



# 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>Puntledge Hatchery Staff</b>           |                     |                 |       | CONTINUOUS COUNTS | Start date <b>01/08/2001</b><br>End date <b>20/12/2001</b> |

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

| Sp | R<br>U<br>N | (1)<br>N Methods | %Spawn<br>habitat<br>surveyed | (2)<br>Rel | (3)<br>Enum<br>Class | Esc Code | (4) Est.<br>total<br>adults | Brood stock<br>removals | Jacks | Escapement<br>Goal |
|----|-------------|------------------|-------------------------------|------------|----------------------|----------|-----------------------------|-------------------------|-------|--------------------|
| SK | 1           | 11               | 0                             | 5          | 4                    | A.C.     | 15                          |                         |       |                    |
| SK | 2           |                  | 0                             |            | 0                    | N.O.     |                             |                         |       |                    |
| CO | 1           | 1,3,9            | 0                             | 5          | 1                    | A.C.     | 18,084                      | 6,210                   | 5,234 |                    |
| CO | 2           |                  | 0                             |            | 0                    | N.O.     |                             |                         |       |                    |
| PK | 1           | 1,3,9            | 0                             | 5          | 1                    | A.C.     | 126,060                     | 11,080                  |       |                    |
| PK | 2           |                  | 0                             |            | 0                    | N.O.     |                             |                         |       |                    |
| CM | 1           | 1,3,9,11         | 0                             | 5          | 1                    | A.C.     | 65,560                      | 6,455                   |       |                    |
| CM | 2           |                  | 0                             |            | 0                    | N.O.     |                             |                         |       |                    |
| CN | 1           | 1,3,9,11         | 0                             | 5          | 1                    | A.C.     | 1,747                       | 1,126                   | 492   |                    |
| CN | 2           | 1,3,9            | 0                             | 5          | 1                    | A.C.     | 11,037                      | 1,628                   | 1,972 |                    |
| ST | 1           |                  | 0                             |            | 1                    | N.O.     |                             |                         |       |                    |
| ST | 2           |                  | 0                             |            | 0                    | N.O.     |                             |                         |       |                    |
| AT | 1           |                  | 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<br>U<br>N | Arrival<br>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               | 1-10  | Nov   | 21-31 | Dec   | 11-20 |
| CO | 2           |                      |       |                   |       |       |       |       |       |
| PK | 1           | Aug                  | 1-10  | Sep               | 11-20 | Sep   | 21-31 | Oct   | 1-10  |
| PK | 2           |                      |       |                   |       |       |       |       |       |
| CM | 1           | Oct                  | 11-20 | Oct               | 21-31 | Nov   | 1-10  | Nov   | 1-10  |
| CM | 2           |                      |       |                   |       |       |       |       |       |
| CN | 1           | Jun                  | 11-20 | Oct               | 1-10  | Oct   | 1-10  | Oct   | 21-31 |
| CN | 2           | Sep                  | 1-10  | Oct               | 1-10  | Oct   | 11-20 | Nov   | 1-10  |
| ST | 1           |                      |       |                   |       |       |       |       |       |
| 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.**

Juvenile observations:

|                             | SK                       | CO                       | PK                       | CM                       | CN                       |
|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 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 |
|---------|--------|----------|---------|--------|-----|-------|---------|
|---------|--------|----------|---------|--------|-----|-------|---------|

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

**Brian Munro**

Person Preparing Report

Signature

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**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.