## FISHERIES AND OCEANS CANADA

#### SOUTH COAST ASSESSMENT BULLETIN

CREEL SURVEY DATA REVIEW PACKAGE

# Area 15 August 2022



# Prepared By: South Coast Salmon Stock Assessment Section

Thursday 19th January, 2023

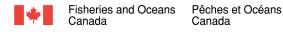




Table 1: Numbers of Interviews conducted contributing to the area by day and access site.

|             |          | Big Rock<br>Boat<br>Rental | Comox<br>Mun | Discov-<br>ery<br>Marina<br>South | Kitty<br>Coleman | Lund | Pacific<br>Play | Union<br>Bay | Westv | riew |
|-------------|----------|----------------------------|--------------|-----------------------------------|------------------|------|-----------------|--------------|-------|------|
| Date        | Day Type | PM                         | PM           | AM                                | PM               | AM   | PM              | AM           | AM    | PM   |
| 29 Jul 2022 | Midweek  |                            |              | 1                                 |                  | 1    |                 |              |       |      |
| 30 Jul 2022 | Weekend  |                            |              |                                   | 1                |      |                 |              |       |      |
| 31 Jul 2022 | Weekend  |                            |              |                                   |                  |      |                 |              | 9     |      |
| 01 Aug 2022 | Weekend  |                            |              |                                   |                  |      |                 |              |       |      |
| 02 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 03 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       | 3    |
| 04 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 05 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 06 Aug 2022 | Weekend  |                            |              |                                   |                  |      |                 |              |       |      |
| 07 Aug 2022 | Weekend  |                            |              |                                   |                  |      | 1               |              |       |      |
| 08 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 09 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 10 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 11 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              | 1     |      |
| 12 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 13 Aug 2022 | Weekend  |                            |              |                                   |                  |      |                 |              |       |      |
| 14 Aug 2022 | Weekend  | 1                          |              |                                   |                  |      |                 |              |       |      |
| 15 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 16 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 17 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 18 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 19 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       | 1    |
| 20 Aug 2022 | Weekend  |                            | 1            |                                   |                  |      |                 |              |       | 3    |
| 21 Aug 2022 | Weekend  |                            |              |                                   |                  |      | 1               |              |       |      |
| 22 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 23 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 24 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       | 1    |
| 25 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              | 7     |      |
| 26 Aug 2022 | Midweek  |                            |              | 2                                 |                  |      |                 |              |       |      |
| 27 Aug 2022 | Weekend  |                            |              |                                   |                  |      |                 |              |       |      |
| 28 Aug 2022 | Weekend  |                            |              |                                   |                  |      |                 | 1            |       |      |
| 29 Aug 2022 | Midweek  |                            | 2            |                                   |                  |      |                 |              |       |      |
| 30 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 31 Aug 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 01 Sep 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       | 3    |
| 02 Sep 2022 | Midweek  |                            |              |                                   |                  |      |                 |              |       |      |
| 03 Sep 2022 | Weekend  |                            |              |                                   |                  |      |                 |              |       |      |

Table 2: Daily tally of interviews, catch and effort.

| Date        | Day                  | Average<br>Fishing<br>Conditions | Interviews &<br>Log Trips | Chinook | Coho | Sockeye | Halibut | Observed<br>Fishing | Flight<br>Time | Expanded<br>Fishing |
|-------------|----------------------|----------------------------------|---------------------------|---------|------|---------|---------|---------------------|----------------|---------------------|
| 29-Jul-2022 | Friday               | calm/rippled                     | 2                         | 1       |      |         |         |                     |                |                     |
| 30-Jul-2022 | Saturday             | choppy                           | 2                         |         |      |         |         | 14                  | 1036           | 41                  |
| 31-Jul-2022 | Sunday               | calm/rippled                     | 10                        | 4       |      |         |         |                     |                |                     |
| 01-Aug-2022 | Monday (B.C.<br>Day) |                                  | 2                         | 2       |      |         |         | 44                  | 1039           | 125                 |
| 02-Aug-2022 | Tuesday              |                                  | 2                         | 3       |      |         |         | 26                  | 1001           | 72                  |
| 03-Aug-2022 | Wednesday            | calm/rippled                     | 3                         | 2       |      |         |         |                     |                |                     |
| 04-Aug-2022 | Thursday             | **                               | 0                         |         |      |         |         |                     |                |                     |
| 05-Aug-2022 | Friday               |                                  | 1                         |         |      |         |         |                     |                |                     |
| 06-Aug-2022 | Saturday             |                                  | 1                         | 1       |      |         |         |                     |                |                     |
| 07-Aug-2022 | Sunday               | calm/rippled                     | 1                         |         |      |         |         | 34                  | 1032           | 97                  |
| 08-Aug-2022 | Monday               | •                                | 0                         |         |      |         |         |                     |                |                     |
| 09-Aug-2022 | Tuesday              |                                  | 0                         |         |      |         |         |                     |                |                     |
| 10-Aug-2022 | Wednesday            |                                  | 0                         |         |      |         |         |                     |                |                     |
| 11-Aug-2022 | Thursday             | calm/rippled                     | 2                         | 1       |      |         |         | 24                  | 1054           | 64                  |
| 12-Aug-2022 | Friday               |                                  | 1                         | 2       |      |         |         |                     |                |                     |
| 13-Aug-2022 | Saturday             |                                  | 1                         |         |      |         |         | 19                  | 1058           | 56                  |
| 14-Aug-2022 | Sunday               | calm/rippled                     | 3                         | 2       |      |         |         |                     |                |                     |
| 15-Aug-2022 | Monday               |                                  | 1                         | 2       |      |         |         |                     |                |                     |
| 16-Aug-2022 | Tuesday              |                                  | 1                         | 1       |      |         |         |                     |                |                     |
| 17-Aug-2022 | Wednesday            |                                  | 1                         | 3       |      |         |         |                     |                |                     |
| 18-Aug-2022 | Thursday             |                                  | 0                         |         |      |         |         | 67                  | 1037           | 183                 |
| 19-Aug-2022 | Friday               | calm/rippled                     | 2                         | 1       |      |         |         |                     |                |                     |
| 20-Aug-2022 | Saturday             | calm/rippled                     | 5                         | 2       |      |         |         |                     |                |                     |
| 21-Aug-2022 | Sunday               | choppy                           | 3                         | 4       |      |         |         | 12                  | 1032           | 34                  |
| 22-Aug-2022 | Monday               |                                  | 1                         | 1       |      |         |         | 38                  | 1028           | 103                 |
| 23-Aug-2022 | Tuesday              |                                  | 1                         |         |      |         |         |                     |                |                     |
| 24-Aug-2022 | Wednesday            | calm/rippled                     | 2                         |         |      |         |         |                     |                |                     |
| 25-Aug-2022 | Thursday             | calm/rippled                     | 7                         | 5       |      |         |         |                     |                |                     |
| 26-Aug-2022 | Friday               | choppy                           | 2                         | 5       |      |         |         |                     |                |                     |
| 27-Aug-2022 | Saturday             |                                  | 0                         |         |      |         |         | 18                  | 1046           | 53                  |
| 28-Aug-2022 | Sunday               | choppy                           | 1                         |         |      |         |         |                     |                |                     |
| 29-Aug-2022 | Monday               | calm/rippled                     | 3                         | 2       |      |         |         | 8                   | 1030           | 22                  |
| 30-Aug-2022 | Tuesday              |                                  | 0                         |         |      |         |         |                     |                |                     |
| 31-Aug-2022 | Wednesday            |                                  | 0                         |         |      |         |         |                     |                |                     |
| 01-Sep-2022 | Thursday             | choppy                           | 3                         |         |      |         |         | 12                  | 1048           | 33                  |
| 02-Sep-2022 | Friday               |                                  | 0                         |         |      |         |         |                     |                |                     |
| 03-Sep-2022 | Saturday             |                                  | 0                         |         |      |         |         | 16                  | 1025           | 47                  |
|             | Totals               | calm/rippled                     | 30                        | 28      |      |         |         | 33*                 |                | 89*                 |
|             | Totals               | calm/rippled                     | 17                        | 11      |      |         |         | 25*                 |                | 73*                 |

<sup>\*</sup> Average number of boats Observed and Expanded

Table 3: Simple area based cpue (catch per boat trip) expansion.

|          |          |           |           |         | CPUE |         |         |         | Retained |         |         |  |  |
|----------|----------|-----------|-----------|---------|------|---------|---------|---------|----------|---------|---------|--|--|
| Day Type | Average  | Number of | Total     | Chinook | Coho | Sockeye | Halibut | Chinook | Coho     | Sockeye | Halibut |  |  |
|          | Expanded | Days      | Estimated |         |      |         |         |         |          |         |         |  |  |
|          | Boats    |           | Effort    |         |      |         |         |         |          |         |         |  |  |
| Weekend  | 73       | 9         | 657       | 0.647   |      |         |         | 425     |          |         |         |  |  |
| Midweek  | 89       | 22        | 1958      | 0.933   |      |         |         | 1827    |          |         |         |  |  |

Table 4: Recent years estimates of retained catch and effort.

| Year     | Month  | Total Effort | Chinook Kept | Coho Kept | Sockeye Kept | Halibut Kept |
|----------|--------|--------------|--------------|-----------|--------------|--------------|
| 2017     | August | 2481         | 1725         | 169       |              |              |
| 2018     | August | 4482         | 2345         | 256       | 121          |              |
| 2019     | August | 2017         | 1442         | 85        |              | 0            |
| 2020     | August | 1576         | 436          | 105       |              | 0            |
| 2021     | August | 2797         | 1319         | 96        |              | 69           |
| 2022     | August | 3246         | 2473         | 62        | 0            | 0            |
| 5-Yr Avg | August | 2671         | 1453         | 142       | 121          | 23           |

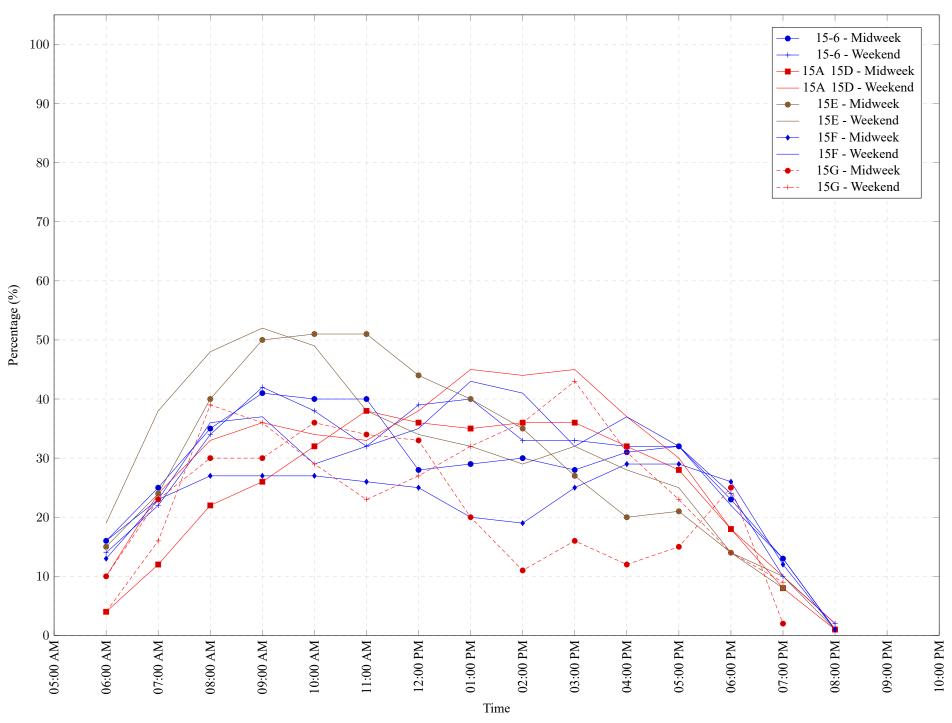
Table 5: Sport Head Recovery Review.

| Species | Creel<br>Marked<br>Catch | l Mark | Creel<br>Submission<br>Rate | iRec<br>Marked<br>Catch | Mark | iRec<br>Submission<br>Rate | Sport Head<br>Recoveries |
|---------|--------------------------|--------|-----------------------------|-------------------------|------|----------------------------|--------------------------|
| Chinook | 306                      | 12%    | 5%                          | 164                     | 14%  | 9%                         | 15                       |

Table 6: Guided Proprtions Review.

| Data Source      | Interviews / Angler Days | Guided Proportion |
|------------------|--------------------------|-------------------|
| Creel Interivews | 47                       | 17%               |
| iRec Anglers     | 4511                     | 4%                |

Figure 1: Proportion of each day's fishing by hour.



Area 15 August 2022

Table 7: Proportion of each day's fishing by hour.

| Areas   | Day Type | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 01:00 | 02:00 | 03:00 | 04:00 | 05:00 | 06:00 | 07:00 | 08:00 | 09:00 | 10:00 |
|---------|----------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |          | AM   | AM   | AM   | AM   | AM    | AM    | PM    |
| 15-6    | Midweek  | 16%  | 25%  | 35%  | 41%  | 40%   | 40%   | 28%   | 29%   | 30%   | 28%   | 31%   | 32%   | 23%   | 13%   | 1%    | 0%    | 0%    |
| 15-6    | Weekend  | 14%  | 22%  | 34%  | 42%  | 38%   | 32%   | 39%   | 40%   | 33%   | 33%   | 32%   | 32%   | 24%   | 10%   | 2%    | 0%    | 0%    |
| 15A 15D | Midweek  | 4%   | 12%  | 22%  | 26%  | 32%   | 38%   | 36%   | 35%   | 36%   | 36%   | 32%   | 28%   | 18%   | 8%    | 1%    | 0%    | 0%    |
| 15A 15D | Weekend  | 10%  | 24%  | 33%  | 36%  | 34%   | 33%   | 38%   | 45%   | 44%   | 45%   | 37%   | 30%   | 18%   | 10%   | 2%    | 0%    | 0%    |
| 15E     | Midweek  | 15%  | 24%  | 40%  | 50%  | 51%   | 51%   | 44%   | 40%   | 35%   | 27%   | 20%   | 21%   | 14%   | 8%    | 0%    | 0%    | 0%    |
| 15E     | Weekend  | 19%  | 38%  | 48%  | 52%  | 49%   | 38%   | 34%   | 32%   | 29%   | 32%   | 28%   | 25%   | 14%   | 10%   | 1%    | 0%    | 0%    |
| 15F     | Midweek  | 13%  | 23%  | 27%  | 27%  | 27%   | 26%   | 25%   | 20%   | 19%   | 25%   | 29%   | 29%   | 26%   | 12%   | 1%    | 0%    | 0%    |
| 15F     | Weekend  | 16%  | 23%  | 36%  | 37%  | 29%   | 32%   | 35%   | 43%   | 41%   | 32%   | 37%   | 32%   | 22%   | 13%   | 1%    | 0%    | 0%    |
| 15G     | Midweek  | 10%  | 23%  | 30%  | 30%  | 36%   | 34%   | 33%   | 20%   | 11%   | 16%   | 12%   | 15%   | 25%   | 2%    | 0%    | 0%    | 0%    |
| 15G     | Weekend  | 4%   | 16%  | 39%  | 36%  | 29%   | 23%   | 27%   | 32%   | 36%   | 43%   | 31%   | 23%   | 14%   | 9%    | 0%    | 0%    | 0%    |

### Table 8: Daily Fishing Conditions.

| Date        | Day Type | Big Rock<br>Boat Rental | Comox Mun    | Discovery<br>Marina<br>South | Kitty<br>Coleman | Lund         | Pacific Play | Union Bay | Westview     |
|-------------|----------|-------------------------|--------------|------------------------------|------------------|--------------|--------------|-----------|--------------|
| 29 Jul 2022 | Midweek  |                         |              | choppy                       |                  | calm/rippled |              |           |              |
| 30 Jul 2022 | Weekend  |                         |              | 117                          | choppy           | **           |              |           |              |
| 31 Jul 2022 | Weekend  |                         |              |                              | ***              |              |              |           | calm/rippled |
| 01 Aug 2022 | Weekend  |                         |              |                              |                  |              |              |           | ***          |
| 02 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 03 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           | calm/rippled |
| 04 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           | • • •        |
| 05 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 06 Aug 2022 | Weekend  |                         |              |                              |                  |              |              |           |              |
| 07 Aug 2022 | Weekend  |                         |              |                              |                  |              | calm/rippled |           |              |
| 08 Aug 2022 | Midweek  |                         |              |                              |                  |              | ••           |           |              |
| 09 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 10 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 11 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           | calm/rippled |
| 12 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           | **           |
| 13 Aug 2022 | Weekend  |                         |              |                              |                  |              |              |           |              |
| 14 Aug 2022 | Weekend  | calm/rippled            |              |                              |                  |              |              |           |              |
| 15 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 16 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 17 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 18 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 19 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           | calm/rippled |
| 20 Aug 2022 | Weekend  |                         | choppy       |                              |                  |              |              |           | calm/rippled |
| 21 Aug 2022 | Weekend  |                         |              |                              |                  |              | choppy       |           |              |
| 22 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 23 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 24 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           | calm/rippled |
| 25 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           | calm/rippled |
| 26 Aug 2022 | Midweek  |                         |              | choppy                       |                  |              |              |           |              |
| 27 Aug 2022 | Weekend  |                         |              |                              |                  |              |              |           |              |
| 28 Aug 2022 | Weekend  |                         |              |                              |                  |              |              | choppy    |              |
| 29 Aug 2022 | Midweek  |                         | calm/rippled |                              |                  |              |              |           |              |
| 30 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 31 Aug 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 01 Sep 2022 | Midweek  |                         |              |                              |                  |              |              |           | choppy       |
| 02 Sep 2022 | Midweek  |                         |              |                              |                  |              |              |           |              |
| 03 Sep 2022 | Weekend  |                         |              |                              |                  |              |              |           |              |