## FISHERIES AND OCEANS CANADA

## SOUTH COAST ASSESSMENT BULLETIN

CREEL SURVEY DATA REVIEW PACKAGE

## Area 19 (GS) June 2019



## Prepared By: South Coast Salmon Stock Assessment Section

Thursday 27<sup>th</sup> August, 2020

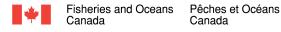




Table 1: Numbers of Interviews conducted contributing to the area by day and access site.

| ,           |          |        | G        |       |     |
|-------------|----------|--------|----------|-------|-----|
|             |          | Cattle | Cowichan | Sidn  | ev  |
|             |          | Point  | Bay      | 21411 | - ) |
| Date        | Day Type | AM     | PM       | AM    | PM  |
| 29 May 2019 | Midweek  |        |          |       |     |
| 30 May 2019 | Midweek  |        |          |       |     |
| 31 May 2019 | Midweek  |        |          |       | 4   |
| 01 Jun 2019 | Weekend  |        |          |       |     |
| 02 Jun 2019 | Weekend  |        |          |       |     |
| 03 Jun 2019 | Midweek  |        |          |       |     |
| 04 Jun 2019 | Midweek  |        |          |       |     |
| 05 Jun 2019 | Midweek  |        |          |       |     |
| 06 Jun 2019 | Midweek  |        |          |       |     |
| 07 Jun 2019 | Midweek  |        |          |       |     |
| 08 Jun 2019 | Weekend  |        |          |       |     |
| 09 Jun 2019 | Weekend  |        |          |       |     |
| 10 Jun 2019 | Midweek  |        |          |       |     |
| 11 Jun 2019 | Midweek  |        |          |       |     |
| 12 Jun 2019 | Midweek  |        |          |       |     |
| 13 Jun 2019 | Midweek  |        |          |       |     |
| 14 Jun 2019 | Midweek  |        |          |       | 1   |
| 15 Jun 2019 | Weekend  | 1      |          |       |     |
| 16 Jun 2019 | Weekend  |        | 3        | 3     |     |
| 17 Jun 2019 | Midweek  |        |          |       |     |
| 18 Jun 2019 | Midweek  |        |          |       |     |
| 19 Jun 2019 | Midweek  |        |          |       |     |
| 20 Jun 2019 | Midweek  |        |          |       |     |
| 21 Jun 2019 | Midweek  |        |          |       |     |
| 22 Jun 2019 | Weekend  |        |          |       |     |
| 23 Jun 2019 | Weekend  |        |          |       |     |
| 24 Jun 2019 | Midweek  |        |          |       |     |
| 25 Jun 2019 | Midweek  |        |          |       |     |
| 26 Jun 2019 | Midweek  |        |          |       |     |
| 27 Jun 2019 | Midweek  |        |          |       |     |
| 28 Jun 2019 | Midweek  |        |          |       |     |
| 29 Jun 2019 | Weekend  |        |          |       |     |
| 30 Jun 2019 | Weekend  |        |          |       | 7   |
| 01 Jul 2019 | Weekend  |        |          |       |     |
| 02 Jul 2019 | Midweek  |        |          |       |     |
| 03 Jul 2019 | Midweek  |        |          |       |     |

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-May-2019 | Wednesday      |                                  | 0                         |         |      |         |         |                     |                |                     |
| 30-May-2019 | Thursday       |                                  | 0                         |         |      |         |         |                     |                |                     |
| 31-May-2019 | Friday         | choppy                           | 4                         |         |      |         |         |                     |                |                     |
| 01-Jun-2019 | Saturday       |                                  | 0                         |         |      |         |         |                     |                |                     |
| 02-Jun-2019 | Sunday         |                                  | 0                         |         |      |         |         | 6                   | 1026           | 13                  |
| 03-Jun-2019 | Monday         |                                  | 0                         |         |      |         |         |                     |                |                     |
| 04-Jun-2019 | Tuesday        |                                  | 0                         |         |      |         |         |                     |                |                     |
| 05-Jun-2019 | Wednesday      |                                  | 0                         |         |      |         |         |                     |                |                     |
| 06-Jun-2019 | Thursday       |                                  | 0                         |         |      |         |         |                     |                |                     |
| 07-Jun-2019 | Friday         |                                  | 0                         |         |      |         |         | 0                   | 1032           | 0                   |
| 08-Jun-2019 | Saturday       |                                  | 0                         |         |      |         |         |                     |                |                     |
| 09-Jun-2019 | Sunday         |                                  | 0                         |         |      |         |         | 6                   | 1031           | 14                  |
| 10-Jun-2019 | Monday         |                                  | 0                         |         |      |         |         |                     |                |                     |
| 11-Jun-2019 | Tuesday        |                                  | 0                         |         |      |         |         |                     |                |                     |
| 12-Jun-2019 | Wednesday      |                                  | 0                         |         |      |         |         |                     |                |                     |
| 13-Jun-2019 | Thursday       |                                  | 0                         |         |      |         |         | 4                   | 1030           | 8                   |
| 14-Jun-2019 | Friday         | frequent                         | 1                         |         |      |         |         |                     |                |                     |
|             |                | whitecaps                        |                           |         |      |         |         |                     |                |                     |
| 15-Jun-2019 | Saturday       | calm/rippled                     | 1                         |         |      |         |         |                     |                |                     |
| 16-Jun-2019 | Sunday         | calm/rippled                     | 6                         |         |      |         |         |                     |                |                     |
| 17-Jun-2019 | Monday         |                                  | 0                         |         |      |         |         |                     |                |                     |
| 18-Jun-2019 | Tuesday        |                                  | 0                         |         |      |         |         |                     |                |                     |
| 19-Jun-2019 | Wednesday      |                                  | 0                         |         |      |         |         | 1                   | 1030           | 2                   |
| 20-Jun-2019 | Thursday       |                                  | 0                         |         |      |         |         |                     |                |                     |
| 21-Jun-2019 | Friday         |                                  | 0                         |         |      |         |         |                     |                |                     |
| 22-Jun-2019 | Saturday       |                                  | 0                         |         |      |         |         | 12                  | 1031           | 28                  |
| 23-Jun-2019 | Sunday         |                                  | 0                         |         |      |         |         |                     |                |                     |
| 24-Jun-2019 | Monday         |                                  | 0                         |         |      |         |         |                     |                |                     |
| 25-Jun-2019 | Tuesday        |                                  | 0                         |         |      |         |         |                     |                |                     |
| 26-Jun-2019 | Wednesday      |                                  | 0                         |         |      |         |         | 4                   | 1029           | 9                   |
| 27-Jun-2019 | Thursday       |                                  | 0                         |         |      |         |         |                     |                |                     |
| 28-Jun-2019 | Friday         |                                  | 0                         |         |      |         |         |                     |                |                     |
| 29-Jun-2019 | Saturday       |                                  | 0                         |         |      |         |         | 7                   | 1030           | 17                  |
| 30-Jun-2019 | Sunday         | calm/rippled                     | 7                         |         |      |         |         |                     |                |                     |
| 01-Jul-2019 | Monday (Canada |                                  | 0                         |         |      |         |         |                     |                |                     |
|             | Day)           |                                  |                           |         |      |         |         |                     |                |                     |
| 02-Jul-2019 | Tuesday        |                                  | 0                         |         |      |         |         |                     |                |                     |
| 03-Jul-2019 | Wednesday      |                                  | 0                         |         |      |         |         | _                   |                | *                   |
|             | Totals         | frequent                         | 1                         |         |      |         |         | 2*                  |                | 5*                  |
|             |                | whitecaps                        |                           |         |      |         |         |                     |                |                     |
|             | Totals         | calm/rippled                     | 14                        |         |      |         |         | 8*                  |                | 18*                 |

<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  | 18       | 10        | 180       |         |      |         |          |         |      |         |         |
| Midweek  | 5        | 20        | 100       |         |      |         |          |         |      |         |         |

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

| Year     | Month | Total Effort | Chinook Kept | Coho Kept | Sockeye Kept | Halibut Kept |
|----------|-------|--------------|--------------|-----------|--------------|--------------|
| 2014     | June  | 490          | 15           |           |              | 5            |
| 2015     | June  | 444          | 60           |           |              |              |
| 2016     | June  | 760          | 5            |           |              | 5            |
| 2017     | June  | 527          | 73           |           |              |              |
| 2018     | June  | 1219         | 38           |           |              |              |
| 2019     | June  | 237          | 0            |           |              | 0            |
| 5-Yr Avg | June  | 688          | 38           |           |              | 5            |

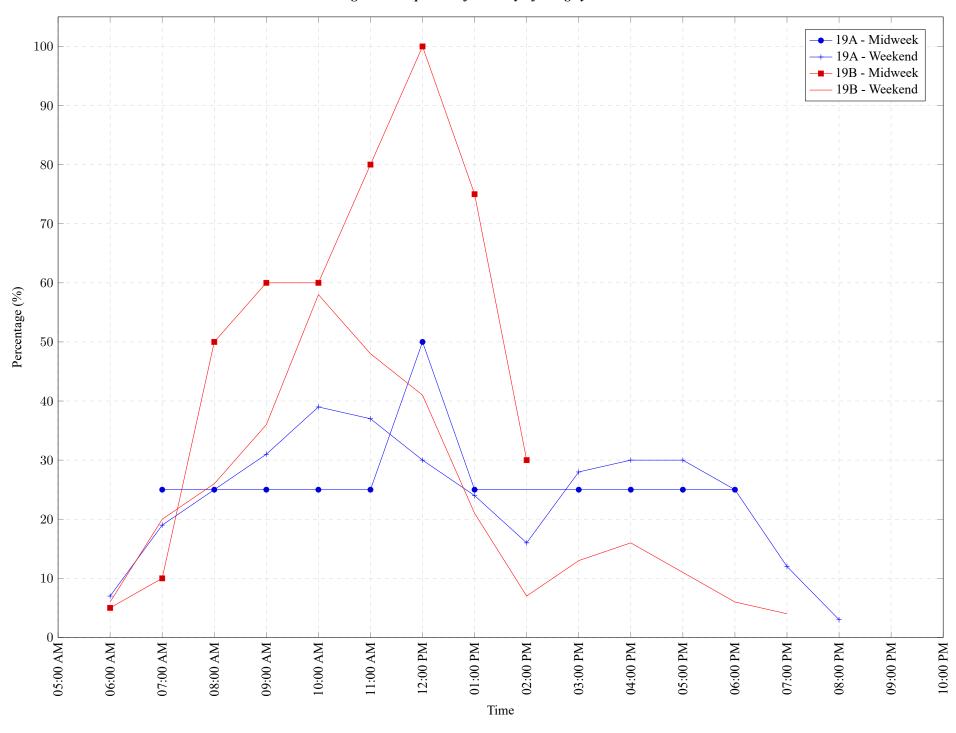
Table 5: Sport Head Recovery Review.

| Species | Creel  | Creel | Creel      | iRec   | iRec | iRec       | Sport Head |
|---------|--------|-------|------------|--------|------|------------|------------|
|         | Marked | Mark  | Submission | Marked | Mark | Submission | Recoveries |
|         | Catch  | Rate  | Rate       | Catch  | Rate | Rate       |            |

Table 6: Guided Proprtions Review.

| Data Source      | Interviews / Angler Days | Guided Proportion |
|------------------|--------------------------|-------------------|
| Creel Interivews | 15                       | 0%                |
| iRec Anglers     | 135                      | 38%               |
| iRec Responses   | 5                        | 20%               |

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



Area 19 (GS) June 2019

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    |
| 19A   | Midweek  | 0%   | 25%  | 25%  | 25%  | 25%   | 25%   | 50%   | 25%   | 0%    | 25%   | 25%   | 25%   | 25%   | 0%    | 0%    | 0%    | 0%    |
| 19A   | Weekend  | 7%   | 19%  | 25%  | 31%  | 39%   | 37%   | 30%   | 24%   | 16%   | 28%   | 30%   | 30%   | 25%   | 12%   | 3%    | 0%    | 0%    |
| 19B   | Midweek  | 5%   | 10%  | 50%  | 60%  | 60%   | 80%   | 100%  | 75%   | 30%   | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    |
| 19B   | Weekend  | 6%   | 20%  | 26%  | 36%  | 58%   | 48%   | 41%   | 21%   | 7%    | 13%   | 16%   | 11%   | 6%    | 4%    | 0%    | 0%    | 0%    |

Table 8: Daily Fishing Conditions.

| Data        | Day True | Cattle Point | Cowichan | Sidney             |
|-------------|----------|--------------|----------|--------------------|
| Date        | Day Type | Cattle Point | Bay      | Sidney             |
| 29 May 2019 | Midweek  |              |          |                    |
| 30 May 2019 | Midweek  |              |          |                    |
| 31 May 2019 | Midweek  |              |          | choppy             |
| 01 Jun 2019 | Weekend  |              |          | 117                |
| 02 Jun 2019 | Weekend  |              |          |                    |
| 03 Jun 2019 | Midweek  |              |          |                    |
| 04 Jun 2019 | Midweek  |              |          |                    |
| 05 Jun 2019 | Midweek  |              |          |                    |
| 06 Jun 2019 | Midweek  |              |          |                    |
| 07 Jun 2019 | Midweek  |              |          |                    |
| 08 Jun 2019 | Weekend  |              |          |                    |
| 09 Jun 2019 | Weekend  |              |          |                    |
| 10 Jun 2019 | Midweek  |              |          |                    |
| 11 Jun 2019 | Midweek  |              |          |                    |
| 12 Jun 2019 | Midweek  |              |          |                    |
| 13 Jun 2019 | Midweek  |              |          |                    |
| 14 Jun 2019 | Midweek  |              |          | frequent whitecaps |
| 15 Jun 2019 | Weekend  | calm/rippled |          |                    |
| 16 Jun 2019 | Weekend  |              | choppy   | calm/rippled       |
| 17 Jun 2019 | Midweek  |              |          |                    |
| 18 Jun 2019 | Midweek  |              |          |                    |
| 19 Jun 2019 | Midweek  |              |          |                    |
| 20 Jun 2019 | Midweek  |              |          |                    |
| 21 Jun 2019 | Midweek  |              |          |                    |
| 22 Jun 2019 | Weekend  |              |          |                    |
| 23 Jun 2019 | Weekend  |              |          |                    |
| 24 Jun 2019 | Midweek  |              |          |                    |
| 25 Jun 2019 | Midweek  |              |          |                    |
| 26 Jun 2019 | Midweek  |              |          |                    |
| 27 Jun 2019 | Midweek  |              |          |                    |
| 28 Jun 2019 | Midweek  |              |          |                    |
| 29 Jun 2019 | Weekend  |              |          |                    |
| 30 Jun 2019 | Weekend  |              |          | calm/rippled       |
| 01 Jul 2019 | Weekend  |              |          |                    |
| 02 Jul 2019 | Midweek  |              |          |                    |
| 03 Jul 2019 | Midweek  |              |          |                    |