Report to the Northern Endowment Fund on project NF-2008-I31

2008 Areas 3 & 4 Tidal Creel Survey

Prepared By: Renny Talbot-Ellis

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ABSTRACT

Talbot-Ellis, R., K. Hein. 2008. 2008 Areas 3 & 4 Tidal Creel Survey.

This report documents the 2008 catch and effort estimates for the statistical Areas 3 and 4 recreational fishery creel survey. The Areas 3 and 4 recreational fishery was assessed seven times between 1995 and 2006, using a combined access point/overflight survey design administered by J.O. Thomas and Associates. In 2008 Fisheries & Oceans Canada administered a recreational fishing study using a similar study design and implemented a data entry and analysis program developed by Fisheries & Oceans Canada, South Coast Stock Assessment for the Strait of Georgia recreational fishing survey. The 2008 study focused on fishing catch and effort of Pacific Salmon (*Oncorhynchus spp.*), Pacific Halibut (*Hippoglossus stenolepis*), Lingcod (*Ophiodon elongates*), groundfish (various), Rockfish (*Sebastes spp*.) and Dungeness crab (*Cancer magister*). The study was conducted between May 15 and September 14, 2008. During the course of the study, 30 overflights and 3,024 interviews were completed for Areas 3 and 4. Total effort was estimated to be 12,352 boat days. Total harvest of Chinook and coho salmon (adults and jacks) were estimated at 11,970 and 34,215 respectively. Total halibut, Lingcod, groundfish and Rockfish harvest were estimated at 24,947; 4,552; 591 and 12,204 respectively. It was estimated that 1,646 Chinook salmon, 3,895 coho salmon, 8,236 Halibut, 316 Lingcod, 2,177 Rockfish and 1,756 other groundfish were released during the study. Creel survey staff observed 16 marked and 1,247 unmarked Chinook. 12 Chinook salmon heads were submitted for CWT analysis. The Chinook salmon CWT awareness factor during the survey period was 0.147. Creel survey staff observed 3,760 coho salmon and submitted 2 adipose coho salmon heads for CWT analysis. Biological samples were collected from Chinook salmon and Halibut.

INTRODUCTION

This paper presents the preliminary results of a creel survey of the 2008 recreational fishery in Areas 3 and 4 to meet the Northern Fund reporting requirements. Creel surveys provide estimates of catch and effort with known variance.

Statistical Areas 3 and 4 off the coast of British Columbia near Prince Rupert host a recreational fishery for salmon (*Oncorhynchus spp.*), Pacific Halibut (*Hippoglossus stenolepis*), Lingcod (*Ophiodon elongates*), Rockfish (*Sebastes spp*.) and Dungeness crab (*Cancer magister*). Many groundfish species are caught as by-catch in the fishery. Previous creel surveys have described Areas 3 and 4 recreational fishery as increasing substantially (Thomas, 2002).

The Northern Fund was the primary funding source for the 2008 Areas 3 & 4 Tidal Creel Survey. The objective of Northern Fund was to fund the development of monthly catch estimates of all salmon species caught in Areas 3, 4 and 5 recreational fisheries. Additional objectives include recording the incidence of Chinook and coho salmon adipose fin clip encounters and collecting biological data. The absence of the adipose fin indicated the possibility of a Coded Wire Tag (CWT). The heads of adipose fin clipped Chinook and coho salmon were solicited from anglers. The collected heads were submitted for analysis of the CWT. Creel survey adipose fin clip encounters along with CWT Chinook salmon heads submitted independent from creel survey staff were used to create CWT awareness factors.

Due to the large geographic survey area, lack of access points, and minimal recreational use, Area 5 was not a component of the 2008 study.

Additional funding was obtained in-kind with the objective of developing monthly catch estimates for none salmon species caught in Areas 3 and 4 recreational fisheries. Additional objectives included collecting Pacific Halibut biological data. In-kind funds enabled the 2008 creel survey to encompass more of the recreational fishing season; thus, providing a more accurate estimate of salmon and none salmon catch.

This paper describes the 2008 Areas 3 & 4 Tidal Creel Survey and documents angler effort, catches, releases, catch per unit of effort (CPUE), and biological information from the recreational fishery in Areas 3 and 4 between May 15 and September 14, 2008. The results were compared with historic creel survey data.

BACKGROUND

Statistical Areas 3 and 4 cover an area of approximately 4,200 km^2 (Figure 1). The target species for recreational anglers are primarily Pacific salmon, halibut, lingcod, rockfish and crab species.

The two main salmon species targeted by anglers in Areas 3 and 4 are Chinook and coho salmon. The Chinook salmon fishery normally begins in May and peaks in June; however, Chinook salmon are caught year-round in Areas 3 and 4 and each license holder is permitted 30 Chinook salmon per year. During the 2008 fishing season, recreational fishing was limited to 4 Pacific salmon daily and a possession limit of 8 Pacific salmon in aggregate. A maximum of 2 Chinook salmon were allowed within the daily limit and a

maximum of 4 within the aggregate possession limit per licence holder. A minimum size limit of 45 cm was in effect for Chinook salmon and barbless hooks were mandatory in the recreational fishery. The coho salmon fishery normally begins in June and peaks July-August. Coho salmon bag limits have varied over the years due to fluctuations in abundance. In 2008 each license holder was permitted four coho salmon per day with no yearly limit (Appendix A).

Halibut angling normally occurs year-round closing only for the month of January. Between April 1 and May 31 of the 2008 creel survey, the daily bag limit for halibut was 1 with 2 in possession. Between June 1 and October 31 the daily bag limit was increased to 2 with 2 in possession. Crab and rockfish angling occurs year-round except in conservation Areas. The daily bag limit for rockfish was 5 with 10 in possession. Dungeness were the main targeted crab species. The daily bag limit for Dungeness crab was 6 with 12 in possession. Dungeness crab retention was limited to males 165mm or greater.

The majority of Areas 3 and 4 recreational fishing effort occurs between May and September to coincide with Skeena and Nass River salmon migrations. Since 1995 there have been seven recreational fishing studies (creel surveys) in Areas 3 and 4 to estimate monthly effort and catch. Four of the seven studies were done between May 15th and September 15th (Table 16). These four studies were done in 1995, 1996, 2001, and 2002. The three remaining studies were done in 1998, 2000 and 2006. The latter studies occurred in July, August and September as they were designed primarily to estimate coho salmon catch and effort.

STUDY AREA

Areas 3 and 4 are made up of seven major island groups in eastern Dixon Entrance, northern Hecate Strait and Chatham Sound. There were three major access points for recreational anglers and three stationary lodges which operate during the summer months (Figure 1). Several mobile charter operations based from large vessels also visited the area in 2008.

METHOD

Study Design

The study ran from May 15 to September 14, 2008 and was made up of four components: a ground survey, an aerial survey, a trailer survey and a Fishing Lodge log book program. Sampling resources were allocated to optimise the estimates of salmon catch (Table 1). Sampling resources were distributed across three time strata in an effort to sample in proportion with angler activity for the duration of the study. Dates for the time strata and proportion of sampling effort assigned to each period were derived from past creel surveys.

Ground Survey

The ground survey consisted of angler interviews at six locations. A designated location was surveyed for eight hours to conduct as many interviews as possible. These eight hour surveys (stints) were conducted at the following locations:

- Prince Rupert Rushbrook Ramp
- Prince Rupert Wamplers Esso Marine Fuel Station
- Prince Rupert Stromdahls Petro Canada Marine Fuel Station
- Prince Rupert Rowing and Yacht Club
- Port Edward Public Access Boat Launch
- Lachmach Forestry Recreation Site Launch

The ground survey consisted of 226 stints that were stratified by day-type: 40 % of stints were allocated to weekdays and 60% were allocated to weekends and holidays. Stints were further stratified by time of day (shifts): 15% of stints allocated to morning shifts (7 am – 2 pm) and 85% of stints allocated to afternoon shifts (2 pm – 10 pm). The number of stints per landing site was allocated randomly using random numbers generated from Microsoft Excel ™ spreadsheet software. Some of the random allocations were modified to optimize opportunities to conduct angler interviews when unforeseen factors occurred (e.g. a lack of anglers at Port Edward due to an Area 4 commercial opening). In these instances an alternate site containing a similar angler profile, such as high usage by unguided anglers, was sampled.

The purpose of the angler interviews was to generate catch per unit of effort (CPUE) estimates for fish caught within Areas 3 and 4, create angler activity profiles, and collect biological data from specific species. The objective of the survey was to sample 20% of effort from each time and area strata.

Aerial Survey

Aerial surveys were conducted to estimate effort. The aerial surveys were conducted from a fixed-wing aircraft (de Havilland DHC-2 Beaver) flying at an elevation no greater than 500 ft. 30 flights were conducted between May 15 and September 14, 2008. Flight days were stratified according to the time and effort allocations defined in Table 1. Flight dates were selected randomly within the day-type strata. Flight duration averaged 1.7 hours. Fishing and non-fishing recreational vessels were counted in each subarea. Flights commenced at 12:00 pm to coincide with peak angler activity. Peak angler activity was established in a creel survey conducted in 2002 (Thomas, 2002) and confirmed in-season from interview data. The flight path for the aerial survey was modified from the 2002 survey to include areas in Hecate Strait and the mouth of Work Channel (Figure 2).

Trailer Survey

The trailer survey was an inexpensive way to augment effort data collected by the aerial surveys. The number of trailers counted at specific access points were compared with vessels observed during the aerial survey.

Trailer counts began on May 28, 2008 and were conducted daily along the Cow Bay waterfront, Rushbrook floats parking lot, Skeena Drive in Port Edward and in the Aero Trading parking lot in Port Edward. The trailers were counted at approximately 12:00 pm to coincide with peak angler activity and the aerial surveys.

Fishing Lodges

Three fishing lodges in Area 3 were provided with logbooks. Data captured in the logbooks included fishing location, effort, and catch. A mobile charter company with two mobile lodges was operating within Area 3 during the course of the study and was included in the survey. Catch, effort and fishing location information was collected post season. CPUE estimates were calculated from lodge catch and effort. Estimates presented in the report are preliminary and have not had the lodge strata removed from the overall calculations.

Data Management

Interview and flight data were entered into a creel survey database. Data was entered throughout the field season. A verification procedure was conducted to ensure accuracy. The data was sorted and stratified by month, day-type, creel subarea and species. Raw data and preliminary catch estimates were generated in-season using an internet based application.

Data Analysis

Activity profiles were generated from effort data collected in the ground surveys. Activity profiles were used to define periods of peak angling activity and measure the proportion of anglers observed during effort surveys. The aerial survey was designed to coincide with peak daily fishing activity. Effort estimates for specific strata (month, day-type, and subarea) were generated from counts of vessels observed during the aerial survey divided by the proportion of anglers active. For example, if the aerial survey occurred between 12:00 and 13:00 and the activity profile determined that 80% of the fleet was fishing during that time, the number of observed vessels would be expanded by approximately 25% or multiplied by 1.25. The expanded effort was then multiplied by species specific CPUE for the creation of catch estimates. The CPUE was calculated by dividing stratified (month, day-type, and subarea) vessel daily catch by effort. CPUE, effort and catch calculations used in the 2008 creel survey are as follows:

Calculations have been applied to data that has been stratified by month, day-type, and creel survey subarea.

CPUE Calculations:

Terms:

[catch] = sum of catch by species

[nfish] = total number of interviews

[catch2] = sum of catch squared - (each interviews catch squared then summed)

STE = Standard Error

VCPUE = Variance of CPUE – (STE in this case)

Formulas:

CPUE = [catch] / [nfish]

VCPUE = STE = ([catch2]-[catch]*[catch]/[nfish])/([nfish]-1)

Expand Single Boat Count:

Terms:

Fix = The Fix function removes the fractional part of the number and returns the resulting integer value. For example, Fix converts -8.4 to -8.

tb = The time block the boat count occurred

ftm = The linear interpolation from the previous time block to the next time block. i.e. flight at 11:30am tb = 6, ftm = 0.5

pba = Proportion of boat activity represented in Activity Profiles.

TH = Hour(timeIn)

TM = Minute(timeIn) / 60

Formulas:

TT = TH + TM

IT = Fix(TT * 100)

ith = Fix(TT)

ftm = (IT - (ith * 100)) / 100.0#

tb = Fix(TT) - 5

act1 = pba(tb)

act2 = pba(tb + 1)

act = act1 + (act2 - act1) * ftm

Expanded count = observer count / act

Effort Calculations:

Terms:

iofc = number of flights used

boats = sum of expanded boats fishing

boats2 = sum of boats fishing squared - (each expanded flight squared then summed)

days = number of days the estimate spans

aofc = boats / iofc

EFF = Effort

VEFF = Variance of effort

Formulas:

varn = (boats2 - (boats * boats / iofc)) / (iofc - 1)

vof = (varn / iofc) * (days - iofc) / (days - 1)

VEFF = days * days * vof

EFF = days * aofc

STE = Square root(VEFF)

Total Catch Calculations:

Terms:

X2 = EFF ^ 2

y2 = CPUE ^ 2

VX = VEFF (square of Effort STE)

VY = 0 If nfish > 1; if not VY = vcpue / nfish

Formulas:

VTC = (X2 * VY) + (y2 * VX) + (VX * VY)

Catch STE = Square root(VTC)

Catch = EFF * CPUE

In strata where there were less than five weekday or weekend interviews containing information from the desired subarea, the subarea interviews were grouped with an adjacent subarea for CPUE creation (Table 22). For example, on May weekdays, subareas I, J and K had 3, 6 and 0 interviews respectively. Subareas I and K had less than five interviews. Therefore I and K interview data were combined with data from J interviews. From the combined subarea data an estimate of CPUE was calculated. Subsequently, subareas I, J and K received the same CPUE for weekdays in May. In order to report monthly CPUE estimates for comparison with past studies monthly catch was divided by effort. No subarea grouping was applied. In order to calculate monthly variance (STE) of catch and effort, stratified (month, day-type, and subarea) variances were squared, summed and square rooted.

The technique for calculating CWT awareness factors followed procedures described by Kuhn (1988).

Biological Data

When anglers were amenable and creel survey staff had time, biological data were collected from Chinook salmon and Halibut. Chinook salmon were sampled for scales, incised to determine sex, observed for flesh colour and measured for nose to fork length to the nearest 0.5 cm. The technique for the collection of Chinook salmon scales followed procedures described by MacLellan (1999). Halibut length (nose to fork) was collected when possible.

RESULTS AND DISCUSSION

Ground Survey

A total of 3,024 fishing interviews were conducted from an estimated 12,352 boat days into the subareas of Areas 3 and 4 between May 15 and September 14, 2008. The sampling objective of 20% of total effort was met or exceeded in all months (Table 2.).

Fishery Characteristics

Subarea F was the most frequented subarea with 672 reports of fishing activity (Table 3). Rushbrook Floats was the busiest sampling site with a total of 1,043 reports of fishing activity (Table 3).

The percentages of fishing effort sampled from subareas G, I, J, and L were below the 20% sampling objective. Most of these areas are in the vicinity of lodge operations and the inability to interview lodge vessels may have resulted in the lower proportion of vessels sampled.

Currently the estimates of boat days calculated for subarea A from the aerial flights appear to be less than the number of interviews collected. This anomaly was the result of a fishing pattern unique to subarea A. Recreational fishers would set crab traps in subarea A before heading into other subareas to fish for other species. Upon return to subarea A, anglers would retrieve their traps/catch and report their fishing activity. Thus the fishing vessel activity in subarea A occurred in the morning and evening, a period inconsistent with the aerial survey times. The shellfish effort in subarea A went undetected by the aerial survey. Therefore an estimate of total shellfish catch has not been determined.

Aerial survey

2,844 recreational fishing vessels were observed during a total of 30 flights between May 15 and September 14, 2008. Average daily vessel abundance was greater on the weekends and holidays than on weekdays. The maximum monthly effort was observed in June with an average of 110 weekday vessels and 136 weekend vessels (Table 5.) The minimum monthly effort was observed in September with an average of 18 weekday vessels and 34 weekend vessels (Table 5). An estimated 12,352 boat days were fished in Areas 3 and 4 during the creel survey (Table 4).

Angler interviews indicate that peak activity occurred between 12:00 pm and 4:00 pm daily (Appendix B). All 30 of the survey flights were conducted during the peak period of fishing vessel activity. Total vessels estimated in each time/area strata represent approximately 1.37 times those observed to account for vessels not apparent in the overflights due to their activity pattern.

Trailer Survey

Boat trailers were counted at the boat launch sites of Rushbrook and Port Edward to provide an indication of fishing vessel activity in Areas 3 and 4. The number of trailers observed ranged from 5 to 63 per day at Rushbrook, and from 1 to 53 per day at Port Edward (Figure 3). The pattern of trailer counts at Rushbrook and Port Edward were similar (Figure 3). There was some bias as the proportion of trailers counted relative to total vessels estimated were higher in May and August and lower in July (Figure 4). This may reflect increased fishing lodge and guided angler activity in June and July as most of these operations are not associated with trailers (i.e. vessels are moored at docks). Estimated effort from the aerial survey was compared against corresponding trailer counts and the regression calculated (R^2=0.78). To help mitigate bias, lodge effort were subtracted from the estimated effort and compared against corresponding trailer counts (R^2=0.85). This demonstrated that additional biases occurred, such as trailer capacity at the launch facilities during high use times. For example; July and August long weekends when trailers get parked outside of the trailer survey area.

Lodge Data

Catches reported in lodge logbooks included 973 Chinook salmon, 3,241 coho salmon, 818 halibut, and 247 lingcod in Area 3 (Table 10). In a sample of two lodges 400 Chinook salmon and 1,553 coho salmon were reported as unmarked, 15 Chinook and 34 coho salmon were reported as marked (Table 11). Catches of 558 Chinook and 1,654 coho salmon reported in lodge logbooks were unchecked.

Catch and Effort

Catch, effort and CPUE data for Chinook and coho salmon from Areas 3 and 4 were compared with historical studies with corresponding time periods (Table 16).

The 2008 creel survey estimated 11,970 Chinook salmon were caught and 1,646 were released (Table 13 and 15). Total Chinook salmon catch variance was 1,075 (Table 14). Most Chinook salmon catch in 2008 occurred in June. This pattern is similar to past years. Chinook salmon catch increased in 2008 from all studies done between 1995 and 2006 (Table 18). Refer to Appendix C for catch, release and variance estimates stratified by month, subarea, day-type, legal or sub-legal, and adipose present or absent.

The 2008 creel survey estimated 34,215 coho salmon were caught and 3,895 were released (Table 13 and 15). Total coho salmon catch variance was 1,987 (Table 14). Most coho salmon catch in 2008 occurred in July. This pattern is similar to past years. Coho salmon catch increased in 2008 from all past studies done between 1995 and 2006 (Table 20). Refer to Appendix D for catch, release and variance estimates stratified by month, subarea, day-type, legal or sub-legal, and adipose present or absent

The 2008 creel survey estimated that 24,947 halibut were caught and 8,236 were released (Table 13 and 15). Total halibut catch variance was 1,422 (Table 14). June and July had the highest retention estimated at 8,367 and 8,507 respectively. Halibut CPUE remained relatively constant. Refer to Appendix E for catch, release and variance estimates stratified by month, subarea and day-type.

The 2008 creel survey estimated that 4,552 Lingcod were caught and 316 released during the 2008 creel survey (Table 13 and 15). Total lingcod catch variance was 434 (Table 14). June and July had the highest retention estimated at 1,462 and 1,348 respectively. In general Lingcod harvest remained proportional to effort. Refer to Appendix F for catch, release and variance estimates stratified by month, subarea and day-type.

Groundfish catch estimates include Dogfish, Greenling, Pacific Cod, Rock Sole, Arrowtooth Flounder, Ratfish, Skate and Unknown Groundfish.

The 2008 creel survey estimated that 591 Groundfish were caught and 1,756 were released during the 2008 creel survey (Table 13 and 15). June had the highest retention estimated at 409. Refer to Appendix G for catch and released estimates stratified by month and subarea or refer to Appendix N for species specific catch, release and variance estimates.

Rockfish estimates include redstripe, canary, copper, china, black, tiger, yellow tail, yellow eye, quillback and unknown rockfish.

The 2008 creel survey estimated that 12,204 Rockfish were caught and 2,177 released during the 2008 creel survey (Table 13 and 15). June had the highest retention estimated at 4,943. Refer to Appendix H for catch and released estimates stratified by month and subarea or refer to Appendix N for species specific catch, release and variance estimates stratified by month, day-type and subarea.

During the 2008 creel survey anglers reported 3,419 Dungeness crab kept and 3,468 released. Of the reported released Dungeness crab 1,660 were of legal size and 1,808 were sub-legal. Crab fishing effort was

recorded in trap soak hours. 2008 crab fishing effort totalled 9,241 hours. Refer to Appendix P for Dungeness effort and catch stratified by month and subarea.

The 2008 creel survey estimated that 12,352 boat days were fished during the 2008 creel survey (Table 4). The variance of total effort was 454 boat days. Most fishing effort occurred in June, estimated at 4,696 boat days. This pattern was consistent with past years except in 2005 where August experienced the greatest amount of effort at 1,927 boat days. When compared with previous creel surveys, estimates of effort in 2008 were higher in every month except September (Table 17).Total effort in 2008 increased from all studies done between 1995 and 2006 (Table 17). Refer to Appendix I for effort and variance stratified by month, day-type and subarea.

Catch Per Unit of Effort (CPUE)

Chinook salmon CPUE was highest in June and July. Chinook salmon CPUE between May and September ranged from 0.09 in September to 1.20 in June (Table 19). Chinook salmon CPUE in 2008 was decreased from 2001. 2008 and 2002 Chinook salmon CPUE were similar with the largest difference being 0.32 occurring in July. 2008 CPUE increased from 1995 and 1996. Refer to Appendix J for Chinook salmon CPUE and CPUE variance stratified by guided, unguided, combined, month, subarea, and day-type.

Coho salmon CPUE was highest in July and August. Coho salmon CPUE between May and September ranged from 0 in May to 4.57 in August (Table 21). 2008 coho salmon CPUE increased from studies done between 1995 and 2002 in all months with exception of June 2001. Refer to Appendix K for coho salmon CPUE and CPUE variance stratified by guided, unguided, combined, month, subarea, and day-type.

Refer to Appendix L for halibut CPUE and variance; Appendix M for lingcod CPUE and variance; Appendix N for all other species stratified by month, day-type and subarea.

Biological Data

During the 2008 Areas 3 & 4 Tidal Creel Survey DFO staff observed 1,263 Chinook. Over 50% of the Chinook salmon caught were reported by anglers in June (Table 7). Scale samples were collected from 924 of the observed Chinook salmon to determine age. Observed Chinook salmon were checked for adipose fin presence or absence (unmarked or marked). Out of the 1,263 Chinook salmon observed 16 were adipose fin clipped and 1,247 were not (Table 7). Head tag numbers were assigned to 14 of the adipose fin clipped Chinook. Creel survey staff removed and submitted 12 of the tagged heads for CWT analysis. 2 tags were given to anglers that wished to keep their fish intact; the heads were not submitted. 1 head tag number was mis-recorded by DFO staff. Areas 3 and 4 anglers submitted 13 CWT Chinook salmon heads independent of creel survey staff (Table 8). The Chinook salmon CWT awareness factor for the duration of the creel survey was 0.147 (Table 9). Lengths were taken from 674 Chinook salmon and the average length was 865mm. The mode of the length in the sample was 700mm-800mm (Figure 5).

A total of 3,760 coho salmon were observed during the 2008 creel survey. Creel survey staff removed heads from 2 adipose fin clipped coho salmon and submitted them for CWT analysis. Areas 3 and 4 anglers submitted 7 CWT heads independently.

During the 2008 creel survey 3,065 halibut were observed. Lengths were collected from 1,522 halibut. The average length in the sample was 849mm. The mode of the length sample was approximately 700mm-800mm (Figure 6).

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TABLES

Table 1: Allocation of sampling resources to the 2008 Areas 3 & 4 Tidal Creel Survey by time strata

Time Strata	% of Sampling effort
May 15 – June 16	26%
June 17- July 29	43%
July 30 – Sept. 15	31%

Table 2: 2008 Areas 3 & 4 Tidal Creel Survey interview sampling success by month.

	May	June	July	Aug	Sept	Total
Total boat days estimated	983	4696	3750	2529	394	**12,352**
Boat days sampled	215	1014	927	740	128	3024
% Sampled	22%	22%	25%	29%	32%	24%

Table 3: 2008 Areas 3 & 4 Tidal Creel Survey recreational fishing effort in units of boat days presented by fishing subarea and interview site with sampling efficiency**.**

Site	A	B	C	D	E	F	G	H	l	I	J	K	Totals
Lac Mac										1	2	32	35
Port Edward	6	254	115	165	6	74		6		2	2	1	631
Yacht Club	38	15	27	20	1	94	10	30	2	11	39	14	301
Rushbrook	175	18	296	13	10	218	25	145	8	50	62	23	1043
Wamplers	112	28	160	31	10	286	29	194	34	38	77	15	1014
Total	331	315	598	229	27	672	64	375	44	102	182	85	3024
Est. Boat Days	50	1279	1961	833	86	2318	473	793	1107	2205	990	258	12352
% of est. effort sampled	n/a	25%	31%	27%	31%	29%	14%	47%	4%	5%	18%	33%	24%

Table 4: Estimated effort (boat days) stratified by day-type and month for the 2008 Areas 3 & 4 Tidal Creel Survey.

Estimated Total Boat Days						
Day-type	**May**	**June**	**July**	**August**	**September**	**Total**
Weekday	410	3422	2725	1351	205	8113
Weekend	573	1274	1025	1178	189	4239
Total	983	4696	3750	2529	394	**12352**

Table 5: Observed average daily effort (boat days) stratified by day-type and month collected during the 2008 Areas 3 & 4 Creel Survey.

Observed Average Daily Boats					
Day-type	**May**	**June**	**July**	**August**	**September**
Weekday	32	110	112	60	18
Weekend	66	136	108	95	34

Table 6: Monthly catch observed by DFO staff during the 2008 Areas 3 & 4 Creel Survey.

Observed						
Species	**May**	**June**	**July**	**August**	**September**	**Total**
Chinook	65	735	372	89	2	1263
Coho	0	253	2058	1368	81	3760
Halibut	168	1010	1018	678	62	2936
Lingcod	96	183	144	136	25	584

Table 7: Monthly observations of Chinook salmon adipose fin during the 2008 Areas 3 & 4 Creel Survey.

Chinook						
Observation Type	**May**	**June**	**July**	**August**	**Sept**	**Total**
Marked	1	10	3	2	0	16
Unmarked	64	725	369	87	2	1247
Unknown/Not Checked	16	39	10	1		65
Not Observed	22	413	214	102	9	760
Total Reported	103	1187	596	193	11	2089

Note: Unknown/Not checked are fish associated with incomplete forms. These fish were not considered observed

Table 8: Monthly Chinook and coho salmon heads submitted for CWT analysis independent of creel survey staff.

None creel Heads Submitted

Species	Area	June	July	August	September	Total
Chinook	3	1	0	0	1	2
	4	3	5	3	0	11
Coho	3	0	0	0	0	0
	4	3	3	1	0	7

Table 9: Monthly and total awareness factors of Chinook salmon adipose fin clips during the 2008 Areas 3 & 4 Creel Survey.

Awareness of adipose clipped Chinook

Area	May	June	July	August	September	Total
3	0.000	0.031	0.000	0.000	0.000	0.034
4	0.000	0.071	0.422	0.282	0.000	0.172
3&4	0.000	0.042	0.227	0.217	0.000	0.147

Table 10: Areas 3 fishing lodges reported 2008 effort and catch during the 2008 Areas 3 & 4 Creel Survey.

Effort and Retained Catch

Data	May	June	July	August	September	Total
Boat Days	15	387	530	332	47	1311
Chinook	19	505	415	33	1	973
Coho	0	213	1468	1331	229	3241
Halibut	21	227	256	260	54	818
Lingcod	8	71	83	75	10	247

Table 11: Monthly observation of Chinook salmon adipose fin from Areas 3 fishing lodges during the 2008 Areas 3 & 4 Creel Survey

Chinook

Adipose Fin	May	June	July	August	September	Total
Marked	n/a	10	2	3	0	15
Unmarked	n/a	205	174	20	1	400
Unchecked	19	290	239	10	0	558
Total						973

Table 12: Monthly observation of coho adipose fin from Area 3 fishing lodges during the 2008 Areas 3 & 4 Creel Survey

Coho						
Adipose Fin	**May**	**June**	**July**	**August**	**September**	**Total**
Marked		3	9	22	0	34
Unmarked		86	557	838	72	1553
Unchecked	0	124	902	471	157	1654
Total						3241

Table 13: Monthly estimate of species retained during the 2008 Areas 3 & 4 Tidal Creel Survey.

Estimated Retained Catch						
Species	**May**	**June**	**July**	**August**	**September**	**Total**
Chinook	474	7708	3080	688	20	11970
Coho		3913	15982	13513	806	34215
Halibut	1435	8367	8507	5865	774	24947
Lingcod	690	1462	1348	884	167	4552
Groundfish	79	409	74	28	0	591
Rockfish	1450	4933	3066	2336	418	12204

Table 14: Monthly estimate of catch variance for species retained during the 2008 Areas 3 & 4 Tidal Creel Survey.

Variance of monthly catch estimates						
Species	**May**	**June**	**July**	**August**	**September**	**All Months**
Chinook	102	1013	325	112	18	1075
Coho		728	1249	1354	155	1987
Halibut	228	952	701	740	152	1422
Lingcod	150	280	221	196		434

Table 15: Monthly estimate of species released during the 2008 Areas 3 & 4 Tidal Creel Survey.

Estimated Released Catch						
Species	**May**	**June**	**July**	**August**	**September**	**Total**
Chinook	108	1123	402	13	0	1646
Coho		545	1731	1542	76	3895
Halibut	554	4240	2807	594	41	8236
Lingcod	14	165	97	42		316
Groundfish	152	787	519	298	0	1756
Rockfish	230	1322	401	216	7	2177

Table 16: Areas 3 & 4 Tidal Creel Survey periods from 1995 to 2008.

Periods												
							Year					
Month	***1995***	***1996***	***1997***	***1998***	***1999***	***2000***	***2001***	***2002***	***2003-05***	***2006***	***2007***	***2008***
May	*May 17-31*	*May 15-31*	--	--	--	--	*May 18-31*	*May 15-31*	--	--	--	*May 15-31*
June	*Jun 1-30*	*Jun 1-30*	--	--	--	--	*Jun 1-30*	*Jun 1-30*	--	--	--	*Jun 1-30*
July	*Jul 1-31*	*Jul 1-31*	--	*Jul 9-31*	--	*Jul 1-31*	*Jul 1-31*	*Jul 1-31*	--	--	--	*Jul 1-31*
Aug	*Aug 1-31*	*Aug 1-31*	--	*Aug 1-31*	--	*Aug 1-31*	*Aug 1-31*	*Aug 1-31*	--	*Aug 1-31*	--	*Aug 1-31*
Sept	*Sep 1-15*	*Sep 1-15*	--	*Sep 1-20*	--	*Sep 1-30*	*Sep 1-15*	*Sep 1-15*	--	*Sep 1-15*	--	*Sep 1-14*

Table 17: Comparison of fishing effort during Areas 3 & 4 Tidal Creel Surveys which took place between 1995 and 2008.

Boat Days												
							Year					
Month	***1995***	***1996***	***1997***	***1998***	***1999***	***2000***	***2001***	***2002***	***2003-05***	***2006***	***2007***	***2008***
May	965	391	--	--	--	--	449	960	--	--	--	983
June	1,590	2,490	--	--	--	--	3,801	3,463	--	--	--	4696
July	1,394	2,385	--	1,307	--	1,842	2,588	2,892	--	--	--	3750
Aug	1,927	1,400	--	1,351	--	1,327	1,808	1,843	--	2593	--	2529
Sept	864	488		504	--	954	540	676	--	758	--	394
Total	6,740	7,154	--	3,162	--	4,123	9,186	9,834	--	3,351	--	12,352

Table 18: Comparison of Chinook salmon catch during Areas 3 & 4 Tidal Creel Surveys which took place between 1995 and 2008.

Chinook												
							Year					
Month	***1995***	***1996***	***1997***	***1998***	***1999***	***2000***	***2001***	***2002***	***2003-05***	***2006***	***2007***	***2008***
May	141	45	--	--	--	--	509	522	--	--	--	474
June	907	2,165	--	--	--	--	6,630	4,028	--	--	--	7708
July	505	1,097	--	254	--	1,611	3,260	2,822	--	--	--	3080
Aug	245	257	--	35	--	108	299	474	--	1207	--	688
Sept	15	62	--	6	--	93	61	59	--	203	--	20
Total	1,813	3,626	--	295	--	1,812	10,759	7,905	--	1,410	--	11,970

Table 19: Comparison of Chinook salmon CPUE during Areas 3 & 4 Tidal Creel Surveys which took place between 1995 and 2008.

Chinook CPUE												
						Year						
Month	***1995***	***1996***	***1997***	***1998***	***1999***	***2000***	***2001***	***2002***	***2003-05***	***2006***	***2007***	***2008***
May	0.15	0.12	--	--	--	--	1.13	0.54	--	--	--	0.48
June	0.57	0.87	--	--	--	--	1.74	1.16	--	--	--	1.20
July	0.36	0.46	--	0.19	--	0.87	1.26	0.98	--	--	--	0.66
Aug	0.13	0.18	--	0.03	--	0.08	0.17	0.26	--	0.47	--	0.26
Sept	0.02	0.13	--	0.01	--	0.1	0.11	0.09	--	0.27	--	0.09

Table 20: Comparison of coho salmon catch during Areas 3 & 4 Tidal Creel Surveys that took place between 1995 and 2008.

Coho												
						Year						
Month	***1995***	***1996***	***1997***	***1998***	***1999***	***2000***	***2001***	***2002***	***2003-05***	***2006***	***2007***	***2008***
May	0	0	--	--	--	--	0	0	--	--	--	0
June	335	474	--	--	--	--	1771	1332	--	--	--	3913
July	402	3565	--	1937	--	568	4736	9798	--	--	--	15982
Aug	1907	3771	--	1500	--	2125	6488	8292	--	15647	--	13513
Sept	1115	1417	--	79	--	790	1006	1010	--	3215	--	806
Total	3759	9227	--	3516	--	3483	14001	20432	--	18862	--	34215

Table 21: Comparison of coho salmon CPUE during Areas 3 & 4 Tidal Creel Surveys which took place between 1995 and 2008.

Coho CPUE												
						Year						
Month	***1995***	***1996***	***1997***	***1998***	***1999***	***2000***	***2001***	***2002***	***2003-05***	***2006***	***2007***	***2008***
May	0	0	--	--	--	--	0	0	--	--	--	0.00
June	0.21	0.19	--	--	--	--	0.47	0.38	--	--	--	0.44
July	0.29	1.49	--	1.48	--	0.31	1.83	3.39	--	--	--	3.73
Aug	0.99	2.69	--	1.11	--	1.6	3.59	4.5	--	6.03	--	4.57
Sept	1.29	2.9	--	0.16	--	0.83	1.86	1.49	--	4.24	--	2.64

Table 22: Monthly subarea grouping for CPUE creation.

	May	June	July	August	September
Grouping	A, B	D,E	D,E	D,E	A, B
	C,D,E	G,L	G,L	G,L	C,D,E
	G,H,L				G,H,L
	I,J,K				I,K

Note: Subareas not in the monthly column were not grouped.

FIGURES

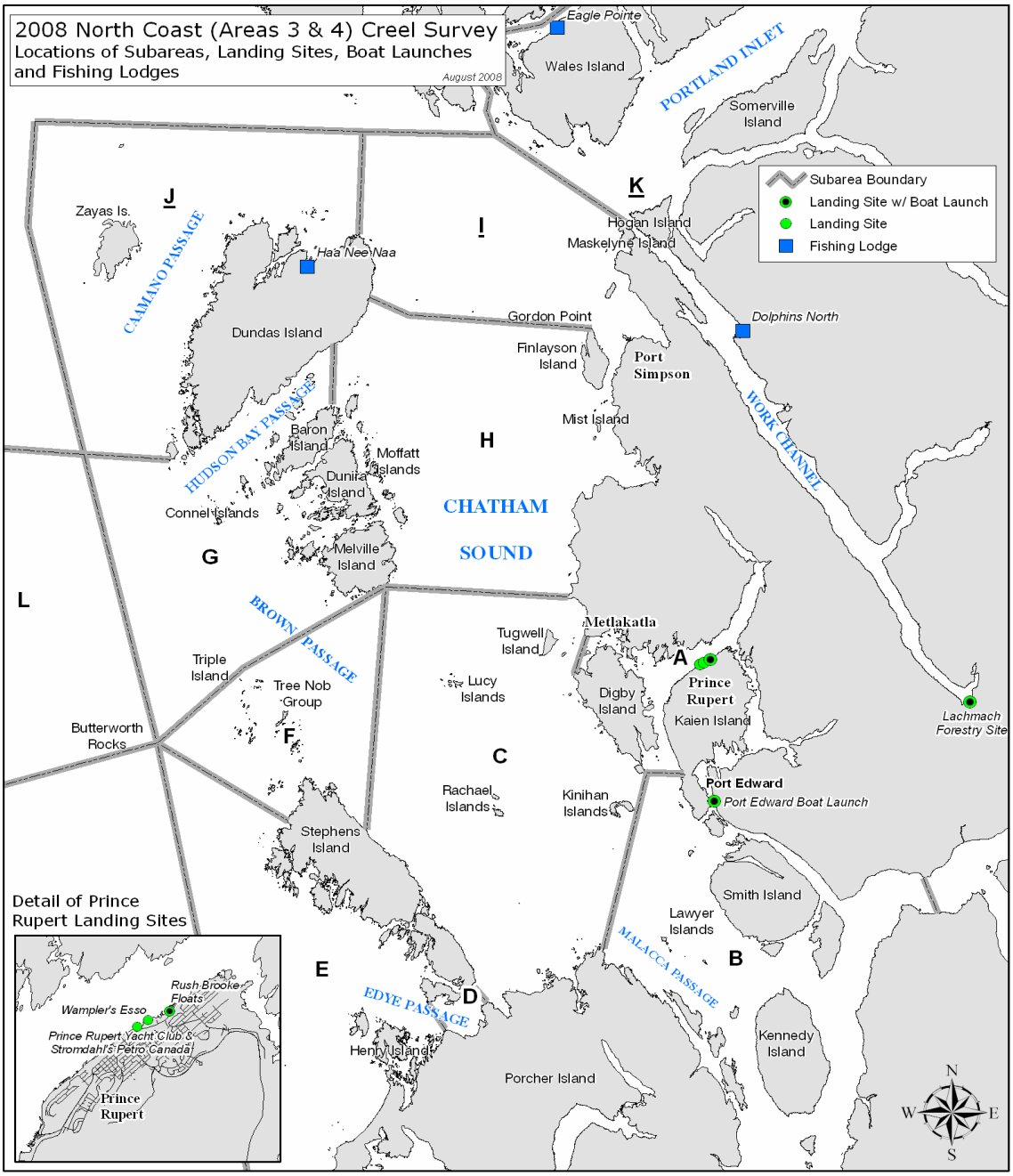

Figure 1: North Coast fishing Areas 3 and 4 with creel sub areas A-L.

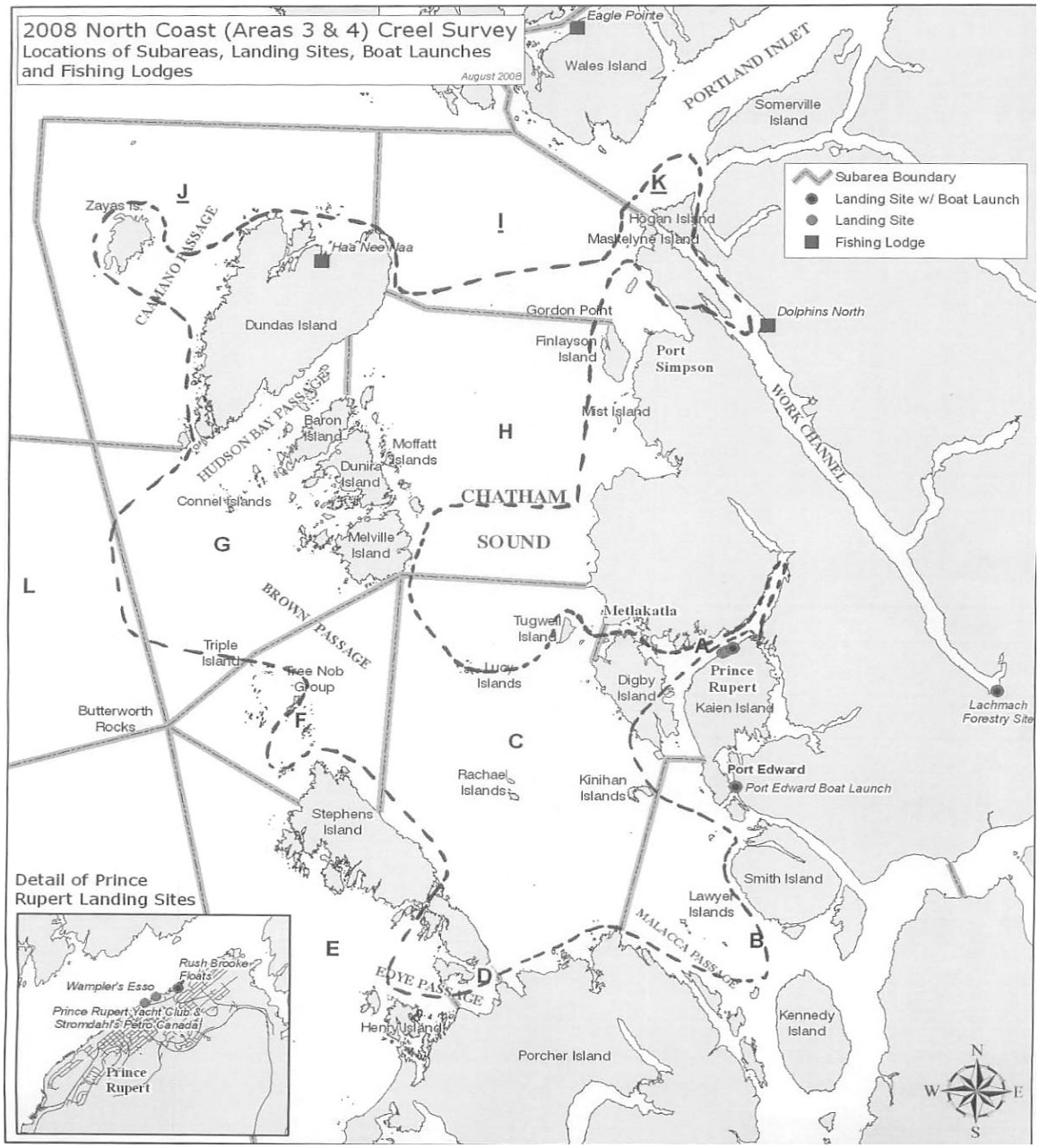

Figure 2: 2008 Areas 3 & 4 Tidal Creel Survey flight path.

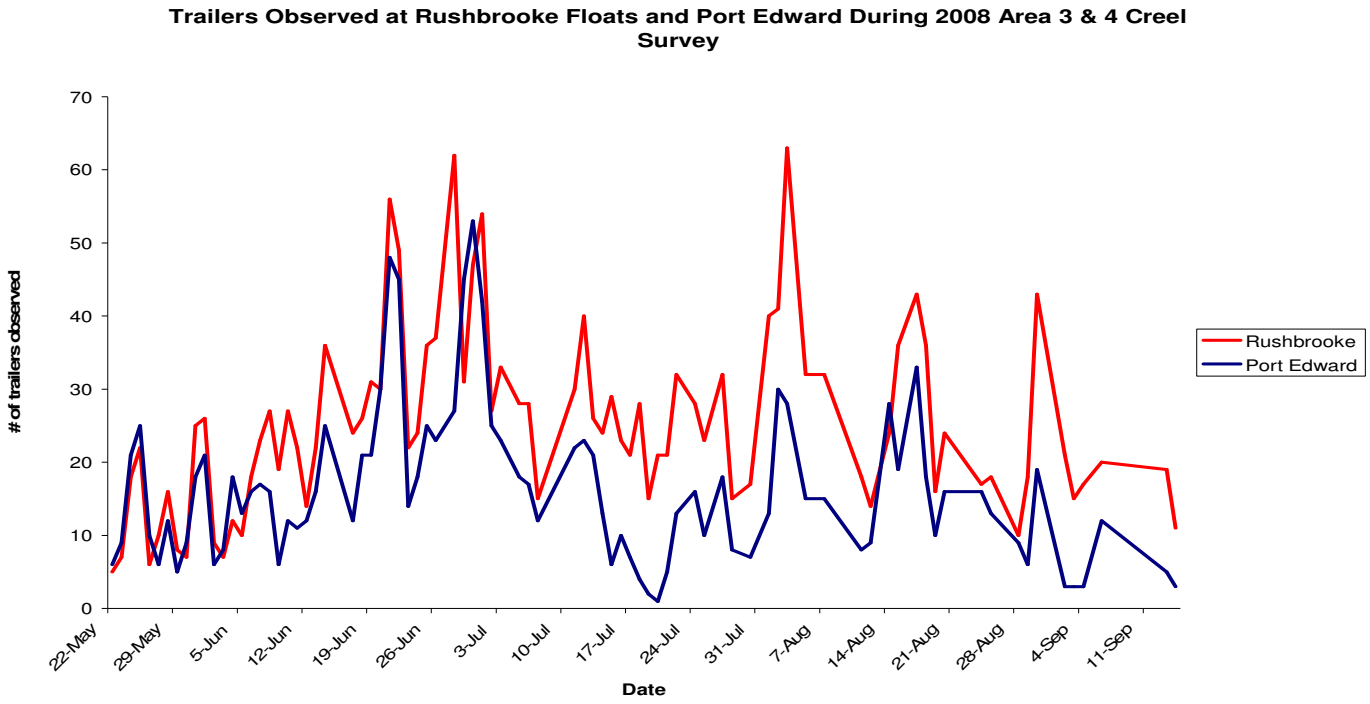

Figure 3: Trailers observed at Rushbrook floats and Port Edward during 2008 Areas 3 & 4 Tidal Creel Survey.

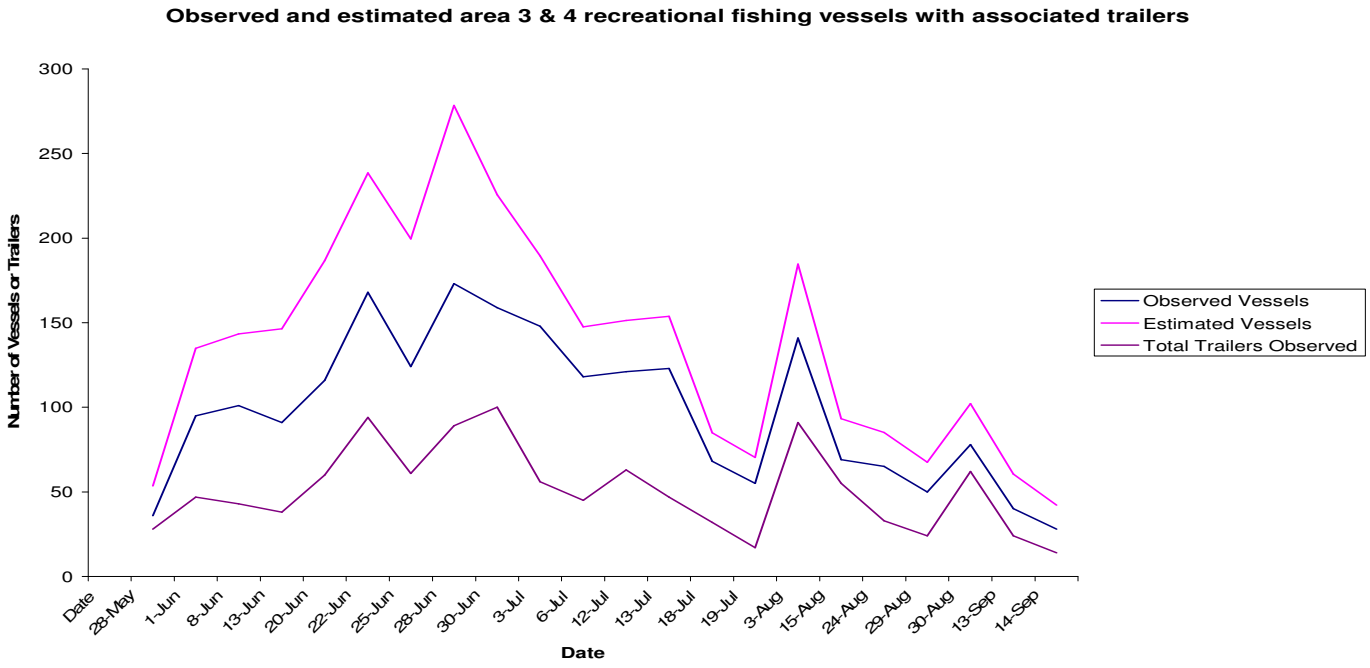

Figure 4: Observed and estimated Areas 3 and 4 recreational fishing vessels with associated trailers.

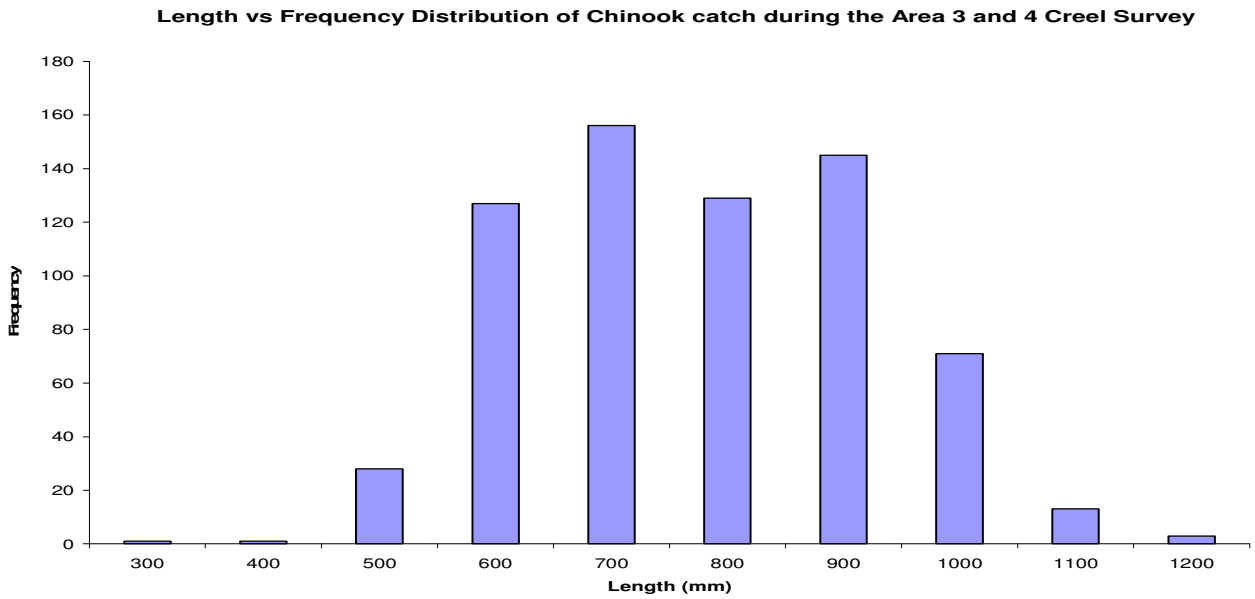

Figure 5: Length vs Frequency distribution of Chinook salmon sampled in the Areas 3 and 4 creel survey

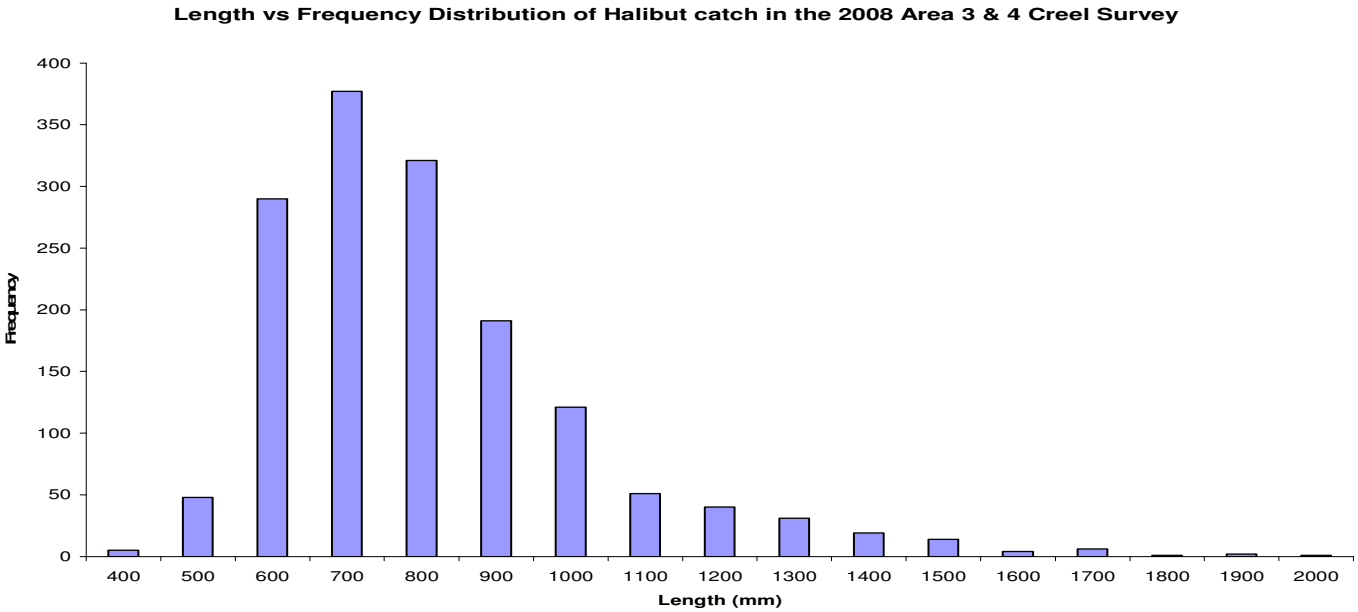

Figure 6: Length vs Frequency distribution of halibut sampled in the Areas 3 and 4 creel survey.

APPENDICES

Appendix A: Recreational Fisheries Regulations

Salmon

Barbless hooks must be used when fishing for salmon in all tidal waters of British Columbia.

Openings & Closures:

Species	Min Size	Daily Limit	Possess. Limit	Annual Limit	Season Open	Gear Permitted
Chinook	45 cm	2	4	30	All Year	Hook & Line
Chum	30 cm	4	8	N/A	All Year	Hook & Line
Coho	30 cm	4	8	N/A	All Year	Hook & Line
Pink	30 cm	4	8	N/A	All Year	Hook & Line
Sockeye	30 cm	4	8	N/A	All Year	Hook & Line
The combined daily limit for all species of Pacific salmon from tidal waters is 4. Coast wide daily limit for Chinook is 2. Aggregate daily limit for all species of Pacific salmon from tidal and non-tidal waters combined is 4.						

Source: http://www.pac.dfo-mpo.gc.ca/recfish/Species/fintable_e.htm

Groundfish

Openings & Closures:

Species	Area	Min. Size Limit	Daily Limit	Poss. Limit	Annual Limit	Season Open	Gear Permitted	Management Measures
Greenling	1 to 29	N/A	3	6	N/A	All Year	Hook & line, spear	
Halibut	1 to 29	N/A	1	2	N/A	April 1 – May 31, 2008	Hook & line, spear	
	1 to 29	N/A	2	2	N/A	June 1 - Oct.30, 2008	Hook & line, spear	
Lingcod	1 to 10	N/A	3	6	N/A	All Year	Hook & line, spear	
Rockfish ***Note:*** Rockfish Conservation Areas are in effect in some areas. Follow this link prior to fishing.	1 to 10	N/A	5	10	N/A	Currently open	Hook & line, spear	Aggregate daily limit for all rockfish is 5, no more than 3 may be Yelloweye.

Source: http://www.pac.dfo-mpo.gc.ca/recfish/Species/fintable_e.htm

Appendix B: Monthly (May 15 – September 14) Areas 3 & 4 recreational fishing activity profiles, derived from effort data collected during the 2008 Areas 3 & 4 Tidal Creel Survey.

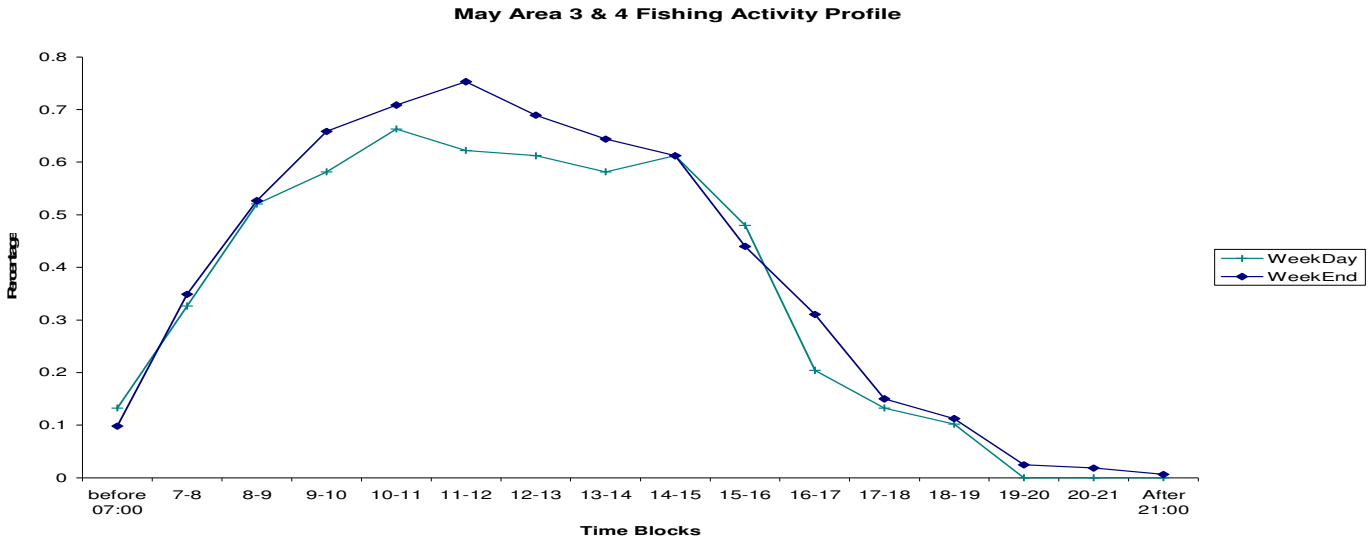

Figure 10: May's Areas 3 & 4 recreational fishing activity profile, derived from effort data collected during the 2008 Areas 3 & 4 Tidal Creel Survey.

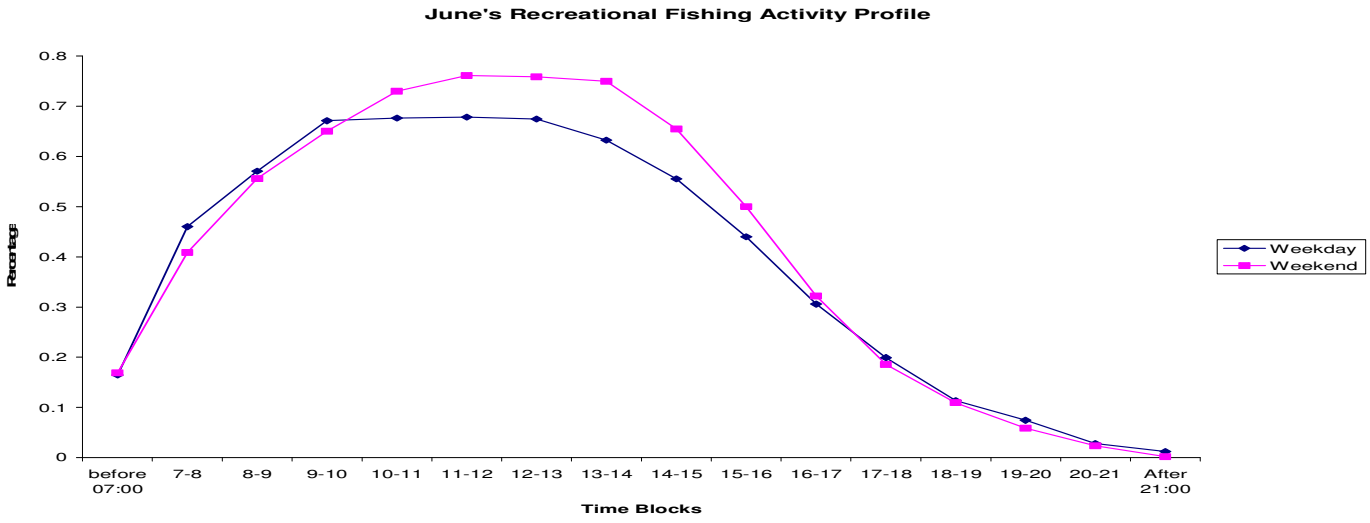

Figure 11: June's Areas 3 & 4 recreational fishing activity profile, derived from effort data collected during the 2008 Areas 3 & 4 Tidal Creel Survey.

Appendix B con't

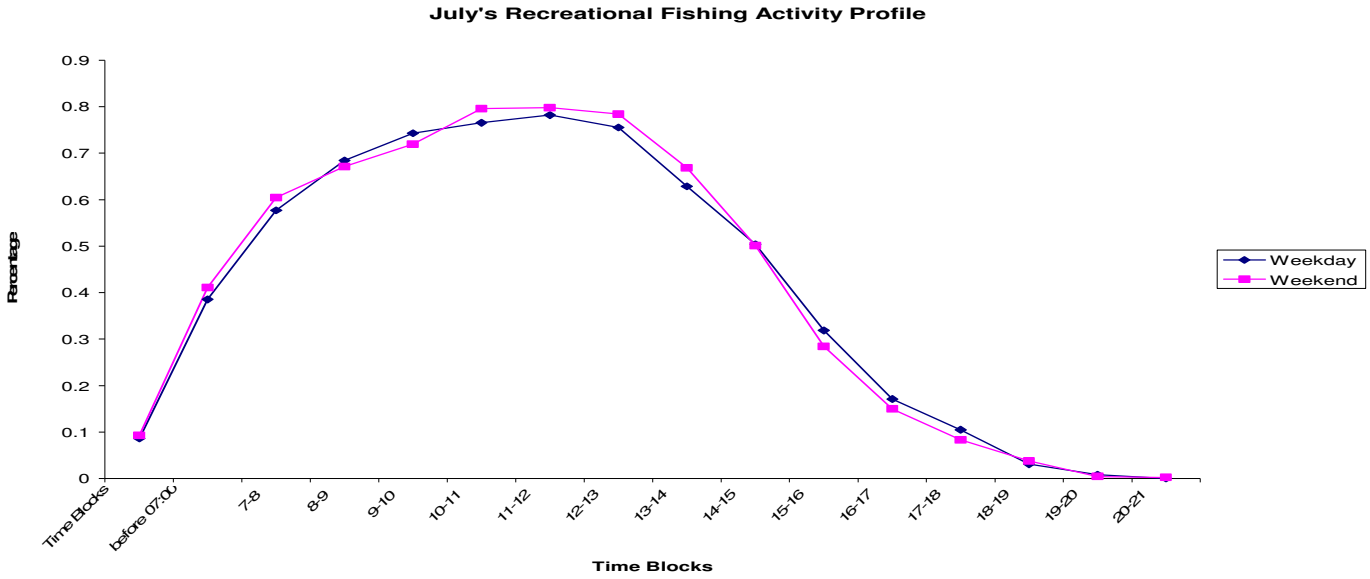

Figure 12: July's Areas 3 & 4 recreational fishing activity profile, derived from effort data collected during the 2008 Areas 3 & 4 Tidal Creel Survey.

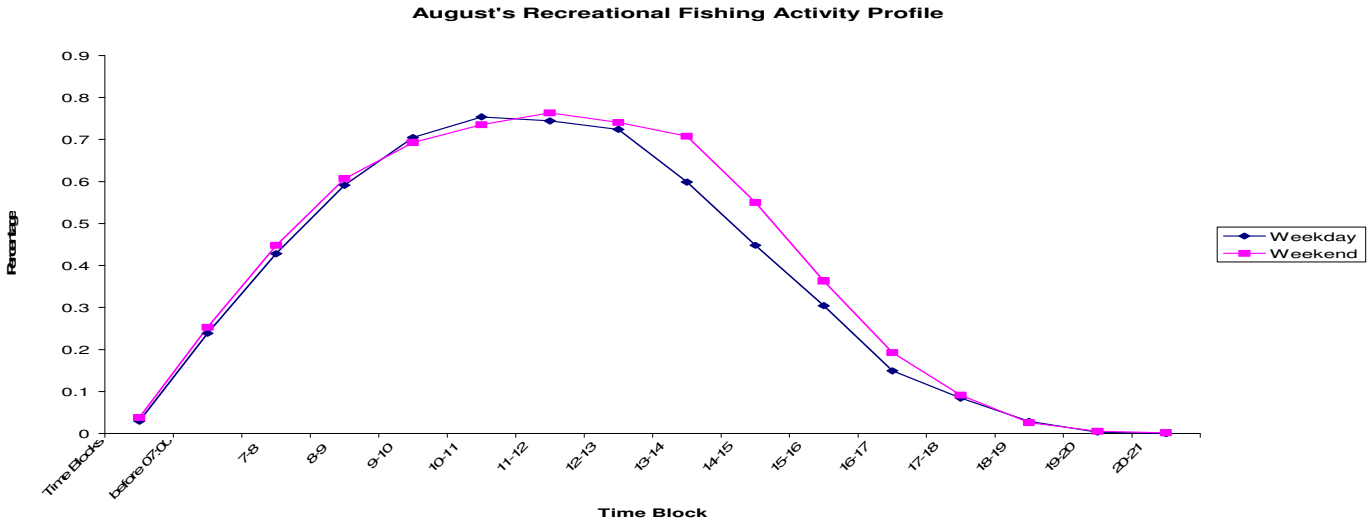

Figure 13: Augusts' Areas 3 & 4 recreational fishing activity profile, derived from effort data collected during the 2008 Areas 3 & 4 Tidal Creel Survey.

Appendix B con't

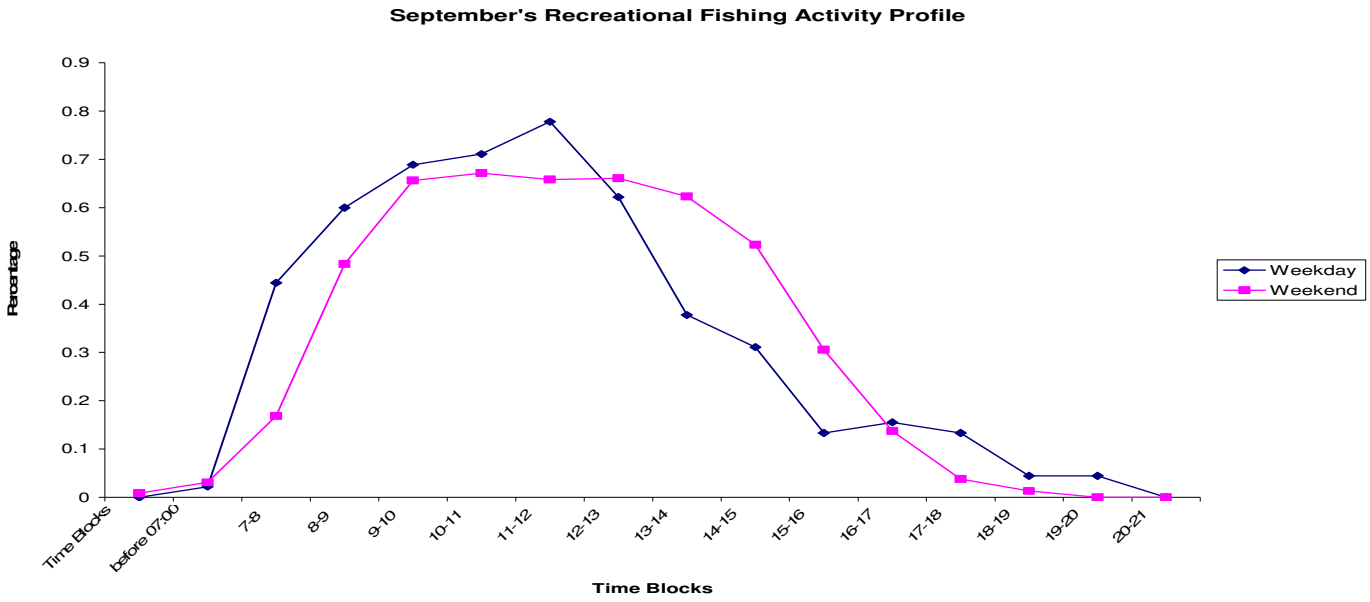

Figure 14: September's Areas 3 & 4 recreational fishing activity profile, derived from effort data collected during the 2008 Areas 3 & 4 Tidal Creel Survey.

Appendix C-M:

Chinook, Coho, Halibut, Lingcod, Groundfish and Rockfish

Catch and CPUE Summaries

Appendix C: Area 3 & 4 Tidal Creel Survey Chinook Catch Summary

Retained
Chinook - *Adipose Present*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	May	1	estimate	0	40	44	21	15	48	2	2	13	12	9	2	**208**	**469**
			ste	0	42	20	22	15	56	3	3	11	17	8	3		
		2	estimate	0	30	85	15	0	70	8	2	29	7	7	10	**262**	
			ste	0	12	25	14	0	40	6	3	22	31	9	8		
	June	1	estimate	1	370	395	418	9	1018	58	184	447	2432	577	21	**5929**	**7639**
			ste	1	83	174	105	9	269	70	83	214	759	519	26		
		2	estimate	2	104	83	159	17	433	81	23	274	407	81	45	**1710**	
			ste	2	28	25	28	7	101	32	12	99	100	55	17		
	July	1	estimate	0	127	220	81	6	413	79	226	240	799	43	16	**2250**	**3072**
			ste	0	82	60	43	6	101	48	56	88	238	42	19		
		2	estimate	0	35	81	57	1	153	8	36	49	284	111	7	**822**	
			ste	0	15	20	22	1	36	6	15	17	77	49	6		
	August	1	estimate	0	8	41	43	22	96	7	33	73	23	0	7	**352**	**679**
			ste	0	8	13	43	37	31	5	30	56	26		11		
		2	estimate	0	9	80	0	0	61	10	37	39	43	37	10	**327**	
			ste	0	7	31	0	0	19	9	15	27	16	19	12		
	Sept	1	estimate	0	0	18	0	0	0	0	0	0	0	0	0	**18**	**20**
			ste	0	0	18	0	0	0	0	0	0	0	0	0		
		2	estimate	0	0	0	0	0	2	0	0	0	0	0	0	**2**	
			ste	0	0	0	0	0	1	0	0	0	0	0	0		
	Total																**11880**

Appendix C con't: Area 3 & 4 Tidal Creel Survey Chinook Catch Summary

Retained
Chinook - *Adipose Absent*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	June	1	estimate	0	10	0	0	0	9	0	4	0	0	0	0	**23**	**37**
			ste	0	7	0	0	0	9	0	5	0	0	0	0		
		2	estimate	0	1	0	0	0	4	0	1	0	9	0	0	**14**	
			ste	0	1	0	0	0	4	0	1	0	9	0	0		
	July	1	estimate	0	0	0	0	0	5	0	0	0	0	0	0	**5**	**8**
			ste	0	0	0	0	0	5	0	0	0	0	0	0		
		2	estimate	0	0	0	2	0	0	0	0	0	0	0	0	**3**	
			ste	0	0	0	3	0	0	0	0	0	0	0	0		
	August	1	estimate	0	0	0	0	0	0	0	3	0	0	0	0	**3**	**3**
			ste	0	0	0	0	0	0	0	5	0	0	0	0		
	Total																**48**

Appendix C con't: Area 3 & 4 Tidal Creel Survey Chinook Catch Summary

Retained

Chinook - *Adipose Unknown*				**Subarea**													
Catch Type	**Month**	**Day Type**		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**	**Monthly Total**
Legal	June	2	estimate	0	0	0	0	0	0	0	0	0	0	31	0	**31**	**31**
			ste	0	0	0	0	0	0	0	0	0	0	33	0		
	August	1	estimate	0	0	6	0	0	0	0	0	0	0	0	0	**6**	**6**
			ste	0	0	6	0	0	0	0	0	0	0	0	0		
	Total																**37**

Appendix C con't: Area 3 & 4 Tidal Creel Survey Chinook Catch Summary

Released
Chinook - *Adipose Present*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	May	1	estimate	0	27	9	4	3	8	5	5	0	0	0	5	**65**	**104**
			ste	0	28	7	6	4	11	8	8	0	0	0	8		
		2	estimate	0	18	12	2	0	0	3	1	0	0	0	3	**38**	
			ste	0	11	9	3	0	0	3	1	0	0	0	3		
	June	1	estimate	1	42	87	57	1	209	0	29	83	229	0	0	**737**	**922**
			ste	1	20	65	33	1	106	0	22	77	132	0	0		
		2	estimate	0	24	9	36	4	89	0	6	0	18	0	0	**185**	
			ste	0	10	5	14	2	29	0	3	0	13	0	0		
	July	1	estimate	0	34	33	0	0	36		59	0	49	0	0	**211**	**358**
			ste	0	28	20	0	0	25	0	28	0	37	0	0		
		2	estimate	0	6	13	7	0	24	0	0	11	46	39	0	**147**	
			ste	0	4	8	6	0	13	0	0	11	27	40	0		
	August	1	estimate	0	0	3	0	0	0	0	0	0	0	0	0	**3**	**13**
			ste	0	0	3	0	0	0	0	0	0	0	0	0		
		2	estimate	0	0	4	0	0	4	0	1	0	0	0	0	**10**	
			ste	0	0	3	0	0	5	0	1	0	0	0	0		
	Total																**1397**

Appendix C con't: Area 3 & 4 Tidal Creel Survey Chinook Catch Summary

Released
Chinook - *Adipose Absent*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	June	1	estimate	0	0	0	13	0	0	0	0	0	0	0	0	**13**	**17**
			ste	0	0	0	13	0	0	0	0	0	0	0	0		
		2	estimate	0	0	0	0	0	4	0	0	0	0	0	0	**4**	
			ste	0	0	0	0	0	4	0	0	0	0	0	0		
	Total																**17**

Appendix C con't: Area 3 & 4 Tidal Creel Survey Chinook Catch Summary

Released
Chinook - *Adipose Unknown*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	June	1	estimate	0	0	0	25	1	0	0	0	0	0	0	0	**26**	**38**
			ste	0	0	0	26	1	0	0	0	0	0	0	0		
		2	estimate	0	0	2	2	0	0	0	0	0	9	0	0	**12**	
			ste	0	0	2	2	0	0	0	0	0	9	0	0		
	July	1	estimate	0	0	13	0	0	0	0	0	0	0	0	0	**13**	**13**
			ste	0	0	14	0	0	0	0	0	0	0	0	0		
	Total																**51**

Appendix C con't: Area 3 & 4 Tidal Creel Survey Chinook Catch Summary

Released
Chinook - *Adipose Unknown*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Sub-Legal	May	2	estimate	0	0	4	1	0	0	0	0	0	0	0	0	**5**	**5**
			ste	0	0	4	1	0	0	0	0	0	0	0	0		
	June	1	estimate	0	0	0	19	0	0	0	0	0	57	0	0	**77**	**146**
			ste	0	0	0	19	1	0	0	0	0	61	0	0		
		2	estimate	1	0	0	11	1	2	0	2	0	53	0	0	**70**	
			ste	1	0	0	7	1	2	0	2	0	40	0	0		
	July	1	estimate	0	0	27	0	0	0	0	0	0	0	0	0	**27**	**30**
			ste	0	0	27	0	0	0	0	0	0	0	0	0		
		2	estimate	0	0	2	0	0	2	0	0	0	0	0	0	**4**	
			ste	0	0	2	0	0	2	0	0	0	0	0	0		
	Total																**181**

Appendix D: Area 3 & 4 Tidal Creel Survey Coho Catch Summary

Retained
Coho - *Adipose Present*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	June	1	estimate	0	21	154	133	3	940	19	84	66	1430	311	7	**3167**	**3913**
			ste	0	11	83	42	3	268	23	45	46	553	354	9		
		2	estimate	0	6	61	33	4	87	61	12	148	274	25	34	**745**	
			ste	0	3	24	16	2	26	32	8	64	84	21	18		
	July	1	estimate	0	177	1694	143	10	3438	716	1631	1637	2235	224	143	**12048**	**15901**
			ste	0	200	327	79	11	715	282	309	380	582	174	144		
		2	estimate	0	8	457	224	5	1270	32	109	465	1118	137	28	**3853**	
			ste	0	7	81	65	4	230	22	41	159	284	77	25		
				0													
	August	1	estimate	0	355	581	76	38	1319	119	928	1199	1342	1347	120	**7425**	**13442**
			ste	0	104	118	39	46	182	46	719	368	608	509	133		
		2	estimate	0	227	1117	38	23	1129	53	596	838	956	987	53	**6017**	
			ste	0	109	368	35	14	283	40	210	315	225	207	57		
	September	1	estimate	0	0	18	0	0	0	0	0	325	0	163	0	**506**	**806**
			ste	0	0	12	0	0	0	0	0	101	0	51	0		
		2	estimate	0	0	15	5	0	43	6	0	94	70	67	0	**300**	
			ste	0	0	7	6	0	8	7	0	87	44	37	0		
	Total																**34062**

Appendix D con't: Area 3 & 4 Tidal Creel Survey Coho Catch Summary

Retained
Coho - *Adipose Absent*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	August	2	estimate	0	0	0	0	0	2	0	22	0	0	7	0	**32**	**32**
			ste	0	0	0	0	0	2	0	24	0	0	8	0		
	Total																**32**

Retained
Coho - *Adipose Unknown*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	July	1	estimate	0	0	0	0	0	0	0	0	0	82	0	0	**82**	**82**
			ste	0	0	0	0	0	0	0	0	0	84	0	0		
	August	1	estimate	0	0	29	0	0	0	0	0	0	0	0	0	**29**	**40**
			ste	0	0	29	0	0	0	0	0	0	0	0	0		
		2	estimate	0	0	11	0	0	0	0	0	0	0	0	0	**11**	
			ste	0	0	12	0	0	0	0	0	0	0	0	0		
	Total																**122**

Appendix D con't: Area 3 & 4 Tidal Creel Survey Coho Catch Summary

Released
Coho – *Adipose Present*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	June	1	estimate	0	0	48	6	0	96	0	0	0	229	0	0	**379**	**457**
			ste	0	0	36	6	0	66	0	0	0	243	0	0		
		2	estimate	0	0	5	2	0	41	0	0	0	18	13	0	**78**	
			ste	0	0	5	2	0	38	0	0	0	13	13	0		
	July	1	estimate	0	0	220	0	0	201	171	279	355	98	26	34	**1384**	**1729**
			ste	0	0	97	0	0	95	111	97	193	100	33	41		
		2	estimate	0	0	152	12	0	74	0	8	16	82	0	0	**346**	
			ste	0	0	67	13	0	28	0	6	12	58	0	0		
	August	1	estimate	0	8	134	0	0	75	0	154	363	23	0	0	**757**	**1530**
			ste	0	8	78	0	0	35	0	173	369	26	0			
		2	estimate	0	0	309	11	7	93	0	18	79	168	88	0	**773**	
			ste	0	0	145	17	8	56	0	11	54	107	76	0		
	Sept	1	estimate	0	0	6	0	0	0	0	0	44	0	22	0	**72**	**76**
			ste	0	0	6	0	0	0	0	0	35	0	18	0		
		2	estimate	0	0	0	0	0	4	0	0	0	0	0	0	**4**	
			ste	0	0	0	0	0	3	0	0	0	0	0	0		
	Total																**3793**

Appendix D con't: Area 3 & 4 Tidal Creel Survey Coho Catch Summary

Released

Coho - *Adipose Absent*

Catch Type	Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Legal	June	2	estimate	0	0	0	0	0	2	0	0	0	0	0	0	**2**	**2**
			ste	0	0	0	0	0	2	0	0	0	0	0	0		
	Total																**2**

Released

Coho - *Adipose Unknown*

Catch Type	Month	Day Type		SubArea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
Sub-Legal	June	1	estimate	0	0	0	0	0	0	0	0	0	86	0	0	**86**	**86**
			ste	0	0	0	0	0	0	0	0	0	91	0	0		
	July	2	estimate	0	0	2	0	0	0	0	0	0	0	0	0	**2**	**2**
			ste	0	0	2	0	0	0	0	0	0	0	0	0		
	August	1	estimate	0	0	6	0	0	0	0	0	0	0	0	0	**6**	**13**
			ste	0	0	6	0	0	0	0	0	0	0	0	0		
		2	estimate	0	0	7	0	0	0	0	0	0	0	0	0	**7**	
			ste	0	0	5	0	0	0	0	0	0	0	0	0		
	Total																**101**

Appendix E: Area 3 & 4 Tidal Creel Survey Halibut Catch Summary

Retained

Halibut Month	DayType	Data	Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
May	1	estimate	0	0	65	31	22	80	14	15	96	96	71	14	504	1435
		ste	0	0	29	32	22	60	17	19	55	99	32	17		
	2	estimate	0	18	173	30	0	287	99	26	116	28	29	124	931	
		ste	0	9	38	29	0	101	30	26	59	109	28	34		
June	1	estimate	1	323	221	488	11	1393	328	493	348	1631	399	117	5751	8367
		ste	1	79	105	155	11	385	242	204	209	635	287	94		
	2	estimate	1	57	276	94	10	465	275	108	177	929	69	153	2615	
		ste	1	17	69	26	5	116	103	47	75	188	54	55		
July	1	estimate	0	8	1160	176	13	1048	473	836	595	1909	198	95	6511	8507
		ste	0	10	232	92	13	250	163	166	202	438	142	92		
	2	estimate	0	56	282	154	3	364	89	98	141	632	98	79	1996	
		ste	0	21	52	47	2	77	50	36	64	163	39	59		
August	1	estimate	0	24	256	22	11	549	249	453	490	620	398	249	3320	5865
		ste	0	24	50	12	13	116	36	351	185	314	330	247		
	2	estimate	0	89	513	20	12	549	75	239	253	380	339	75	2545	
		ste	0	57	173	19	8	148	40	85	111	105	105	66		
Sept	1	estimate	0	0	108	0	0	0	0	199	105	0	53	0	465	774
		ste	0	0	70	0	0	0	0	69	74	0	37	0		
	2	estimate	1	5	74	27	0	11	14	0	65	65	47	0	309	
		ste	2	6	19	25	0	4	12	0	61	32	26	0		
Total																**24947**

Appendix E con't: Area 3 & 4 Tidal Creel Survey Halibut Catch Summary

Released

Halibut Month	Day Type	Data	Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
May	1	estimate	0	0	9	4	3	16	31	34	59	58	43	31	287	554
		ste	0	0	6	5	4	21	43	47	45	71	29	43		
	2	estimate	0	2	54	9	0	56	32	8	43	11	11	40	267	
		ste	0	2	37	12	0	61	17	10	52	57	18	20		
June	1	estimate	0	31	135	108	2	296	771	242	199	744	710	276	3514	4240
		ste	0	22	100	57	3	160	934	144	190	652	809	351		
	2	estimate	0	16	49	11	1	164	85	108	15	230	0	47	726	
		ste	0	13	26	8	1	101	55	62	16	141	0	30		
July	1	estimate	0	0	420	215	15	103	355	474	206	457	78	71	2393	2807
		ste	0	0	231	156	18	67	286	142	124	276	90	97		
	2	estimate	0	2	123	10	0	64	27	23	11	110	20	24	414	
		ste	0	2	65	8	0	25	20	17	11	54	20	22		
August	1	estimate	0	8	15	22	11	25	72	49	0	45	0	72	319	594
		ste	0	8	8	22	18	25	51	50	0	52	0	100		
	2	estimate	0	0	43	0	0	54	19	41	11	29	59	19	275	
		ste	0	0	23	0	0	31	15	26	12	22	42	21		
Sept	1	estimate	0	0	0	0	0	0	0	38	0	0	0	0	38	41
		ste	0	0	0	0	0	0	0	38	0	0	0	0		
	2	estimate	0	0	0	0	0	0	2	0	0	0	0	0	2	
		ste	0	0	0	0	0	0	3	0	0	0	0	0		
Total																**8236**

Appendix F: Area 3 & 4 Tidal Creel Survey Lingcod Catch Summary

Retained
Lingcod

Month	Day Type		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total	Monthly Total
May	1	estimate	0	0	30	14	10	64	14	15	17	17	12	14	206	690
		ste	0	0	20	18	12	77	17	19	16	24	11	17		
	2	estimate	0	0	112	19	0	190	54	14	19	5	5	67	485	
		ste	0	0	56	22	0	87	22	15	23	26	8	26		
June	1	estimate	0	42	10	38	1	400	154	63	33	200	0	55	996	1462
		ste	0	20	11	22	1	163	147	36	26	135	0	56		
	2	estimate	0	4	26	17	2	132	69	4	15	141	19	38	467	
		ste	0	2	12	9	1	46	27	2	16	46	20	15		
July	1	estimate	0	8	33	52	4	207	263	143	23	179	17	53	982	1348
		ste	0	10	18	51	5	64	128	64	23	101	22	56		
	2	estimate	0	0	25	5	0	61	54	6	32	128	7	48	366	
		ste	0	0	10	4	0	19	39	4	23	51	7	43		
			0													
August	1	estimate	0	8	61	0	0	65	127	20	0	113	0	127	521	884
		ste	0	8	42	0	0	26	41	21	0	76	0	136		
	2	estimate	0	0	59	2	1	74	29	22	62	86	0	29	364	
		ste	0	0	24	2	1	26	23	15	52	61	0	33		
Total																**4385**

Appendix F con't: Area 3 & 4 Tidal Creel Survey Lingcod Catch Summary

Released Lingcod			Subarea												
Month	**Day Type**		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**	**Monthly Total**
May	2	estimate	0	0	8	2	0	5	0	0	0	0	0	0	9	9
		ste	0	0	8	2	0	5	0	0	0	0	0	0		
June	1	estimate	0	0	0	0	0	52	0	0	0	0	0	0	52	74
		ste	0	0	0	0	0	35	0	0	0	0	0	0		
	2	estimate	0	0	0	8	1	14	0	1	0	88	0	0	22	
		ste	0	0	0	6	1	9	0	1	0	89	0	0		
July	1	estimate	0	0	0	0	0	5	26	0	0	16	9	5	62	97
		ste	0	0	0	0	0	5	17	0	0	17	11	6		
	2	estimate	0	0	0	7	0	3	13	0	0	0	0	11	35	
		ste	0	0	0	8	0	2	12	0	0	0	0	13		
August	1	estimate	0	0	0	0	0	5	5	0	0	0	0	5	15	42
		ste	0	0	0	0	0	5	5	0	0	0	0	8		
	2	estimate	0	0	0	0	0	15	5	1	0	0	0	5	27	
		ste	0	0	0	0	0	11	6	1	0	0	0	8		
Sept	1	estimate	0	0	0	0	0	0	0	77	0	0	0	0	77	167
		ste	0	0	0	0	0	0	0	77	0	0	0	0		
	2	estimate	0	0	0	0	0	5	3	0	29	33	20	0	90	
		ste	0	0	0	0	0	2	3	0	41	33	22	0		
Total																**388**

Appendix G: Area 3 & 4 Tidal Creel Survey Groundfish Catch Summary

Retained

GroundFish Month		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
May	estimate	0	5	29	7	2	23	5	1	0	0	0	7	79
June	estimate	1	17	31	54	1	56	19	23	0	200	0	7	409
July	estimate	0	0	14	19	1	31	2	6	0	0	0	1	74
August	estimate	1	8	4	0	0	9	0	6	0	0	0	0	28
Total		2	29	79	80	4	119	26	35	0	200	0	15	**591**

Released

GroundFish Month		Subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
May	estimate	0	9	50	21	13	5	16	4	10	2	2	20	152
June	estimate	0	0	46	52	2	545	32	73	0	18	0	18	787
July	estimate	0	0	158	2	0	174	49	72	0	0	43	21	519
August	estimate	0	9	105	0	0	30	0	7	0	0	147	0	298
Total		0	18	360	75	15	754	97	155	10	20	193	59	**1756**

Groundfish Catch Summary includes Dogfish, Greenling, Pacific Cod, Rock Sole, Arrowtooth Flounder, Ratfish, Skate and Unknown Groundfish

Appendix H: Area 3 & 4 Tidal Creel Survey Rockfish Catch Summary

Retained

Rockfish		Subarea												
Month		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**
May	estimate	0	2	142	41	18	661	152	94	85	54	27	173	1450
June	estimate	0	105	215	201	7	890	215	230	1568	1375	44	82	4933
July	estimate	0	259	130	129	6	990	466	277	73	544	30	161	3066
August	estimate	0	39	277	43	25	548	277	144	84	450	169	278	2336
Sept	estimate	4	15	13	3	0	1	6	179	93	47	57	0	418
Total		4	421	777	416	56	3090	1116	926	1904	2470	328	694	**12204**

Released

Rockfish		Subarea												
Month		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**
May	estimate	0	0	97	28	12	93	0	0	0	0	0	0	230
June	estimate	3	232	101	60	6	482	0	10	66	229	133	0	1322
July	estimate	0	76	60	5	0	118	58	19	23	9	0	33	401
August	estimate	0	0	20	0	0	166	11	2	6	0	0	11	216
Sept	estimate	0	0	0	0	0	0	0	0	4	0	3	0	7
Total		3	308	279	92	18	860	69	31	99	238	136	44	**2177**

Rockfish species include redstripe, canary, copper, china, black, tiger, yellow tail, yellow eye, quillback and unknown rockfish.

Appendix I: Area 3 & 4 Tidal Creel Survey Effort Summary

Boat Days

Month	Day Type	Data	subarea I	J	K	A	B	C	D	E	F	G	H	L	Total	Monthly Total
May	1	estimate	37.69	37.43	27.93	0.00	120.42	56.26	27.07	18.72	55.68	9.21	10.07	9.20	**410**	**983**
		ste	17.73	35.51	9.03	0.00	28.24	18.28	25.68	17.75	35.44	8.74	9.56	8.73		
	2	estimate	38.60	9.46	9.66	0.00	125.15	157.65	27.34	0.00	111.28	37.57	9.70	47.01	**573**	
		ste	17.73	35.51	9.03	0.00	28.24	18.28	25.68	17.75	35.44	8.74	9.56	8.73		
June	1	estimate	165.54	743.79	266.23	23.81	510.59	288.75	373.54	8.06	713.66	115.67	171.26	41.40	**3422**	**4696**
		ste	60.11	189.77	102.80	7.32	58.99	94.04	38.55	7.43	160.65	55.86	63.43	22.96		
	2	estimate	140.45	327.19	56.40	16.65	92.94	163.27	110.00	11.94	229.94	64.80	23.88	36.07	**1274**	
		ste	43.74	32.82	14.55	6.29	20.17	32.92	11.21	4.62	48.15	17.89	9.92	9.31		
July	1	estimate	274.72	522.00	137.90	0.00	177.22	540.13	100.10	7.16	531.75	144.47	261.32	28.88	**2726**	**3751**
		ste	41.35	81.53	77.38	0.00	88.00	74.64	41.19	6.63	101.19	37.79	39.71	26.74		
	2	estimate	81.09	219.86	71.61	2.26	76.98	169.04	106.98	2.28	219.05	20.59	36.81	18.31	**1025**	
		ste	12.41	22.46	12.89	1.60	16.88	17.79	23.98	1.61	34.47	10.67	11.99	12.95		
Aug	1	estimate	163.48	191.78	183.69	0.00	80.79	177.31	54.21	27.09	231.53	54.69	131.17	54.78	**1351**	**2529**
		ste	20.88	79.79	67.41	0.00	0.06	13.06	0.09	26.37	12.95	0.06	99.16	53.32		
	2	estimate	89.96	129.75	169.45	3.62	80.01	323.86	18.22	11.03	217.11	22.12	90.87	22.20	**1178**	
		ste	30.62	22.33	22.90	3.03	27.00	101.66	15.24	5.90	50.43	10.65	30.17	18.57		
Sept	1	estimate	70.28	0.00	35.31	0.00	0.00	41.93	0.00	0.00	0.00	0.00	57.66	0.00	**205**	**394**
		ste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	2	estimate	44.94	23.27	32.19	3.79	15.16	42.38	15.34	0.00	7.68	3.95	0.00	0.00	**189**	
		ste	32.29	0.48	8.02	3.29	6.58	2.66	13.28	0.00	0.09	3.42	0.00	0.00		
																12352

Appendix J: Area 3 & 4 Tidal Creel Survey Chinook CPUE Summary

Combined

Chinook			Subarea											
Month	**daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
May	1	CPUE	0.33	0.33	0.33	0.33	0.33	0.79	0.79	0.79	0.86	0.17	0.17	0.17
		STE	0.50	0.50	0.50	1.00	1.00	1.06	1.06	1.06	3.48	0.17	0.17	0.17
	2	CPUE	0.75	0.75	0.75	0.24	0.24	0.56	0.56	0.56	0.63	0.21	0.21	0.21
		STE	1.36	1.36	1.36	0.37	0.37	0.95	0.95	0.95	1.90	0.34	0.34	0.34
June	1	CPUE	2.70	3.27	2.17	0.06	0.74	1.37	1.12	1.12	1.44	0.50	1.10	0.50
		STE	6.23	8.44	16.17	0.05	1.87	4.52	3.83	3.83	3.05	1.50	2.89	1.50
	2	CPUE	1.95	1.27	2.00	0.15	1.13	0.51	1.44	1.44	1.90	1.25	1.00	1.25
		STE	2.16	2.88	9.56	0.40	2.67	1.18	2.92	2.92	4.67	1.93	2.78	1.93
July	1	CPUE	0.88	1.53	0.31	0.02	0.71	0.41	0.81	0.81	0.79	0.55	0.87	0.55
		STE	2.03	4.71	0.76	0.02	1.51	0.74	1.26	1.26	1.44	1.88	2.04	1.88
	2	CPUE	0.60	1.29	1.55		0.46	0.48	0.56	0.56	0.70	0.38	0.98	0.38
		STE	0.54	2.48	4.07		1.03	1.01	1.18	1.18	1.82	0.42	3.27	0.42
August	1	CPUE	0.44	0.12			0.10	0.26	0.80	0.80	0.41	0.14	0.28	0.14
		STE	1.03	0.24			0.10	0.38	6.40	6.40	0.78	0.22	0.42	0.22
	2	CPUE	0.44	0.33	0.22		0.11	0.25			0.28	0.46	0.40	0.46
		STE	0.93	0.31	0.27		0.10	0.40			0.35	1.27	0.69	1.27
Sept	1	CPUE						0.43	0.43	0.43				
		STE						1.29	1.29	1.29				
	2	CPUE									0.27			
		STE									0.34			

Appendix J con't: Area 3 & 4 Tidal Creel Survey Chinook CPUE Summary

Guided

Chinook			Subarea											
Month	**Daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
May	1	CPUE	0.20	0.20	0.20			0.70	0.70	0.70	1.20	0.33	0.33	0.33
		STE	0.20	0.20	0.20			1.34	1.34	1.34	4.70	0.33	0.33	0.33
	2	CPUE	0.86	0.86	0.86	0.70	0.70	1.78	1.78	1.78	0.17	0.17	0.17	0.17
		STE	1.48	1.48	1.48	1.12	1.12	2.11	2.11	2.11	0.17	0.17	0.17	0.17
June	1	CPUE	2.88	3.88	5.00		1.57	3.80	2.71	2.71	1.91	0.75	1.43	0.75
		STE	6.70	8.74	50.00		2.62	1.20	8.84	8.84	3.90	2.25	3.76	2.25
	2	CPUE	2.86	1.33	4.50		2.64	1.08	2.40	2.40	2.41	1.50	1.32	1.50
		STE	1.14	3.19	16.50		6.05	2.81	2.97	2.97	5.67	2.57	3.83	2.57
July	1	CPUE	1.56	1.05	2.50		3.50	0.60	0.50	0.50	1.06	0.79	0.94	0.79
		STE	3.53	3.19	0.50		0.50	1.62	1.00	1.00	1.94	2.80	2.02	2.80
	2	CPUE	0.56	2.00	4.00		3.00	1.27	1.40	1.40	0.88	0.30	1.05	0.30
		STE	0.53	3.45	4.00		0.00	1.64	1.80	1.80	2.97	0.23	3.47	0.23
August	1	CPUE	0.80	0.15				0.56			0.80	0.20	0.38	0.20
		STE	1.70	0.31				0.66			1.43	0.31	0.55	0.31
	2	CPUE	0.33	0.41	0.17			0.48			0.28	0.86	0.35	0.86
		STE	1.00	0.38	0.17			0.64			0.32	2.14	0.51	2.14
Sept	1	CPUE												
		STE												
	2	CPUE									0.29			
		STE									0.24			

Appendix J con't: Area 3 & 4 Tidal Creel Survey Chinook CPUE Summary

Unguided

Chinook			Subarea											
Month	**Daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
May	1	CPUE	0.50	0.50	0.50	0.75	0.75	0.89	0.89	0.89				
		STE	1.00	1.00	1.00	2.25	2.25	0.86	0.86	0.86				
	2	CPUE				0.13	0.13	0.22	0.22	0.22	0.78	0.25	0.25	0.25
		STE				0.16	0.16	0.19	0.19	0.19	2.42	0.50	0.50	0.50
June	1	CPUE	2.00	2.11	0.75	0.13	0.68	0.88	0.62	0.62	1.09		0.38	
		STE	8.00	6.61	2.25	0.12	1.78	3.78	1.38	1.38	2.21		0.42	
	2	CPUE	1.42	1.15		0.29	0.92	0.43	1.18	1.18	1.40	1.00	0.64	1.00
		STE	2.08	2.49		0.76	1.89	0.92	2.63	2.63	3.28	1.43	1.48	1.43
July	1	CPUE	0.47	2.60		0.05	0.42	0.34	0.88	0.88	0.51	0.13	0.71	0.13
		STE	0.84	6.93		0.05	0.70	0.46	1.36	1.36	0.81	0.13	2.13	0.13
	2	CPUE	0.67	0.58	0.63		0.31	0.32	0.45	0.45	0.53	0.67	0.93	0.67
		STE	0.67	0.63	1.13		0.69	0.75	1.03	1.03	0.68	1.33	3.24	1.33
August	1	CPUE					0.11	0.16	0.80	0.80	0.12			
		STE					0.11	0.24	6.40	6.40	0.11			
	2	CPUE	0.57	0.20	0.24		0.13	0.20			0.28		0.48	
		STE	0.95	0.18	0.32		0.12	0.34			0.36		0.99	
Sept	1	CPUE						0.75	0.75	0.75				
		STE						2.25	2.25	2.25				
	2	CPUE									0.26			
		STE									0.38			

Appendix K: Area 3 & 4 Tidal Creel Survey Coho CPUE Summary

Combined

Coho			Subarea											
Month	**Daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
June	1	CPUE	0.40	1.92	1.17		0.04	0.53	0.36	0.36	1.32	0.17	0.49	0.17
		STE	0.49	7.59	8.17		0.04	1.43	0.65	0.65	4.17	0.17	1.31	0.17
	2	CPUE	1.05	0.84	0.44		0.07	0.38	0.30	0.30	0.38	0.94	0.51	0.94
		STE	1.72	2.14	1.03		0.09	1.50	1.31	1.31	0.75	2.73	2.60	2.73
July	1	CPUE	5.96	4.44	1.63		1.00	3.14	1.43	1.43	6.47	4.95	6.24	4.95
		STE	25.95	25.70	9.32		17.20	14.27	5.06	5.06	29.04	44.05	36.59	44.05
	2	CPUE	5.73	5.08	1.91		0.11	2.70	2.09	2.09	5.80	1.54	2.96	1.54
		STE	44.78	33.30	11.09		0.27	12.83	6.18	6.18	33.88	5.27	13.92	5.27
August	1	CPUE	7.33	7.00	7.33		4.40	3.44	1.40	1.40	5.70	2.18	7.07	2.18
		STE	37.00	22.75	2.27		16.49	25.14	5.16	5.16	23.73	15.30	35.61	15.30
	2	CPUE	9.31	7.37	5.87		2.83	3.48	2.09	2.09	5.21	2.38	6.80	2.38
		STE	31.83	36.32	19.83		15.44	16.16	11.34	11.34	22.56	20.26	49.87	20.26
Sept	1	CPUE	4.63	0.67	4.63			0.43	0.43	0.43	5.14			
		STE	16.55	0.33	16.55			0.62	0.62	0.62	22.90			
	2	CPUE	2.09	3.00	2.09			0.35	0.35	0.35	5.57	1.56	1.56	1.56
		STE	10.69	18.00	10.69			0.60	0.60	0.60	34.05	12.00	12.00	12.00

Appendix K con't: Area 3 & 4 Tidal Creel Survey Coho CPUE Summary

Guided

Coho			Subarea											
Month	**daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
June	1	CPUE	0.50	2.06				1.00	0.14	0.14	1.54	0.25	0.43	0.25
		STE	0.57	6.56				1.00	0.29	0.29	5.31	0.25	0.70	0.25
	2	CPUE	1.71	0.83	0.75		0.09	0.75	0.07	0.07	0.31	1.50	0.80	1.50
		STE	2.90	1.62	2.25		0.09	2.57	0.07	0.07	0.82	4.57	4.17	4.57
July	1	CPUE	5.89	4.64	5.00		9.50	4.25	3.25	3.25	9.17	5.57	7.37	5.57
		STE	27.86	29.58	50.00		180.50	21.25	14.25	14.25	29.44	50.73	37.28	50.73
	2	CPUE	7.22	6.83	5.67			5.67	4.20	4.20	7.33	1.10	3.55	1.10
		STE	60.44	45.06	24.33			19.38	12.20	12.20	39.53	4.10	19.88	4.10
August	1	CPUE	8.60	7.38	7.00		6.00	7.44			7.85	3.00	8.45	3.00
		STE	48.30	25.59	2.00		0.00	36.80			26.87	20.14	38.40	20.14
	2	CPUE	8.89	8.71	9.33		4.00	7.22	5.33	5.33	5.75	3.71	8.69	3.71
		STE	44.61	39.72	35.93		32.00	20.41	85.33	85.33	34.92	32.57	62.65	32.57
Sept	1	CPUE	6.20		6.20			0.67	0.67	0.67	6.80			
		STE	19.20		19.20			1.33	1.33	1.33	30.70			
	2	CPUE	7.50	9.00	7.50						4.14	2.22	2.22	2.22
		STE	4.50	0.00	4.50						5.48	18.69	18.69	18.69

Appendix K con't: Area 3 & 4 Tidal Creel Survey Coho CPUE Summary

Unguided

Coho			Subarea											
Month	**daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
June	1	CPUE		1.67	1.75		0.04	0.44	0.42	0.42	1.15		0.62	
		STE		10.50	12.25		0.04	1.51	0.75	0.75	3.35		2.76	
	2	CPUE	0.67	0.85	0.20		0.06	0.32	0.36	0.36	0.45	0.38	0.18	0.38
		STE	0.79	3.31	0.20		0.09	1.35	1.64	1.64	0.69	0.55	0.73	0.55
July	1	CPUE	6.00	4.00	1.14		0.11	2.77	1.00	1.00	3.71	3.88	3.83	3.88
		STE	26.71	19.33	4.90		0.21	11.75	2.63	2.63	13.81	35.84	27.80	35.84
	2	CPUE	3.50	3.33	0.50		0.11	2.10	1.82	1.82	4.32	3.00	2.53	3.00
		STE	18.70	17.88	0.57		0.28	9.53	5.02	5.02	24.40	9.00	9.64	9.00
August	1	CPUE	5.75	5.75	9.00		4.22	2.02	1.40	1.40	4.04	0.43	3.45	0.43
		STE	28.25	16.25	0.00		18.19	13.20	5.16	5.16	15.72	1.29	11.47	1.29
	2	CPUE	9.86	5.10	4.65		2.69	2.66	1.77	1.77	4.91	0.83	3.71	0.83
		STE	19.48	25.21	10.37		15.16	11.50	5.43	5.43	15.80	4.17	16.61	4.17
Sept	1	CPUE	2.00	1.00	2.00			0.25	0.25	0.25	4.22			
		STE	3.00	0.00	3.00			0.25	0.25	0.25	19.19			
	2	CPUE	0.89	1.50	0.89			0.40	0.40	0.40	6.00	0.71	0.71	0.71
		STE	3.86	9.00	3.86			0.67	0.67	0.67	42.55	3.57	3.57	3.57

Appendix L: Area 3 & 4 Tidal Creel Survey Halibut CPUE Summary

Combined

Halibut			Subarea											
Month	**daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
May	1	CPUE	2.56	2.56	2.56			1.16	1.16	1.16	1.43	1.50	1.50	1.50
		STE	5.03	5.03	5.03			2.03	2.03	2.03	1.62	4.30	4.30	4.30
	2	CPUE	3.00	3.00	3.00	0.15	0.15	1.10	1.10	1.10	2.58	2.64	2.64	2.64
		STE	2.86	2.86	2.86	0.24	0.24	1.64	1.64	1.64	3.04	3.63	3.63	3.63
June	1	CPUE	2.10	2.19	1.50	0.03	0.63	0.77	1.31	1.31	1.95	2.83	2.88	2.83
		STE	8.99	10.16	4.30	0.03	1.80	1.91	8.94	8.94	7.68	12.17	10.06	12.17
	2	CPUE	1.26	2.84	1.22	0.06	0.62	1.69	0.86	0.86	2.02	4.25	4.53	4.25
		STE	2.32	9.14	6.94	0.15	1.47	5.67	3.28	3.28	9.49	17.00	12.43	17.00
July	1	CPUE	2.17	3.66	1.44	0.07	0.05	2.15	1.76	1.76	1.97	3.27	3.20	3.27
		STE	10.23	11.85	4.93	0.20	0.05	7.68	5.89	5.89	8.03	10.97	12.24	10.97
	2	CPUE	1.73	2.88	1.36	0.00	0.73	1.67	1.44	1.44	1.66	4.31	2.65	4.31
		STE	8.21	11.07	2.45	0.00	1.70	5.69	3.78	3.78	7.06	8.40	9.80	8.40
August	1	CPUE	3.00	3.24	2.17		0.30	1.44	0.40	0.40	2.37	4.55	3.45	4.55
		STE	10.00	12.69	13.77		0.90	4.15	0.49	0.49	10.77	9.31	8.97	9.31
	2	CPUE	2.81	2.93	2.00	0.00	1.11	1.58	1.12	1.12	2.53	3.38	2.63	3.38
		STE	8.70	10.38	7.00	0.00	5.99	5.01	3.42	3.42	11.26	7.09	7.64	7.09
Sept	1	CPUE	1.50	2.67	1.50			2.57	2.57	2.57	0.86	3.44	3.44	3.44
		STE	8.86	21.33	8.86			19.62	19.62	19.62	2.44	13.03	13.03	13.03
	2	CPUE	1.45	2.80	1.45	0.33	0.33	1.74	1.74	1.74	1.47	3.44	3.44	3.44
		STE	5.47	9.20	5.47	0.67	0.67	4.29	4.29	4.29	6.26	6.66	6.66	6.66

Appendix L con't: Area 3 & 4 Tidal Creel Survey Halibut CPUE Summary

Guided

Halibut Month	Daytype		Subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
May	1	CPUE	2.80	2.80	2.80			1.60	1.60	1.60	1.60	1.33	1.33	1.33
		STE	3.70	3.70	3.70			3.16	3.16	3.16	2.30	2.33	2.33	2.33
	2	CPUE	3.14	3.14	3.14	0.10	0.10	1.33	1.33	1.33	3.83	3.83	3.83	3.83
		STE	3.14	3.14	3.14	0.10	0.10	3.25	3.25	3.25	2.57	1.37	1.37	1.37
June	1	CPUE	2.25	3.00	2.50		0.71		3.00	3.00	2.91	2.75	3.57	2.75
		STE	10.79	13.25	12.50		3.57		29.85	29.85	10.08	14.25	11.51	14.25
	2	CPUE	1.71	3.21	2.75		1.18	2.33	1.53	1.53	2.39	4.25	5.28	4.25
		STE	3.57	10.87	12.92		3.56	11.15	8.55	8.55	12.08	16.79	13.21	16.79
July	1	CPUE	2.67	4.45	1.00			4.45	6.00	6.00	2.69	4.43	3.75	4.43
		STE	13.00	13.88	2.00			10.68	2.67	2.67	10.14	11.34	13.67	11.34
	2	CPUE	2.22	2.92	1.33			2.40	0.80	0.80	2.33	5.30	3.77	5.30
		STE	11.19	12.99	2.33			13.11	3.20	3.20	9.18	5.79	12.95	5.79
August	1	CPUE	2.80	3.77	2.60			2.25			3.70	4.73	3.90	4.73
		STE	15.20	13.36	15.80			5.00			14.54	8.78	10.67	8.78
	2	CPUE	1.78	3.53	3.67		5.50	1.63	2.33	2.33	4.08	3.43	3.49	3.43
		STE	7.69	9.26	17.07		40.50	4.01	10.33	10.33	18.02	5.62	8.93	5.62
Sept	1	CPUE	1.60	8.00	1.60			6.00	6.00	6.00		5.00	5.00	5.00
		STE	12.80	0.00	12.80			28.00	28.00	28.00		12.00	12.00	12.00
	2	CPUE	1.00	2.00	1.00			3.67	3.67	3.67	1.14	3.56	3.56	3.56
		STE	2.00	0.00	2.00			6.33	6.33	6.33	6.81	7.53	7.53	7.53

Appendix L con't: Area 3 & 4 Tidal Creel Survey Halibut CPUE Summary

Unguided

Halibut Month	Daytype		Subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
May	1	CPUE	2.25	2.25	2.25			0.67	0.67	0.67	1.00	1.67	1.67	1.67
		STE	8.25	8.25	8.25			0.50	0.50	0.50	0.00	8.33	8.33	8.33
	2	CPUE	2.00	2.00	2.00	0.16	0.16	1.03	1.03	1.03	2.17	1.75	1.75	1.75
		STE	0.00	0.00	0.00	0.27	0.27	1.26	1.26	1.26	2.62	3.64	3.64	3.64
June	1	CPUE	1.50	0.67	1.00	0.07	0.63	0.92	0.78	0.78	1.23	3.00	1.38	3.00
		STE	4.50	1.25	2.00	0.07	1.70	2.16	1.77	1.77	4.84	18.00	4.09	18.00
	2	CPUE	1.00	2.15		0.12	0.54	1.60	0.67	0.67	1.66	4.25	3.68	4.25
		STE	1.64	5.81		0.29	1.16	4.94	1.82	1.82	6.82	19.64	10.70	19.64
July	1	CPUE	1.87	1.90	1.50	0.15	0.05	1.39	0.76	0.76	1.24	1.25	2.04	1.25
		STE	9.12	3.43	5.50	0.45	0.05	4.51	1.32	1.32	4.94	4.50	7.61	4.50
	2	CPUE	1.00	2.83	1.38	0.00	0.77	1.52	1.53	1.53	1.02	1.00	1.83	1.00
		STE	4.00	10.15	2.84	0.00	1.77	4.20	3.88	3.88	4.26	3.00	6.21	3.00
August	1	CPUE	3.25	1.50			0.33	1.16	0.40	0.40	1.35	4.14	2.27	4.14
		STE	6.25	9.00			1.00	3.63	0.49	0.49	5.84	11.81	3.02	11.81
	2	CPUE	4.14	1.90	1.41	0.00	0.56	1.57	1.00	1.00	1.66	3.33	1.23	3.33
		STE	7.81	11.66	2.88	0.00	1.20	5.27	2.90	2.90	5.53	10.27	2.45	10.27
Sept	1	CPUE	1.33		1.33			0.00	0.00	0.00	1.33	0.33	0.33	0.33
		STE	5.33		5.33			0.00	0.00	0.00	3.25	0.33	0.33	0.33
	2	CPUE	1.56	3.00	1.56	0.40	0.40	1.45	1.45	1.45	1.57	3.29	3.29	3.29
		STE	6.53	12.00	6.53	0.80	0.80	3.63	3.63	3.63	6.35	6.57	6.57	6.57

Appendix M: Area 3 & 4 Tidal Creel Survey Lingcod CPUE Summary

Combined
Lingcod

Month	daytype		Subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
May	1	CPUE	0.44	0.44	0.44			0.53	0.53	0.53	1.14	1.50	1.50	1.50
		STE	1.03	1.03	1.03			1.71	1.71	1.71	6.81	4.30	4.30	4.30
	2	CPUE	0.50	0.50	0.50			0.71	0.71	0.71	1.71	1.43	1.43	1.43
		STE	2.00	2.00	2.00			4.86	4.86	4.86	6.82	3.03	3.03	3.03
June	1	CPUE	0.20	0.27			0.08	0.03	0.10	0.10	0.56	1.33	0.37	1.33
		STE	0.18	0.68			0.14	0.03	0.20	0.20	2.82	5.87	0.94	5.87
	2	CPUE	0.11	0.43	0.33		0.04	0.16	0.16	0.16	0.57	1.06	0.15	1.06
		STE	0.21	0.64	1.00		0.04	0.41	0.42	0.42	3.15	1.40	0.26	1.40
July	1	CPUE	0.08	0.34	0.13		0.05	0.06	0.52	0.52	0.39	1.82	0.55	1.82
		STE	0.17	1.07	0.25		0.05	0.08	3.86	3.86	0.89	11.39	3.85	11.39
	2	CPUE	0.40	0.58	0.09			0.15	0.05	0.05	0.28	2.62	0.17	2.62
		STE	1.11	1.21	0.09			0.29	0.05	0.05	0.73	17.09	0.30	17.09
August	1	CPUE		0.59			0.10	0.34			0.28	2.32	0.15	2.32
		STE		1.38			0.10	3.40			0.56	12.32	0.34	12.32
	2	CPUE	0.69	0.67				0.18	0.09	0.09	0.34	1.31	0.24	1.31
		STE	4.10	5.54				0.31	0.09	0.09	0.79	7.73	1.45	7.73
Sept	1	CPUE									0.43	1.33	1.33	1.33
		STE									2.57	16.00	16.00	16.00
	2	CPUE	0.64	1.40	0.64						0.70	0.75	0.75	0.75
		STE	4.45	9.80	4.45						2.15	1.27	1.27	1.27

Appendix M con't: Area 3 & 4 Tidal Creel Survey Lingcod CPUE Summary

Guided

Lingcod			Subarea											
Month	**Daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
May	1	CPUE	0.80	0.80	0.80			0.90	0.90	0.90	1.40	2.67	2.67	2.67
		STE	1.70	1.70	1.70			2.99	2.99	2.99	9.80	6.33	6.33	6.33
	2	CPUE	0.57	0.57	0.57			1.33	1.33	1.33	2.33	1.67	1.67	1.67
		STE	2.29	2.29	2.29			16.00	16.00	16.00	4.67	5.07	5.07	5.07
June	1	CPUE	0.13	0.29			0.14	0.20	0.07	0.07	0.69	1.50	0.39	1.50
		STE	0.13	0.97			0.14	0.20	0.07	0.07	2.22	9.00	1.06	9.00
	2	CPUE	0.29	0.54	0.75		0.09		0.27	0.27	0.75	1.00	0.16	1.00
		STE	0.57	0.87	2.25		0.09		1.07	1.07	4.06	0.86	0.39	0.86
July	1	CPUE	0.22	0.41	0.00			0.05	2.50	2.50	0.42	2.71	0.78	2.71
		STE	0.44	1.40	0.00			0.05	19.00	19.00	1.15	15.76	5.49	15.76
	2	CPUE	0.67	0.25	0.33			0.33			0.42	3.30	0.14	3.30
		STE	1.75	0.39	0.33			1.10			1.26	20.46	0.41	20.46
August	1	CPUE		0.62				1.13			0.45	1.93	0.21	1.93
		STE		1.59				12.12			0.79	7.92	0.46	7.92
	2	CPUE	1.11	0.88				0.33			0.61	2.29	0.37	2.29
		STE	7.11	8.36				0.77			1.16	12.90	2.28	12.90
Sept	1	CPUE												
		STE												
	2	CPUE	3.50	7.00	3.50						1.43	0.78	0.78	0.78
		STE	24.50	0.00	24.50						5.29	1.44	1.44	1.44

Appendix M con't: Area 3 & 4 Tidal Creel Survey Lingcod CPUE Summary

UnGuided

Lingcod			Subarea											
Month	**Daytype**		**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
May	1	CPUE						0.11	0.11	0.11	0.50	0.33	0.33	0.33
		STE						0.11	0.11	0.11	0.50	0.33	0.33	0.33
	2	CPUE						0.53	0.53	0.53	1.50	1.25	1.25	1.25
		STE						2.00	2.00	2.00	7.68	1.93	1.93	1.93
June	1	CPUE	0.50	0.22			0.08		0.11	0.11	0.47	1.00	0.31	1.00
		STE	0.50	0.19			0.14		0.24	0.24	3.30	2.00	0.73	2.00
	2	CPUE		0.23			0.04	0.18	0.13	0.13	0.40	1.13	0.14	1.13
		STE		0.19			0.04	0.46	0.26	0.26	2.24	2.13	0.12	2.13
July	1	CPUE		0.20	0.14		0.05	0.07	0.06	0.06	0.35	0.25	0.04	0.25
		STE		0.40	0.29		0.05	0.10	0.06	0.06	0.63	0.50	0.04	0.50
	2	CPUE		0.92				0.11	0.05	0.05	0.14	0.33	0.20	0.33
		STE		1.90				0.13	0.05	0.05	0.18	0.33	0.23	0.33
August	1	CPUE		0.50			0.11	0.07			0.15	3.14		3.14
		STE		1.00			0.11	0.20			0.38	23.48		23.48
	2	CPUE	0.14	0.30				0.15	0.10	0.10	0.19	0.17	0.03	0.17
		STE	0.14	0.90				0.21	0.09	0.09	0.54	0.17	0.03	0.17
Sept	1	CPUE									0.67	4.00	4.00	4.00
		STE									4.00	48.00	48.00	48.00
	2	CPUE									0.48	0.71	0.71	0.71
		STE									1.17	1.24	1.24	1.24

Appendix N:

Groundfish, Rockfish and Other

Detailed Catch Summary

Appendix N: Groundfish, Rockfish and Other Detailed Catch Summary

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Arrowtooth Flounder**	6	1	estimate				6	0			4					**11**
				ste				6	0			5					
			2	estimate			2	3	0	2							**7**
				ste			2	3	0	2							
		6 Sum of estimate					2	9	0	2		4					**18**
		7	2	estimate								1					**1**
				ste								2					
		7 Sum of estimate										1					**1**
	Arrowtooth Flounder Sum of estimate						2	9	0	2		6					**19**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Black**	5	1	estimate			6	3	2	40	26	29				26	**131**
				ste			7	5	3	45	37	40				37	
			2	estimate						185	8	2	10	2	2	10	**220**
				ste						111	6	3	12	13	4	8	
		5 Sum of estimate					6	3	2	225	34	31	10	2	2	36	**351**
		6	1	estimate		36		13	0	44	39	92		401		14	**638**
				ste		32		9	0	25	47	81		241		18	
			2	estimate		3	12			103	16	9				9	**153**
				ste		2	8			50	14	10				8	
		6 Sum of estimate				40	12	13	0	147	55	101		401		23	**790**
		7	1	estimate		51				129	230	21	23	16		46	**516**
				ste		54				77	162	12	16	17		58	
			2	estimate						64	38		5			34	**141**
				ste						39	31		6			33	
		7 Sum of estimate				51				193	268	21	28	16		80	**657**
		8	1	estimate			6			106	20					20	**151**
				ste			6			63	14					28	
			2	estimate			4	12	7	69	5	7				5	**109**
				ste			3	14	6	41	6	7				8	
		8 Sum of estimate					10	12	7	175	25	7				25	**261**
		9	2	estimate			2	1			1						**3**
				ste			2	1			1						
		9 Sum of estimate					2	1			1						**3**
	Black Sum of estimate					90	30	28	9	740	382	159	38	419	2	164	**2063**
	Blue Rockfish	8	2	estimate			2										**2**
				ste			2										
		8 Sum of estimate					2										**2**
	Blue Rockfish Sum of estimate						2										**2**

					subarea												
Catch Type	**Species**	**Month**	**daytype**	**Data**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**
Retained	**Bocaccio Rockfish**	8	1	estimate							7					7	**15**
				ste							7					13	
		8 Sum of estimate									7					7	**15**
	Bocaccio Rockfish Sum of estimate										7					7	**15**
	Bull Head	8	2	estimate	0												**0**
				ste	0												
		8 Sum of estimate			0												**0**
	Bull Head Sum of estimate				0												**0**
	Cabezon	8	2	estimate								1					**1**
				ste								1					
		8 Sum of estimate										1					**1**
	Cabezon Sum of estimate											1					**1**
	Canary	5	1	estimate							2	2				2	**5**
				ste							3	3				3	
			2	estimate						5							**5**
				ste						5							
		5 Sum of estimate								5	2	2				2	**9**
		7	1	estimate				5	0	5							**10**
				ste				6	1	5							
			2	estimate						2							**2**
				ste						2							
		7 Sum of estimate						5	0	7							**12**
		8	2	estimate								3					**3**
				ste								4					
		8 Sum of estimate										3					**3**
	Canary Sum of estimate							5	0	11	2	5				2	**25**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**China**	5	1	estimate			3	1	1								**5**
				ste			3	2	2								
			2	estimate						14	3	1	10	2	2	3	**35**
				ste						12	3	1	12	13	4	3	
		5 Sum of estimate					3	1	1	14	3	1	10	2	2	3	**40**
		6	1	estimate				6	0	17							**24**
				ste				6	0	13							
			2	estimate			5			7		1					**13**
				ste			5			5		1					
		6 Sum of estimate					5	6	0	25		1					**37**
		7	1	estimate		25				108		24					**158**
				ste		31				63		18					
			2	estimate						10	8			27		7	**53**
				ste						6	8			28		9	
		7 Sum of estimate				25				119	8	24		27		7	**211**
		8	1	estimate			9			10	25			11		25	**80**
				ste			9			7	22			13		40	
			2	estimate			4	1	0	9	2					2	**17**
				ste			5	1	0	7	2					3	
		8 Sum of estimate					13	1	0	19	27			11		27	**97**
		9	2	estimate							1						**1**
				ste							2						
		9 Sum of estimate									1						**1**
	China Sum of estimate					25	21	8	1	176	38	26	10	41	2	37	**386**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Chum**	6	1	estimate				6	0	9			17				**32**
				ste				6	0	9			19				
		6 Sum of estimate						6	0	9			17				**32**
		7	1	estimate						5		10					**16**
				ste						5		8					
			2	estimate				2	0					9	7		**18**
				ste				3	0					9	7		
		7 Sum of estimate						2	0	5		10		9	7		**34**
		9	2	estimate						0							**0**
				ste						0							
		9 Sum of estimate								0							**0**
	Chum Sum of estimate							9	0	14		10	17	9	7		**66**

					subarea											
Catch Type	**Species**	**Month**	**daytype**	**Data**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**
Retained	**Copper**	5	1	estimate							2	2	8	8	6	2	**28**
				ste							3	3	7	11	5	3	
			2	estimate			8	1		14							**23**
				ste			5	2		9							
		5 Sum of estimate					8	1		14	2	2	8	8	6	2	**51**
		6	1	estimate		36		6	0	9			99	57			**208**
				ste		27		6	0	9			112	61			
			2	estimate		3		2	0	7	4	3			19	2	**40**
				ste		2		2	0	5	4	3			20	2	
		6 Sum of estimate				40		8	0	16	4	3	99	57	19	2	**248**
		7	1	estimate			7	5	0	5		3					**20**
				ste			7	6	1	5		4					
			2	estimate						3							**3**
				ste						3							
		7 Sum of estimate					7	5	0	9		3					**24**
		8	1	estimate										11			**11**
				ste										13			
			2	estimate				3	2	2	5	3			37	5	**57**
				ste				3	2	2	6	3			38	8	
		8 Sum of estimate						3	2	2	5	3		11	37	5	**68**
	Copper Sum of estimate					40	14	17	2	40	11	11	108	77	62	9	**390**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Dogfish**	5	2	estimate		5											**5**
				ste		5											
		5 Sum of estimate				5											**5**
		8	1	estimate		8											**8**
				ste		8											
		8 Sum of estimate				8											**8**
	Dogfish Sum of estimate					13											**13**
	Dusky	6	1	estimate		5		6	0								**12**
				ste		5		6	0								
		6 Sum of estimate				5		6	0								**12**
	Dusky Sum of estimate					5		6	0								**12**
	Greenling	5	2	estimate			4	1									**5**
				ste			4	1									
		5 Sum of estimate					4	1									**5**
		6	1	estimate		10	10	32	1	35				86			**173**
				ste		11	11	32	1	29				69			
			2	estimate			7										**7**
				ste			7										
		6 Sum of estimate				10	16	32	1	35				86			**180**
		7	1	estimate						21							**21**
				ste						21							
			2	estimate				5	0	2	2					1	**10**
				ste				5	0	2	2					2	
		7 Sum of estimate						5	0	22	2					1	**30**
		8	1	estimate						5							**5**
				ste						5							
			2	estimate			2			2							**4**
				ste			2			2							
		8 Sum of estimate					2			7							**9**
	Greenling Sum of					10	22	37	1	64	2			86		1	**224**

					subarea											
Catch Type	**Species**	**Month**	**daytype**	**Data**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**
Retained	**Groundfish**	5	1	estimate			6	3	2								**11**
				ste			7	5	3								
			2	estimate			4	1		14	5	1				7	**32**
				ste			4	1		12	6	2				7	
		5 Sum of estimate					10	4	2	14	5	1				7	**43**
		6	1	estimate	1			6	0		19	17		114		7	**164**
				ste	1			6	0		23	15		97		9	
			2	estimate						4		1					**5**
				ste						4		1					
		6 Sum of estimate			1			6	0	4	19	18		114		7	**169**
		7	1	estimate			7	10	1	5		3					**26**
				ste			7	11	1	5		4					
			2	estimate			8	5	0	3		1					**17**
				ste			8	5	0	2		1					
		7 Sum of estimate					14	15	1	9		4					**42**
		8	2	estimate						2		4					**7**
				ste						2		3					
		8 Sum of estimate								2		4					**7**
	Groundfish Sum of estimate				1		24	24	3	28	25	28		114		14	**261**

					subarea											
Catch Type	**Species**	**Month**	**daytype**	**Data**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**
Retained	**Pacific cod**	5	2	estimate			12	2									**14**
				ste			12	3									
		5 Sum of estimate					12	2									**14**
		6	1	estimate			10			9							**18**
				ste			11			9							
			2	estimate		1	2			7		1					**11**
				ste		1	2			7		1					
		6 Sum of estimate				1	11			16		1					**29**
		7	1	estimate			7					7					**14**
				ste			7					7					
			2	estimate							2	3				1	**6**
				ste							2	2				2	
		7 Sum of estimate					7				2	10				1	**19**
	Pacific cod Sum of estimate					1	30	2		16	2	11				1	**62**
	Perches	8	2	estimate	1												**1**
				ste	1												
		8 Sum of estimate			1												**1**
	Perches Sum of estimate				1												**1**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
	Pink	5	2	estimate						5							**5**
				ste						5							
		5 Sum of estimate								5							**5**
		6	1	estimate		5				17		17		257			**297**
				ste		5				18		19		218			
			2	estimate		1		2	0	7	4	1	37	44		2	**98**
				ste		1		2	0	5	4	1	30	26		2	
		6 Sum of estimate				6		2	0	25	4	18	37	302		2	**395**
		7	1	estimate			33	5	0	46	13	24	206	65	34	3	**431**
				ste			18	6	1	19	10	11	165	33	30	3	
			2	estimate	0		10	7	0	10	3	7	16	55		3	**112**
				ste	0		5	6	0	6	3	5	12	56		3	
		7 Sum of estimate			0		43	12	0	57	16	31	222	120	34	5	**542**
		8	1	estimate		97	15	5	3	45	5	3	54	23	31	5	**286**
				ste		45	6	5	5	19	3	5	55	19	34	7	
			2	estimate		9	54	3	2	22		17	34	48	103		**291**
				ste		7	24	3	1	13		8	24	40	46		
		8 Sum of estimate				106	69	8	4	67	5	20	88	71	134	5	**577**
		9	2	estimate						1							**1**
				ste						0							
		9 Sum of estimate								1							**1**
	Pink Sum of estimate				0	112	112	22	5	154	25	69	347	493	168	13	**1520**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Quillback**	5	1	estimate			9	4	3		6	7				6	**35**
				ste			10	7	5		10	11				10	
			2	estimate			31	5		121	24	6	10	2	2	30	**232**
				ste			23	7		63	16	8	12	13	4	19	
		5 Sum of estimate					40	10	3	121	30	13	10	2	2	36	**267**
		6	1	estimate		47	58	44	1	148		25		257			**580**
				ste		22	46	29	1	74		16		182			
			2	estimate	0	5	99	6	1	53	32	13	22	221		18	**471**
				ste	0	5	44	3	0	22	28	8	24	97		15	
		6 Sum of estimate			0	52	156	51	2	201	32	38	22	479		18	**1051**
		7	1	estimate		135	33	29	2	294	85	66	23	130		17	**815**
				ste		156	34	24	3	119	41	31	23	91		18	
			2	estimate	0		13	27	1	51	30	1	5	128	7	27	**290**
				ste	0		8	19	1	17	23	2	6	80	7	25	
		7 Sum of estimate			0	135	47	56	3	345	115	68	28	259	7	44	**1106**
		8	1	estimate		8	20			60	45	10				45	**188**
				ste		8	13			28	19	12				51	
			2	estimate		31	35	14	9	72	2	22	6	24	22	2	**238**
				ste		34	21	15	7	35	2	13	6	25	17	3	
		8 Sum of estimate				39	55	14	9	132	46	32	6	24	22	47	**426**
		9	1	estimate			6					77	18		9		**109**
				ste			6					64	18		9		
			2	estimate			6	2		1	1		4	5	3		**21**
				ste			6	3		0	2		6	5	3		
		9 Sum of estimate					12	2		1	1	77	22	5	12		**131**
	Quillback Sum of estimate				0	226	309	133	16	800	226	227	87	768	43	145	**2981**
	Red Irish Lord	8	1	estimate						5							**5**
				ste						5							
		8 Sum of estimate								5							**5**
	Red Irish Lord Sum of estimate									5							**5**

					subarea											
Catch Type	**Species**	**Month**	**daytype**	**Data**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**
Retained	**Redstripe rockfish**	5	2	estimate						23	8	2				10	**43**
				ste						17	8	4				10	
		5 Sum of estimate								23	8	2				10	**43**
		6	2	estimate						2							**2**
				ste						2							
		6 Sum of estimate								2							**2**
		7	1	estimate		8				5							**14**
				ste		10				5							
		7 Sum of estimate				8				5							**14**
		8	1	estimate						10	2					2	**15**
				ste						10	2					4	
			2	estimate											22		**22**
				ste											23		
		8 Sum of estimate								10	2				22	2	**37**
	Redstripe rockfish Sum of estimate					8				40	11	2			22	13	**96**
	Rock sole	5	2	estimate			4	1		9							**14**
				ste			4	1		10							
		5 Sum of estimate					4	1		9							**14**
		8	2	estimate			2					1					**3**
				ste			2					1					
		8 Sum of estimate					2					1					**3**
	Rock sole Sum of estimate						6	1		9		1					**17**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Rockfish**	5	1	estimate			27	13	9	48	20	22				20	**158**
				ste			21	17	12	64	33	37				33	
			2	estimate						23	16	4	19	5	5	20	**92**
				ste						16	17	7	23	26	8	21	
		5 Sum of estimate					27	13	9	71	36	26	19	5	5	40	**250**
		6	1	estimate				63	1	183	58	17	50	286		21	**678**
				ste				53	2	119	70	19	56	200		26	
			2	estimate		1	19	20	2	43	8	6		71	25	5	**199**
				ste		1	15	8	1	26	9	4		37	27	5	
		6 Sum of estimate				1	19	84	4	226	66	22	50	357	25	25	**878**
		7	1	estimate			33	5	0	114	26	91		16		5	**290**
				ste			25	6	1	71	20	64		17		7	
			2	estimate		15	21	22	0	57		2		37	7		**161**
				ste		10	9	17	1	26		2		26	7		
		7 Sum of estimate				15	54	27	1	171	26	93		53	7	5	**452**
		8	1	estimate			32	5	3	25	40	59		147		40	**351**
				ste			19	5	5	21	23	77		132		50	
			2	estimate	0		107	4	2	72	7	11	67	115	22	7	**414**
				ste	1		62	5	2	31	8	6	60	65	23	11	
		8 Sum of estimate			0		138	9	5	97	47	70	67	262	22	47	**765**
		9	1	estimate								6	18		9		**33**
				ste								6	18		9		
			2	estimate							2		25	28	18		**72**
				ste							3		35	28	19		
		9 Sum of estimate									2	6	42	28	26		**105**
	Rockfish Sum of estimate				0	16	238	133	18	564	177	218	179	704	85	117	**2449**
	Skates	6	2	estimate			2										**2**
				ste			2										
		6 Sum of estimate					2										**2**
	Skates Sum of estimate						2										**2**

					subarea											
Catch Type	**Species**	**Month**	**daytype**	**Data**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Total**
Retained	**Sockeye**	6	1	estimate						9				29			**37**
				ste						9				30			
			2	estimate						2							**2**
				ste						2							
		6 Sum of estimate								10				29			**39**
		7	1	estimate			7			5				16			**28**
				ste			7			5				17			
			2	estimate			2										**2**
				ste			2										
		7 Sum of estimate					9			5				16			**30**
		8	2	estimate									6				**6**
				ste									6				
		8 Sum of estimate											6				**6**
	Sockeye Sum of estimate						9			16			6	45			**75**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Tiger**	5	1	estimate			3	1	1		3	3				3	**15**
				ste			3	2	2		5	6				5	
			2	estimate						14	11	3				13	**41**
				ste						9	5	3				6	
		5 Sum of estimate					3	1	1	14	14	6				16	**56**
		6	1	estimate						26		25					**51**
				ste						21		24					
			2	estimate						9		2					**10**
				ste						6		2					
		6 Sum of estimate								35		27					**62**
		7	1	estimate		25				26		3		33			**87**
				ste		24				18		4		33			
			2	estimate						3	10	2				8	**23**
				ste						3	9	2				9	
		7 Sum of estimate				25				29	10	6		33		8	**111**
		8	1	estimate						5							**5**
				ste						5							
			2	estimate			4			17	2	2				2	**27**
				ste			3			9	2	2				3	
		8 Sum of estimate					4			22	2	2				2	**32**
	Tiger Sum of estimate					25	7	1	1	101	25	41		33		27	**260**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Yellow Eye**	5	1	estimate			6	3	2	64	8	8	4	4	3	8	**110**
				ste			7	5	3	63	10	11	5	7	3	10	
			2	estimate		2	46	8		107	16	4	24	6	6	20	**240**
				ste		2	30	10		54	13	6	21	27	8	15	
		5 Sum of estimate				2	52	11	2	170	24	13	28	10	9	28	**349**
		6	1	estimate		5	10			200	39	38		29		14	**334**
				ste		5	11			104	47	28		30		18	
			2	estimate		4	14	2	0	37		2	22	53			**134**
				ste		3	7	2	0	14		2	24	28			
		6 Sum of estimate				9	23	2	0	238	39	40	22	82		14	**468**
		7	1	estimate			20	24	2	83	26	42	11	130	17	5	**361**
				ste			15	23	2	36	22	24	12	91	17	7	
			2	estimate			2	12	0	29	13	4	5	9		11	**85**
				ste			2	7	0	14	10	2	6	9		11	
		7 Sum of estimate					22	36	2	111	39	45	17	140	17	17	**446**
		8	1	estimate			41			30	114	3		102		115	**405**
				ste			25			17	41	5		85		126	
			2	estimate			13	4	2	50	2	21	11	29	66	2	**200**
				ste			9	4	2	20	2	12	12	14	39	3	
		8 Sum of estimate					54	4	2	80	116	24	11	130	66	116	**605**
		9	1	estimate								96	9		4		**109**
				ste								96	9		4		
			2	estimate	4	15				0	1		20	14	15		**69**
				ste	6	18				0	1		20	9	9		
		9 Sum of estimate			4	15				0	1	96	29	14	19		**179**
	Yellow Eye Sum of estimate				4	27	151	53	6	600	218	218	108	376	112	174	**2046**

Catch Type	Species	Month	daytype	Data	subarea A	B	C	D	E	F	G	H	I	J	K	L	Total
Retained	**Yellow Tail**	5	2	estimate			4	1		5							**9**
				ste			4	1		5							
		5 Sum of estimate					4	1		5							**9**
		6	1	estimate		10		38	1								**49**
				ste		11		38	1								
		6 Sum of estimate				10		38	1								**49**
		7	1	estimate								17					**17**
				ste								18					
			2	estimate						2							**2**
				ste						2							
		7 Sum of estimate								2		17					**19**
		8	1	estimate						5				11			**16**
				ste						5				13			
			2	estimate				1	0								**1**
				ste				1	0								
		8 Sum of estimate						1	0	5				11			**17**
	Yellow Tail Sum of estimate					10	4	39	1	11		17		11			**95**

Appendix O:

Groundfish, Rockfish and Other

Detailed CPUE Summary

Appendix O: Groundfish, Rockfish and Other
Detailed CPUE Summary

Angler/Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Arrowtooth Flounder**	5	1	cpe						0.00	0.00	0.00				
				vcpe						0.00	0.00	0.00				
			2	cpe										0.00	0.00	0.00
				vcpe										0.00	0.00	0.00
		6	1	cpe							0.02	0.02	0.00		0.02	
				vcpe							0.02	0.02	0.00		0.02	
			2	cpe						0.01	0.03	0.03	0.01	0.00	0.00	0.00
				vcpe						0.01	0.06	0.06	0.01	0.00	0.00	0.00
		7	1	cpe			0.00									
				vcpe			0.00									
			2	cpe						0.00	0.00	0.00	0.00		0.04	
				vcpe						0.00	0.00	0.00	0.00		0.08	
		8	2	cpe			0.00								0.00	
				vcpe			0.00								0.00	

					subarea											
Angler Type	**Species**	**Month**	**Day Type**	**Data**	**3I**	**3J**	**3K**	**4A**	**4B**	**4C**	**4D**	**4E**	**4F**	**4G**	**4H**	**4L**
Combined	**Black**	5	1	cpe						0.11	0.11	0.11	0.71	2.83	2.83	2.83
				vcpe						0.21	0.21	0.21	2.24	27.37	27.37	27.37
			2	cpe	0.25	0.25	0.25						1.67	0.21	0.21	0.21
				vcpe	0.50	0.50	0.50						15.54	0.34	0.34	0.34
		6	1	cpe		0.54			0.07		0.03	0.03	0.06	0.33	0.54	0.33
				vcpe		2.10			0.38		0.03	0.03	0.08	0.67	6.55	0.67
			2	cpe					0.03	0.07			0.45	0.25	0.38	0.25
				vcpe					0.06	0.19			4.84	0.60	5.46	0.60
		7	1	cpe	0.08	0.03			0.29				0.24	1.59	0.08	1.59
				vcpe	0.08	0.03			1.21				1.89	22.35	0.16	22.35
			2	cpe	0.07								0.29	1.85	0.00	1.85
				vcpe	0.07								3.82	13.47	0.00	13.47
		8	1	cpe						0.03			0.46	0.36		0.36
				vcpe						0.07			3.36	1.48		1.48
			2	cpe						0.01	0.64	0.64	0.32	0.23	0.07	0.23
				vcpe						0.01	5.36	5.36	2.79	0.69	0.44	0.69
		9	1	cpe									0.36			
				vcpe									1.17			
			2	cpe						0.04	0.04	0.04		0.19	0.19	0.19
				vcpe						0.04	0.04	0.04		0.56	0.56	0.56
	Blue Rockfish	8	2	cpe						0.01						
				vcpe						0.01						
	Bocaccio Rockfish	8	1	cpe										0.14		0.14
				vcpe										0.41		0.41
	Bull Head	8	2	cpe				0.04								
				vcpe				0.04								
	Cabezon	8	2	cpe											0.01	
				vcpe											0.01	

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Canary**	5	1	cpe										0.17	0.17	0.17
				vcpe										0.17	0.17	0.17
			2	cpe									0.04			
				vcpe									0.04			
		7	1	cpe							0.05	0.05	0.01			
				vcpe							0.05	0.05	0.01			
			2	cpe									0.01			
				vcpe									0.01			
		8	2	cpe											0.04	
				vcpe											0.11	
	China	5	1	cpe						0.05	0.05	0.05				
				vcpe						0.05	0.05	0.05				
			2	cpe	0.25	0.25	0.25						0.13	0.07	0.07	0.07
				vcpe	0.50	0.50	0.50						0.20	0.07	0.07	0.07
		6	1	cpe							0.02	0.02	0.02			
				vcpe							0.02	0.02	0.02			
			2	cpe						0.03			0.03		0.02	
				vcpe						0.09			0.05		0.02	
		7	1	cpe					0.14				0.20		0.09	
				vcpe					0.43				1.24		0.33	
			2	cpe		0.13							0.05	0.38		0.38
				vcpe		0.38							0.09	1.26		1.26
		8	1	cpe		0.06				0.05			0.04	0.45		0.45
				vcpe		0.06				0.15			0.04	3.69		3.69
			2	cpe						0.01	0.03	0.03	0.04	0.08		0.08
				vcpe						0.03	0.03	0.03	0.10	0.08		0.08
		9	2	cpe										0.25	0.25	0.25
				vcpe										1.00	1.00	1.00

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Chum**	6	1	cpe	0.10						0.02	0.02	0.01			
				vcpe	0.10						0.02	0.02	0.01			
		7	1	cpe									0.01		0.04	
				vcpe									0.01		0.07	
			2	cpe		0.04	0.09				0.02	0.02				
				vcpe		0.04	0.09				0.02	0.02				
		9	2	cpe									0.03			
				vcpe									0.03			
	Copper	5	1	cpe	0.22	0.22	0.22							0.17	0.17	0.17
				vcpe	0.19	0.19	0.19							0.17	0.17	0.17
			2	cpe						0.05	0.05	0.05	0.13			
				vcpe						0.05	0.05	0.05	0.11			
		6	1	cpe	0.60	0.08			0.07	0.00	0.02	0.02	0.01			
				vcpe	3.60	0.15			0.27	0.00	0.02	0.02	0.01			
			2	cpe			0.33		0.03		0.01	0.01	0.03	0.06	0.11	0.06
				vcpe			1.00		0.06		0.01	0.01	0.05	0.06	0.53	0.06
		7	1	cpe						0.01	0.05	0.05	0.01		0.01	
				vcpe						0.01	0.05	0.05	0.01		0.01	
			2	cpe									0.02			
				vcpe									0.03			
		8	1	cpe		0.06										
				vcpe		0.06										
			2	cpe			0.22				0.15	0.15	0.01	0.23	0.04	0.23
				vcpe			1.09				0.38	0.38	0.01	0.69	0.06	0.69

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Dogfish**	5	1	cpe						0.00	0.00	0.00				
				vcpe						0.00	0.00	0.00				
			2	cpe				0.04	0.04				0.00	0.00	0.00	0.00
				vcpe				0.07	0.07				0.00	0.00	0.00	0.00
		6	1	cpe						0.00	0.00	0.00	0.00			
				vcpe						0.00	0.00	0.00	0.00			
			2	cpe		0.00								0.00		0.00
				vcpe		0.00								0.00		0.00
		7	1	cpe						0.00			0.00	0.00	0.00	0.00
				vcpe						0.00			0.00	0.00	0.00	0.00
			2	cpe				0.00		0.00			0.00	0.00		0.00
				vcpe				0.00		0.00			0.00	0.00		0.00
		8	1	cpe					0.10				0.00			
				vcpe					0.10				0.00			
			2	cpe					0.00	0.00					0.00	
				vcpe					0.00	0.00					0.00	
		9	1	cpe									0.00			
				vcpe									0.00			
	Dusky	6	1	cpe					0.01		0.02	0.02				
				vcpe					0.01		0.02	0.02				

Angler Type	Species	Month	Daytype	Data	subarea 3l	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Greenling**	5	2	cpe						0.02	0.02	0.02				
				vcpe						0.02	0.02	0.02				
		6	1	cpe		0.12			0.02	0.03	0.08	0.08	0.05			
				vcpe		0.19			0.04	0.03	0.42	0.42	0.12			
			2	cpe						0.04						
				vcpe						0.17						
		7	1	cpe									0.04			
				vcpe									0.16			
			2	cpe							0.05	0.05	0.01	0.08		0.08
				vcpe							0.09	0.09	0.01	0.08		0.08
		8	1	cpe									0.02			
				vcpe									0.02			
			2	cpe						0.01			0.01			
				vcpe						0.01			0.01			
	Groundfish	5	1	cpe						0.11	0.11	0.11				
				vcpe						0.21	0.21	0.21				
			2	cpe				0.00	0.00	0.02	0.02	0.02	0.13	0.14	0.14	0.14
				vcpe				0.00	0.00	0.02	0.02	0.02	0.20	0.29	0.29	0.29
		6	1	cpe		0.15		0.03			0.02	0.02	0.00	0.17	0.10	0.17
				vcpe		0.38		0.03			0.02	0.02	0.00	0.17	0.24	0.17
			2	cpe		0.00							0.02		0.04	
				vcpe		0.00							0.03		0.04	
		7	1	cpe						0.01	0.10	0.10	0.01	0.00	0.01	0.00
				vcpe						0.01	0.19	0.19	0.01	0.00	0.01	0.00
			2	cpe						0.05	0.05	0.05	0.02		0.02	
				vcpe						0.18	0.09	0.09	0.02		0.02	
		8	1	cpe						0.00						
				vcpe						0.00						
			2	cpe									0.01		0.05	
				vcpe									0.01		0.07	

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Mackerel, Tuna**	7	1	cpe						0.00						
				vcpe						0.00						
	Pacific cod	5	2	cpe						0.07	0.07	0.07				
				vcpe						0.22	0.22	0.22				
		6	1	cpe						0.03			0.01		0.00	
				vcpe						0.03			0.01		0.00	
			2	cpe					0.01	0.01			0.03		0.04	
				vcpe					0.01	0.01			0.12		0.04	
		7	1	cpe						0.01					0.03	
				vcpe						0.01					0.05	
			2	cpe										0.08	0.08	0.08
				vcpe										0.08	0.15	0.08
	Perches	8	2	cpe				0.21								
				vcpe				1.29								
	Pink	5	2	cpe									0.04			
				vcpe									0.04			
		6	1	cpe		0.35			0.01				0.02		0.10	
				vcpe		1.92			0.01				0.05		0.39	
			2	cpe	0.26	0.14			0.01		0.01	0.01	0.03	0.06	0.04	0.06
				vcpe	0.65	0.23			0.01		0.01	0.01	0.05	0.06	0.04	0.06
		7	1	cpe	0.75	0.13	0.25			0.06	0.05	0.05	0.09	0.09	0.09	0.09
				vcpe	8.20	0.11	0.33			0.08	0.05	0.05	0.10	0.09	0.11	0.09
			2	cpe	0.20	0.25		0.03		0.06	0.07	0.07	0.05	0.15	0.19	0.15
				vcpe	0.31	1.50		0.03		0.08	0.11	0.11	0.08	0.14	0.59	0.14
		8	1	cpe	0.33	0.12	0.17		1.20	0.08	0.10	0.10	0.20	0.09	0.03	0.09
				vcpe	1.00	0.11	0.17		3.07	0.08	0.10	0.10	0.29	0.09	0.03	0.09
			2	cpe	0.38	0.37	0.61		0.11	0.17	0.15	0.15	0.10		0.18	
				vcpe	0.78	2.40	1.52		0.10	0.34	0.20	0.20	0.27		0.32	
		9	2	cpe									0.10			
				vcpe									0.09			

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Quillback**	5	1	cpe						0.16	0.16	0.16		0.67	0.67	0.67
				vcpe						0.47	0.47	0.47		2.67	2.67	2.67
			2	cpe	0.25	0.25	0.25			0.20	0.20	0.20	1.08	0.64	0.64	0.64
				vcpe	0.50	0.50	0.50			0.81	0.81	0.81	4.43	2.09	2.09	2.09
		6	1	cpe		0.35			0.09	0.20	0.12	0.12	0.21		0.15	
				vcpe		1.28			0.17	0.58	0.35	0.35	0.66		0.23	
			2	cpe	0.16	0.68		0.01	0.06	0.60	0.06	0.06	0.23	0.50	0.53	0.50
				vcpe	0.47	3.06		0.01	0.19	5.40	0.05	0.05	0.79	2.40	2.60	2.40
		7	1	cpe	0.08	0.25			0.76	0.06	0.29	0.29	0.55	0.59	0.25	0.59
				vcpe	0.17	0.90			10.69	0.31	0.81	0.81	3.90	1.21	0.92	1.21
			2	cpe	0.07	0.58	0.09	0.03		0.08	0.26	0.26	0.23	1.46	0.04	1.46
				vcpe	0.07	3.04	0.09	0.03		0.17	1.10	1.10	0.58	6.60	0.08	6.60
		8	1	cpe					0.10	0.11			0.26	0.82	0.08	0.82
				vcpe					0.10	0.30			0.64	2.63	0.12	2.63
			2	cpe	0.06	0.19	0.13		0.39	0.11	0.79	0.79	0.33	0.08	0.24	0.08
				vcpe	0.06	0.93	0.21		2.72	0.43	5.17	5.17	1.96	0.08	0.93	0.08
		9	1	cpe	0.25	0.67	0.25			0.14	0.14	0.14	0.71	1.33	1.33	1.33
				vcpe	0.50	1.33	0.50			0.14	0.14	0.14	2.07	11.00	11.00	11.00
			2	cpe	0.09	0.20	0.09			0.13	0.13	0.13	0.10	0.38	0.38	0.38
				vcpe	0.09	0.20	0.09			0.39	0.39	0.39	0.09	0.78	0.78	0.78
	Ratfish	5	2	cpe						0.00	0.00	0.00		0.00	0.00	0.00
				vcpe						0.00	0.00	0.00		0.00	0.00	0.00
		6	1	cpe							0.00	0.00				
				vcpe							0.00	0.00				
			2	cpe						0.00				0.00		0.00
				vcpe						0.00				0.00		0.00
		7	1	cpe						0.00					0.00	
				vcpe						0.00					0.00	
			2	cpe						0.00						
				vcpe						0.00						

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Red Irish Lord**	8	1	cpe									0.02			
				vcpe									0.02			
	Redstripe rockfish	5	2	cpe									0.21	0.21	0.21	0.21
				vcpe									0.43	0.64	0.64	0.64
		6	1	cpe									0.00			
				vcpe									0.00			
			2	cpe									0.01			
				vcpe									0.01			
		7	1	cpe					0.05				0.01			
				vcpe					0.05				0.01			
		8	1	cpe									0.04	0.05		0.05
				vcpe									0.09	0.05		0.05
			2	cpe			0.13									
				vcpe			0.39									
	Rock sole	5	2	cpe	0.00	0.00	0.00			0.02	0.02	0.02	0.08			
				vcpe	0.00	0.00	0.00			0.02	0.02	0.02	0.17			
		7	1	cpe						0.00						
				vcpe						0.00						
		8	2	cpe						0.01					0.01	
				vcpe						0.01					0.01	

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Rockfish**	5	1	cpe						0.47	0.47	0.47	0.86	2.17	2.17	2.17
				vcpe						2.04	2.04	2.04	5.14	28.17	28.17	28.17
			2	cpe	0.50	0.50	0.50			0.00	0.00	0.00	0.21	0.43	0.43	0.43
				vcpe	2.00	2.00	2.00			0.00	0.00	0.00	0.35	2.57	2.57	2.57
		6	1	cpe	0.30	0.38	0.00	0.00	0.00		0.17	0.17	0.26	0.50	0.10	0.50
				vcpe	0.90	1.53	0.00	0.00	0.00		1.14	1.14	1.90	1.50	0.39	1.50
			2	cpe		0.22	0.44		0.01	0.11	0.19	0.19	0.19	0.13	0.23	0.13
				vcpe		0.45	1.78		0.01	0.71	0.39	0.39	1.40	0.25	0.84	0.25
		7	1	cpe	0.00	0.03			0.00	0.06	0.05	0.05	0.21	0.18	0.35	0.18
				vcpe	0.00	0.03			0.00	0.16	0.05	0.05	1.62	0.35	4.18	0.35
			2	cpe		0.17	0.09		0.19	0.13	0.21	0.21	0.26	0.00	0.06	0.00
				vcpe		0.32	0.09		0.55	0.25	0.93	0.93	1.56	0.00	0.09	0.00
		8	1	cpe		0.76				0.18	0.10	0.10	0.11	0.73	0.45	0.73
				vcpe		5.44				0.65	0.10	0.10	0.37	3.73	5.79	3.73
			2	cpe	0.75	0.89	0.13	0.11		0.33	0.21	0.21	0.33	0.31	0.12	0.31
				vcpe	5.40	6.03	0.39	0.32		3.48	0.73	0.73	1.35	1.23	0.16	1.23
		9	1	cpe	0.25		0.25						0.21	0.11	0.11	0.11
				vcpe	0.50		0.50						0.64	0.11	0.11	0.11
			2	cpe	0.55	1.20	0.55			0.00	0.00	0.00		0.50	0.50	0.50
				vcpe	3.27	7.20	3.27			0.00	0.00	0.00		2.00	2.00	2.00
	Sculpins	7	2	cpe				0.00								
				vcpe				0.00								

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Skates**	5	1	cpe						0.00	0.00	0.00				
				vcpe						0.00	0.00	0.00				
		6	1	cpe						0.00						
				vcpe						0.00						
			2	cpe						0.01			0.00	0.00		0.00
				vcpe						0.01			0.00	0.00		0.00
		7	1	cpe										0.00		0.00
				vcpe										0.00		0.00
			2	cpe						0.00			0.00	0.00		0.00
				vcpe						0.00			0.00	0.00		0.00
		8	2	cpe						0.00						
				vcpe						0.00						
	Sockeye	6	1	cpe		0.04							0.01			
				vcpe		0.04							0.01			
			2	cpe									0.01			
				vcpe									0.01			
		7	1	cpe		0.03				0.01			0.01			
				vcpe		0.03				0.01			0.01			
			2	cpe						0.01						
				vcpe						0.01						
		8	2	cpe	0.06											
				vcpe	0.06											

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Tiger**	5	1	cpe						0.05	0.05	0.05		0.33	0.33	0.33
				vcpe						0.05	0.05	0.05		0.67	0.67	0.67
			2	cpe									0.13	0.29	0.29	0.29
				vcpe									0.11	0.22	0.22	0.22
		6	1	cpe									0.04		0.15	
				vcpe									0.06		0.63	
			2	cpe									0.04		0.06	
				vcpe									0.08		0.19	
		7	1	cpe		0.06			0.14				0.05		0.01	
				vcpe		0.13			0.23				0.11		0.01	
			2	cpe									0.02	0.46	0.06	0.46
				vcpe									0.03	1.27	0.17	1.27
		8	1	cpe									0.02			
				vcpe									0.02			
			2	cpe						0.01			0.08	0.08	0.02	0.08
				vcpe						0.01			0.13	0.08	0.05	0.08
	Unknown Salmonid	6	1	cpe							0.00	0.00				
				vcpe							0.00	0.00				
			2	cpe					0.00							
				vcpe					0.00							
		7	2	cpe			0.00	0.00	0.00	0.00	0.00	0.00				
				vcpe			0.00	0.00	0.00	0.00	0.00	0.00				
		8	2	cpe									0.00			
				vcpe									0.00			

Angler Type	Species	Month	Daytype	Data	subarea 3I	3J	3K	4A	4B	4C	4D	4E	4F	4G	4H	4L
Combined	**Yellow Eye**	5	1	cpe	0.11	0.11	0.11			0.11	0.11	0.11	1.14	0.83	0.83	0.83
				vcpe	0.11	0.11	0.11			0.21	0.21	0.21	3.81	1.77	1.77	1.77
			2	cpe	0.63	0.63	0.63	0.02	0.02	0.29	0.29	0.29	0.96	0.43	0.43	0.43
				vcpe	1.41	1.41	1.41	0.02	0.02	1.46	1.46	1.46	3.17	1.34	1.34	1.34
		6	1	cpe		0.04			0.01	0.03			0.28	0.33	0.22	0.33
				vcpe		0.04			0.01	0.03			1.34	0.67	0.73	0.67
			2	cpe	0.16	0.16			0.04	0.08	0.01	0.01	0.16		0.09	
				vcpe	0.47	0.25			0.07	0.16	0.01	0.01	0.34		0.17	
		7	1	cpe	0.04	0.25	0.13			0.04	0.24	0.24	0.16	0.18	0.16	0.18
				vcpe	0.04	0.90	0.12			0.06	0.79	0.79	0.37	0.44	0.57	0.44
			2	cpe	0.07	0.04				0.01	0.12	0.12	0.13	0.62	0.10	0.62
				vcpe	0.07	0.04				0.01	0.15	0.15	0.46	1.59	0.13	1.59
		8	1	cpe		0.53				0.23			0.13	2.09	0.03	2.09
				vcpe		2.14				1.18			0.25	12.56	0.03	12.56
			2	cpe	0.13	0.22	0.39			0.04	0.21	0.21	0.23	0.08	0.23	0.08
				vcpe	0.25	0.26	1.16			0.08	0.55	0.55	0.52	0.08	0.80	0.08
		9	1	cpe	0.13	0.33	0.13						0.43	1.67	1.67	1.67
				vcpe	0.13	0.33	0.13						2.57	25.00	25.00	25.00
			2	cpe	0.45	0.60	0.45	1.00	1.00				0.03	0.25	0.25	0.25
				vcpe	0.67	0.80	0.67	6.00	6.00				0.03	0.60	0.60	0.60
	Yellow Tail	5	2	cpe						0.02	0.02	0.02	0.04			
				vcpe						0.02	0.02	0.02	0.04			
		6	1	cpe			0.00		0.02		0.10	0.10				
				vcpe			0.00		0.04		0.61	0.61				
		7	1	cpe											0.07	
				vcpe											0.33	
			2	cpe									0.01			
				vcpe									0.01			
		8	1	cpe		0.06							0.02			
				vcpe		0.06							0.02			
			2	cpe							0.03	0.03				

Appendix P:

Dungeness crab

Catch and Effort Summary

Appendix P: Dungeness Crab Catch and Effort Summary.

Dungeness Crab Catch and Effort Reported in 2008 Area 3, 4 Creel Survey

	May				*June*				*July*				*August*				*September*				*Full Season*			
Subarea	**Effort**	**Kept**	**R-legal**	**R-sub**	**Effort**	**Kept**	**R-legal**	**R-sub**	**Effort**	**Kept**	**R-legal**	**R-sub**	**Effort**	**Kept**	**R-legal**	**R-sub**	**Effort**	**Kept**	**R-legal**	**R-sub**	**Effort**	**Kept**	**R-legal**	**R-sub**
4A	527	335	46	25	3301	1108	489	378	1977	821	437	451	1483	416	135	303	57	20	44	0	**7345**	**2700**	**1151**	**1157**
4B	58	26	0	38	311	115	141	180	73	17	0	58	119	11	54	24					**561**	**169**	**195**	**300**
4C	40	26	30	53	157	57	46	95	52	10	4	40	27	22	35	2	14	8	0	30	**290**	**123**	**115**	**220**
4D					143	22	17	20	26	18	0	0	25	16	11	0					**194**	**56**	**28**	**20**
4E					9	4	0	0					14	4	0	10					**23**	**8**	**0**	**10**
4F	64	38	20	8	121	40	27	25	73	36	43	0					30	2	0	0	**287**	**116**	**90**	**33**
4G					27	6	8	0													**27**	**6**	**8**	**0**
4H	40	15	0	0	85	51	20	18	36	4	6	0	28	15	0	22					**189**	**85**	**26**	**40**
4L	30	15	0	0																	**30**	**15**	**0**	**0**
3I									4	3	5	0									**4**	**3**	**5**	**0**
3J	42	37	8	0	34	10	6	0	20	14	0	0	20	10	15	0					**116**	**71**	**29**	**0**
3K					16	22	0	0	64	16	0	0	86	23	1	28	10	6	12	0	**176**	**67**	**13**	**28**
TOTALS:	**801**	**492**	**104**	**124**	**4203**	**1435**	**754**	**716**	**2324**	**939**	**495**	**549**	**1802**	**517**	**251**	**389**	**111**	**36**	**56**	**30**	**9241**	**3419**	**1660**	**1808**

Effort = Trap hours: sum(number of traps*soak time)
Where soak time is unreported assume soak = mean(soak)
Data was collected between May 15 and September 14, 2008.