

#### **Overview:**

This **final bulletin of 2010** provides a monthly update on estimates of recreational fishing effort and fin fish catch in the marine waters of southern British Columbia (Pacific Fishery Management Areas 11 through 29 and 121 to 127). These estimates are generated from data collected by the DFO's South Coast Creel Survey. A brief overview of the survey, the study area and methods used to collect data and generate these estimates are provided in the first bulletin of 2010, available on the DFO ExtraNet:

http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/salmon/sc creelbulletins

The estimates presented in this bulletin are based on in-season data and should be interpreted as **preliminary** and **subject to revision** as the data are finalized.

#### **Recreational Fishery Links:**

It is your responsibility to know the current fishing regulations prior to fishing. A listing of recreational fishing regulations can be viewed at the Fisheries and Oceans Canada Pacific Region Recreational Fishery webpage:

http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/index-eng.htm

In addition, Fisheries and Oceans fishery notices of in-season regulation updates can be viewed at:

http://ops.info.pac.dfo.ca/fishman/fnotice/fnotice.htm

#### **Creel Survey Data:**

A summary of survey statistics and preliminary recreational effort estimates (boat trips) by Pacific Fishery Management Area (PFMA) are presented in Table 1 (attached). A map of PFMA's is available in Bulletin #1 of 2010 (Overview Bulletin) or alternatively in the 2009-2011 British Columbia Tidal Waters Sport Fishing Guide. Note: Creel surveys only operate in a portion of South Coast PFMA's during September – see Table

#### **Recreational Catch Estimates:**

A summary of preliminary kept and released catch estimates for key species by Pacific Fishery Management Area (PFMA) are presented in Table 2 and 3 (attached). Regional kept catch totals for August relative to recent 5-year averages are presented in Figures 1 through 4 (attached). A map of PFMA's is available in Bulletin #1 of 2010 (Overview Bulletin) or alternatively in the 2009-2011 British Columbia Tidal Waters Sport Fishing Guide. Note: Creel surveys only operate in a portion of South Coast PFMA's during September – see Tables 2 & 3.

#### **Contacts:**

For additional information on the South Coast Creel Survey Programs, please contact: Johnstone Strait and North Island Surveys (PFMA's 11, 12, 26, 27, 126 & 127) Pieter Van Will - Program Head, Johnstone Strait Salmon Stock Assessment 250-949-9273

Strait of Georgia Survey (PFMA's 13 – 20, 28 & 29) Steve Baillie - Program Head, Strait of Georgia Salmon Stock Assessment 250-756-7227

West Coast Vancouver Island Survey (PFMA's 20 – 25 & 121 – 125) Diana Dobson - Program Head, WCVI Salmon Stock Assessment 250-756-7186



Table 1 Creel survey statistics (interviews and number of flights) and preliminary effort estimates (number of boat trips) by Pacific Fishery Management Area, August 2010.

Pacific Fishery Management	Number of Cre	Number of Effort Count	Effort						
Area (PFMA)	Interviews	Flights <sup>1</sup>	Estimate	%SE <sup>2</sup>					
11	not surveyed in September								
12	not surveyed in September								
13	92	6	2,592	15%					
14	99	7	1,758	11%					
15	12	6	99	27%					
16	18	6	503	21%					
17	92	5	284	23%					
18	55	6	256	26%					
19	122	7	387	9%					
20-5 <sup>3</sup>	240	3	1,956	25%					
20-1 to 20-4 <sup>3,4</sup>	153	4	740	49%					
<b>21</b> <sup>4</sup>	3	4	38	21%					
121 <sup>4</sup>	21	4	136	33%					
23 <sup>4</sup>	126	4	5,318	11%					
123 <sup>4</sup>	31	4	488	29%					
<b>24</b> <sup>4</sup>	13	4	76	36%					
124 <sup>4</sup>	7	4	1,877	88%					
25 &125		not surveyed in Se	eptember						
26 & 126	not surveyed in September								
27 & 127	not surveyed in September								
28	29	6	526	40%					
29	54	6	1,268	19%					
Totals <sup>5</sup>	1,167	67 18,302							

<sup>&</sup>lt;sup>1</sup> The number of flights where weather conditions allowed effort counts

<sup>&</sup>lt;sup>2</sup> %SE is a measure of uncertainty; one Standard Error as a percentage of the estimate.

<sup>&</sup>lt;sup>3</sup> Sub-areas are distinguished for PFMA 20, as surveys in this area include both partial and whole month estimates in September

<sup>&</sup>lt;sup>4</sup> Estimates for these highlighted PFMA's and PFMA sub-areas include the period September 1 to September 15 only

<sup>&</sup>lt;sup>5</sup> Flights cover multiple PFMA's, so are not additive.

**Table 2** Preliminary recreational <u>kept</u> catch (pieces) estimates for key species by Pacific Fishery Management Area (PFMA), September 2010. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season. Note that not all PFMA's are surveyed for the entire month in September.

Pacific Fishery Management Area (PFMA)	Chinook		Coho		Sockeye		Halibut		Lingcod		Rockfish 1	
	Estimate	%SE	Estimate	%SE	Estimate	%SE	Estimate	%SE	Estimate	%SE	Estimate	%SE
11	not surveyed in September											
12	not surveyed in September											
13	364	34%	124	34%	1,952	18%			68	44%	99	83%
14	447	23%	10	82%					5	102%	48	67%
15	43	63%										
16	61	57%	1						21	61%	110	50%
17	21	45%							34	36%	37	37%
18	3	87%			29	79%			48	53%	100	54%
19	17	46%	3	85%			80	27%	13	46%	16	42%
20-5 <sup>2</sup>	754	21%	238	32%	171	39%	55	59%	72	47%	216	35%
20-1 to 20-4 <sup>2,3</sup>	516	40%	46	91%	350	73%	16	133%	10	107%	180	50%
21 <sup>3</sup>												
121 <sup>3</sup>	214	31%	21	52%			250	36%	5	88%	169	43%
23 <sup>3</sup>	1,757	25%	219	74%	69	80%			3	121%	82	97%
123 <sup>3</sup>	1,328	24%	198	44%			220	42%	66	83%	24	59%
<b>24</b> <sup>3</sup>			57	36%								
124 <sup>3</sup>	315	32%	5	167%			108	80%			3	167%
25 & 125	not surveyed in September											
26 & 126					not s	urveyed ir	n September					
27 & 127					not s	urveyed ir	n September					
28	68	99%	90	126%	36	116%						
29	59	80%	28	102%	3,304	33%					3	
Kept Total <sup>4</sup>	5,967		1,040		5,912		729		346		1,086	

<sup>&</sup>lt;sup>1</sup> All rockfishes; including those not identified to species.

<sup>&</sup>lt;sup>2</sup> Sub-areas are distinguished for PFMA 20, as surveys in this area include both partial and whole month estimates in September.

<sup>&</sup>lt;sup>3</sup> Estimates for these highlighted PFMA's and PFMA sub-areas include the period September 1 to September 15 only.

<sup>&</sup>lt;sup>4</sup> Including only those areas with in-season estimates this month.



**Table 3** Preliminary recreational <u>released</u> catch (pieces) estimates for key species by Pacific Fishery Management Area (PFMA), September 2010. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season. Note that not all PFMA's are surveyed for the entire month in September.

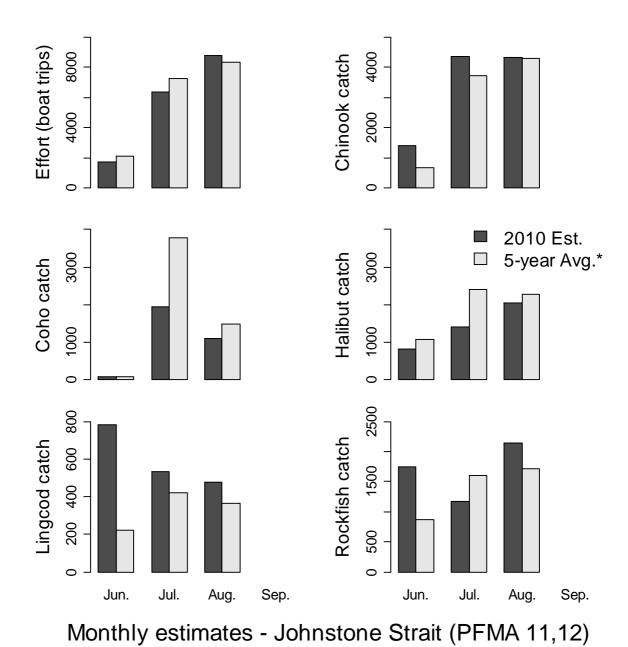
Pacific Fishery Management Area (PFMA)	Chinook		Coho		Sockeye		Halibut		Lingcod		Rockfish 1		
	Estimate	%SE	Estimate	%SE	Estimate	%SE	Estimate	%SE	Estimate	%SE	Estimate	%SE	
11	not surveyed in September												
12			not surveyed in September										
13	238	60%	1,046	22%					309	50%	3		
14	731	27%	372	33%					62	48%	56	55%	
15	65	60%	28	84%					8		1		
16	26	74%	12	98%					203	32%	218	46%	
17	219	71%	12	70%					167	37%	375	41%	
18	54	77%	3	87%	33	87%			140	74%	356	73%	
19	7	58%	9	65%					122	27%	75	27%	
20-5 <sup>2</sup>	632	29%	659	33%	26	84%			594	39%	284	38%	
20-1 to 20-4 <sup>2,3</sup>	28	82%	18	81%					38	117%	70	71%	
<b>21</b> <sup>3</sup>													
121 <sup>3</sup>	32	51%	37	62%			5	88%			21	62%	
23 <sup>3</sup>	527	49%			19	101%			87	86%	28	95%	
123 <sup>3</sup>	1,200	31%	249	44%			21	90%	43	67%	6	118%	
<b>24</b> <sup>3</sup>	13	120%											
124 <sup>3</sup>	368	36%	93	74%					18	100%			
25 & 125			not surveyed in September										
26 & 126			not surveyed in September										
27 & 127			not surveyed in September										
28	34	74%											
29	91	62%			322	77%			66		3		
Released Total 4	4,264		2,538		400		27		1,857		1,497		

<sup>&</sup>lt;sup>1</sup> All rockfishes; including those not identified to species.

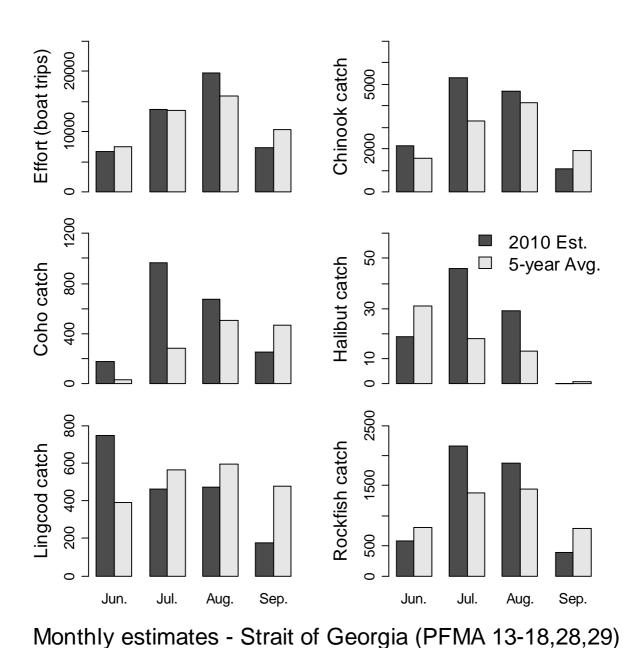
<sup>&</sup>lt;sup>2</sup> Sub-areas are distinguished for PFMA 20, as surveys in this area include both partial and whole month estimates in September.

<sup>&</sup>lt;sup>3</sup> Estimates for these highlighted PFMA's and PFMA sub-areas include the period September 1 to September 15 only.

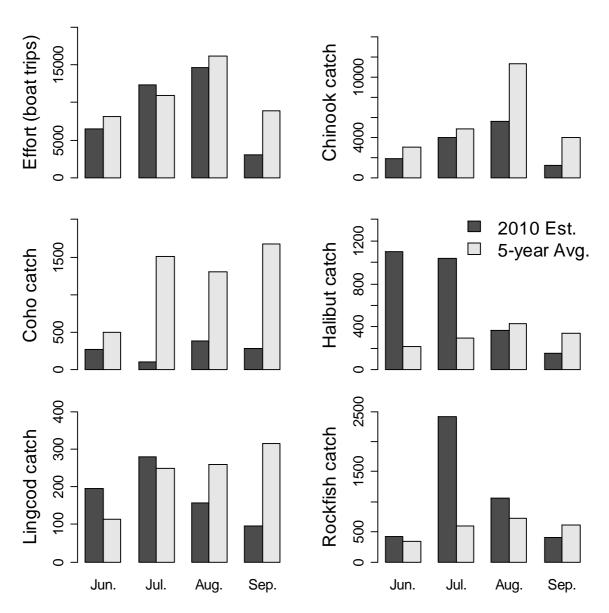
<sup>&</sup>lt;sup>4</sup> Including only those areas with in-season estimates this month.



**Figure 1** Monthly estimates of effort and kept catch by species in 2010 (dark bars) and the average over the last five years (2005 to 2009 average, light bars) in July and August or past estimates from the last two years (2008 & 2009) in June for Johnstone Strait (PFMA 11, 12). **NOTE** There is no September creel survey in Johnstone Strait.

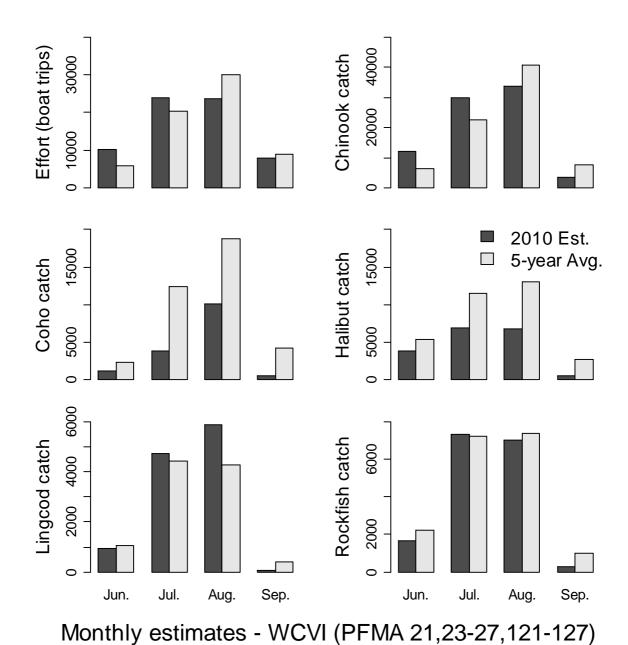


**Figure 2** Monthly estimates of effort and kept catch by species in 2010 (dark bars) and the average over the last five years (2005 to 2009 average, light bars) for Strait of Georgia (PFMA 13 – 18, 28 & 29).



Monthly estimates - Juan de Fuca Strait (PFMA 19-20)

**Figure 3** Monthly estimates of effort and kept catch by species in 2010 (dark bars) and the average over the last five years (2005 to 2009 average, light bars) for Juan de Fuca Strait (including all of PFMA's 19 & 20).



**Figure 4** Monthly estimates of effort and kept catch by species in 2010 (dark bars) and the average over the last five years (2005 to 2009 average, light bars) for the WCVI Creel Survey (PFMA's 21, 23-27, 121-127). **NOTE** September estimates for the WCVI survey include September 1 to September 15 only.