



# Annual Report of Salmon Streams and Spawning Populations

## STREAM IDENTIFICATION

Area: <b>14</b>	District: <b>03</b>	Sub: <b>14N</b>	Comox	INSPECTION DATES	
1st Local Name:					
2nd Local Name:					
Flows Into: <b>COMOX HARBOUR</b>					
Latitude: <b>49 40 48</b> Longitude: <b>124 58 32</b>					
Field Crew: <b>Hatchery Staff</b>				CONTINUOUS COUNTS	Start date <b>01/08/2000</b> End date <b>20/12/2000</b>

## DETAILS AFFECTING ESCAPEMENT ESTIMATION (5) ESCAPEMENT ESTIMATION COMMENTS ☒

Sp	R U N	(1) N Methods	%Spawn habitat surveyed	(2) Rel	(3) Enum Class	Esc Code	(4) Est. total adults	Brood stock removals	Jacks	Escapement Goal
SK	1	11	0	5	4	A.C.	12			
SK	2		0		0	N.O.				
CO	1	1,3,9	100	5	1	A.C.	7,918	5,750	7,920	
CO	2		0		0	N.O.				
PK	1	1,3,9	100	5	1	A.C.	9,991	191		
PK	2		0		0	N.O.				
CM	1	1,3,9,11	100	5	1	A.C.	47,199	6,364		
CM	2		0		0	N.O.				
CN	1	1,3,9,11	100	5	1	A.C.	519	469	76	
CN	2	1,3,9	100	5	1	A.C.	2,283	2,233	485	
ST	1	1,3,11	75	4	4	A.C.	205	18		
ST	2		0		0	N.O.				
AT	1	3,11	0		0	N.O.				
AT	2		0		0	N.O.				
CT	1		0		0	N.I.				
CT	2		0		0	N.I.				
TR	1		0		0	N.I.				
TR	2		0		0	N.I.				

## SPAWNING RUN TIMING

## (6) GENERAL COMMENTS ON RUN TIMING ☐

Sp	R U N	Arrival in Stream		Dates of Spawning					
				Start		Peak		End	
		Month	Day	Month	Day	Month	Day	Month	Day
SK	1								
SK	2								
CO	1	Sep	1-10	Nov	7	Nov	21	Dec	15
CO	2								
PK	1	Aug	1-10	Sep	11-20	Sep	21-31	Oct	1-10
PK	2								
CM	1	Oct	11-20	Oct	23	Nov	3	Nov	10
CM	2								
CN	1	Jun	11-20	Oct	4	Oct	10	Oct	26
CN	2	Sep	1-10	Oct	6	Oct	18	Nov	7
ST	1	Jul	1-10						
ST	2								
AT	1								
AT	2								
CT	1								
CT	2								
TR	1								
TR	2								



## UNUSUAL CONDITIONS IN STREAM COURSE OR SPAWNING GROUNDS

- ☒ (7) Enhancement or intense biological activities  
☐ (8) Unusual mortalities  
☐ (9) Upslope instability  
☐ (10) Debris jams present which could become a debris torrent  
☒ (11) Severe bank erosion  
(12) Percent (%) of spawning habitat degradation:  
Unusual (13) Drought ☒ (14) or Flood ☐ impacts on spawning or egg incubation success of salmon this year  
☐ (15) GENERAL COMMENTS ON UNUSUAL CONDITIONS

## RECOMMENDATIONS

- ☐ (16) Fish access problems ☒ (17) Spawning site conditions  
☐ (18) Augmentation of flows ☒ (19) Other suggestions

## BIOLOGICAL DETAILS

Particulars of distribution of spawning salmon over the stream bed:

**Limited spawning habitat. Most spawning occurs below Hydro Generation plant (upstream of lower Hatchery). Spawning below lower Hatchery (barrier fence) in lower 1/3 of river and side channels.**

Juvenile observations:	<b>SK</b>	<b>CO</b>	<b>PK</b>	<b>CM</b>	<b>CN</b>
Juveniles present?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Juvenile studies performed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evidence of digging up of redds or eggs by spawning fish:

Pink: Sockeye: Chum:

Predator observations: ☒ Predator (bears, eagles or seals) counts available for one or more survey dates

☐ (20) GENERAL COMMENTS ABOUT ADULT & JUVENILE SALMON DISTRIBUTION OR PREDATOR INTERACTIONS

Biosampling procedures:

Species	Scales	Otoliths	Ovaries	Length	DNA	Other	Comment
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Contact: Data Location:

☐ (21) GENERAL COMMENTS ON SAMPLING ACTIVITIES OR STUDIES NOT COVERED ABOVE

☐ (22) SUPPLEMENTARY DOCUMENTATION NOT INCLUDED WITH THIS REPORT



## COMMENTS ON CONDITIONS AFFECTING THIS STREAM AND ESCAPEMENT ESTIMATES

(11) Bank erosion: Bank erosion and siltation - Browns River ( major trib.)- natural erosion and logging and Highway construction activities.

(13) Drought: Low reservoir levels in Fall ( Comox lake). Minimum acceptable flows. BC Hydro created 6 "events" (approx.) resulting in extreme low H2O &/or " freshets" due to problems with Penstock Inlet screen &/or mechanical equipment failure. Exposed redds for a few hours in lower river.

(17) Spawning site recommendations: Develop additional side channel habitat.

(19) Other restoration recommendations: Continued discussion

(20a) Predator counts by date and predator type: Poaching continues to be a problem.

(5) General Comments on Escapement Estimation: Chum over spawn in lower river ( below Condensory Bridge)

**Darcy Miller**

Person Preparing Report

Signature

## EXPLANATION OF MULTI-LEVEL VARIABLES RELATED TO ESCAPEMENT

(1) Method codes: (1) bank walk; (2) stream walk; (3) snorkel; (4) boat; (5) plane; (6) helicopter; (7) redd counts; (8) dead pitch; (9) strip counts; (10) other; (11) Fence.

(2) Reliability codes: Low -> 1 - 2 - 3 - 4 - 5 <- High

(3) Enumeration class: (0) Not available; (1) Absolute abundance; (2) Relative: constant multi-year methods; (3) Relative: varying multi-years methods; (4) Presence/absence; (5) No survey this year.

(4) Escapement codes: (N.O.) stream inspected but None Observed; (U.K.) number UnKnown; (N.I.) stream Not Inspected; (N.S.) species does Not Spawn in this system; (A.P.) Adults Present; (A.C.) Adult Count.