## FISHERIES AND OCEANS CANADA

## SOUTH COAST ASSESSMENT BULLETIN

CREEL SURVEY DATA REVIEW PACKAGE

## Area 19 (GS) May 2019



## Prepared By: South Coast Salmon Stock Assessment Section

Thursday 27th August, 2020

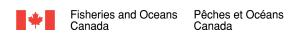




Table 1: Numbers of Interviews conducted contributing to the area by day and access site.

|             |          | Cattle | Point | Cowicha | an Bav | Sidn | ev |
|-------------|----------|--------|-------|---------|--------|------|----|
| Date        | Day Type | AM     | PM    | AM      | PM     | AM   | PM |
| 28 Apr 2019 | Weekend  |        |       |         |        |      |    |
| 29 Apr 2019 | Midweek  |        | 1     |         |        |      |    |
| 30 Apr 2019 | Midweek  |        |       |         |        |      |    |
| 01 May 2019 | Midweek  |        |       |         |        |      |    |
| 02 May 2019 | Midweek  |        |       |         |        |      |    |
| 03 May 2019 | Midweek  |        |       |         |        | 1    |    |
| 04 May 2019 | Weekend  |        |       |         | 1      |      |    |
| 05 May 2019 | Weekend  |        |       |         |        |      |    |
| 06 May 2019 | Midweek  |        |       | 1       |        |      |    |
| 07 May 2019 | Midweek  |        |       |         |        |      |    |
| 08 May 2019 | Midweek  |        |       |         |        |      |    |
| 09 May 2019 | Midweek  |        |       |         |        |      |    |
| 10 May 2019 | Midweek  |        |       |         |        |      |    |
| 11 May 2019 | Weekend  |        |       |         | 1      |      |    |
| 12 May 2019 | Weekend  |        |       |         |        |      |    |
| 13 May 2019 | Midweek  | 1      |       |         |        |      |    |
| 14 May 2019 | Midweek  |        |       |         |        |      |    |
| 15 May 2019 | Midweek  |        |       |         |        |      |    |
| 16 May 2019 | Midweek  |        |       |         |        |      |    |
| 17 May 2019 | Midweek  |        |       |         |        |      |    |
| 18 May 2019 | Weekend  |        |       |         |        |      |    |
| 19 May 2019 | Weekend  |        |       |         |        |      | 9  |
| 20 May 2019 | Weekend  |        |       |         |        |      |    |
| 21 May 2019 | Midweek  |        |       |         |        |      |    |
| 22 May 2019 | Midweek  |        |       |         |        |      |    |
| 23 May 2019 | Midweek  |        |       |         |        |      |    |
| 24 May 2019 | Midweek  |        |       |         |        |      |    |
| 25 May 2019 | Weekend  |        |       |         |        |      |    |
| 26 May 2019 | Weekend  |        |       |         |        | 5    |    |
| 27 May 2019 | Midweek  |        |       |         |        |      |    |
| 28 May 2019 | Midweek  |        |       |         |        |      |    |
| 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  |        |       |         |        |      |    |

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

| Date          | Day          | Average<br>Fishing<br>Conditions        | Interviews & Log Trips | Chinook | Coho | Sockeye | Halibut | Observed<br>Fishing | Flight<br>Time | Expanded<br>Fishing |
|---------------|--------------|---|------------------------|---------|------|---------|---------|---------------------|----------------|---------------------|
| 28-Apr-2019   | Sunday       |   | 0                      |         |      |         |         |                     |                |                     |
| 29-Apr-2019   | Monday       | choppy                                  | 1                      |         |      |         |         |                     |                |                     |
| 30-Apr-2019   | Tuesday      | • | 0                      |         |      |         |         |                     |                |                     |
| 01-May-2019 V | Wednesday    |   | 0                      |         |      |         |         |                     |                |                     |
| 02-May-2019   | Thursday     |   | 0                      |         |      |         |         |                     |                |                     |
| 03-May-2019   | Friday       | calm/rippled                            | 1                      |         |      |         |         |                     |                |                     |
| 04-May-2019   | Saturday     | calm/rippled                            | 1                      |         |      |         |         | 10                  | 1025           | 35                  |
| 05-May-2019   | Sunday       | • •                                     | 0                      |         |      |         |         |                     |                |                     |
| 06-May-2019   | Monday       | calm/rippled                            | 1                      |         |      |         |         |                     |                |                     |
| 07-May-2019   | Tuesday      |   | 0                      |         |      |         |         |                     |                |                     |
| 08-May-2019 V | Wednesday    |   | 0                      |         |      |         |         |                     |                |                     |
| 09-May-2019   | Thursday     |   | 0                      |         |      |         |         |                     |                |                     |
| 10-May-2019   | Friday       |   | 0                      |         |      |         |         |                     |                |                     |
| 11-May-2019   | Saturday     | calm/rippled                            | 1                      |         |      |         |         | 7                   | 1020           | 24                  |
| 12-May-2019   | Sunday       |   | 0                      |         |      |         |         |                     |                |                     |
| 13-May-2019   | Monday       | choppy                                  | 1                      |         |      |         |         |                     |                |                     |
| 14-May-2019   | Tuesday      | 111                                     | 0                      |         |      |         |         |                     |                |                     |
| 15-May-2019 V | Wednesday    |   | 0                      |         |      |         |         |                     |                |                     |
|               | Thursday     |   | 0                      |         |      |         |         |                     |                |                     |
| 17-May-2019   | Friday       |   | 0                      |         |      |         |         |                     |                |                     |
| 18-May-2019   | Saturday     |   | 0                      |         |      |         |         |                     |                |                     |
| 19-May-2019   | Sunday       | choppy                                  | 9                      |         |      |         |         |                     |                |                     |
| 20-May-2019   | Monday       | ***                                     | 0                      |         |      |         |         |                     |                |                     |
|               | ictoria Day) |   |                        |         |      |         |         |                     |                |                     |
| 21-May-2019   | Tuesday      |   | 0                      |         |      |         |         |                     |                |                     |
| 22-May-2019 V | Wednesday    |   | 0                      |         |      |         |         |                     |                |                     |
| 23-May-2019   | Thursday     |   | 0                      |         |      |         |         | 1                   | 1016           | 3                   |
| 24-May-2019   | Friday       |   | 0                      |         |      |         |         | 0                   | 1031           | 0                   |
| 25-May-2019   | Saturday     |   | 0                      |         |      |         |         | 1                   | 0958           | 4                   |
| 26-May-2019   | Sunday       | calm/rippled                            | 5                      |         |      |         |         |                     |                |                     |
| 27-May-2019   | Monday       |   | 0                      |         |      |         |         | 9                   | 1022           | 24                  |
| 28-May-2019   | Tuesday      |   | 0                      |         |      |         |         |                     |                |                     |
|               | Wednesday    |   | 0                      |         |      |         |         |                     |                |                     |
|               | Thursday     |   | 0                      |         |      |         |         |                     |                |                     |
| 31-May-2019   | Friday       | choppy                                  | 4                      |         |      |         |         |                     |                |                     |
| 01-Jun-2019   | Saturday     | ***                                     | 0                      |         |      |         |         |                     |                |                     |
| 02-Jun-2019   | Sunday       |   | 0                      |         |      |         |         | 6                   | 1026           | 21                  |
| 03-Jun-2019   | Monday       |   | 0                      |         |      |         |         |                     |                |                     |
|               | Totals       | choppy                                  | 7                      |         |      |         |         | 3*                  |                | 9*                  |
|               | Totals       | calm/rippled                            | 16                     |         |      |         |         | 6*                  |                | 21*                 |

 $<sup>^{\</sup>ast}$  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    |         |      |         |          |         |      |         |         |
| Midweek  | 9        | 22        | 198       |         |      |         |          |         |      |         |         |
| Weekend  | 21       | 9         | 189       |         |      |         |          |         |      |         |         |

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

| Year     | Month | Total Effort | Chinook Kept | Coho Kept | Sockeye Kept | Halibut Kept |
|----------|-------|--------------|--------------|-----------|--------------|--------------|
| 2014     | May   | 485          |              |           |              | 77           |
| 2015     | May   | 583          | 40           |           |              | 65           |
| 2016     | May   | 547          | 37           |           |              |              |
| 2017     | May   | 575          | 268          |           |              |              |
| 2018     | May   | 936          | 341          |           |              |              |
| 2019     | May   | 378          | 0            |           |              | 0            |
| 5-Yr Avg | May   | 625          | 172          |           |              | 71           |

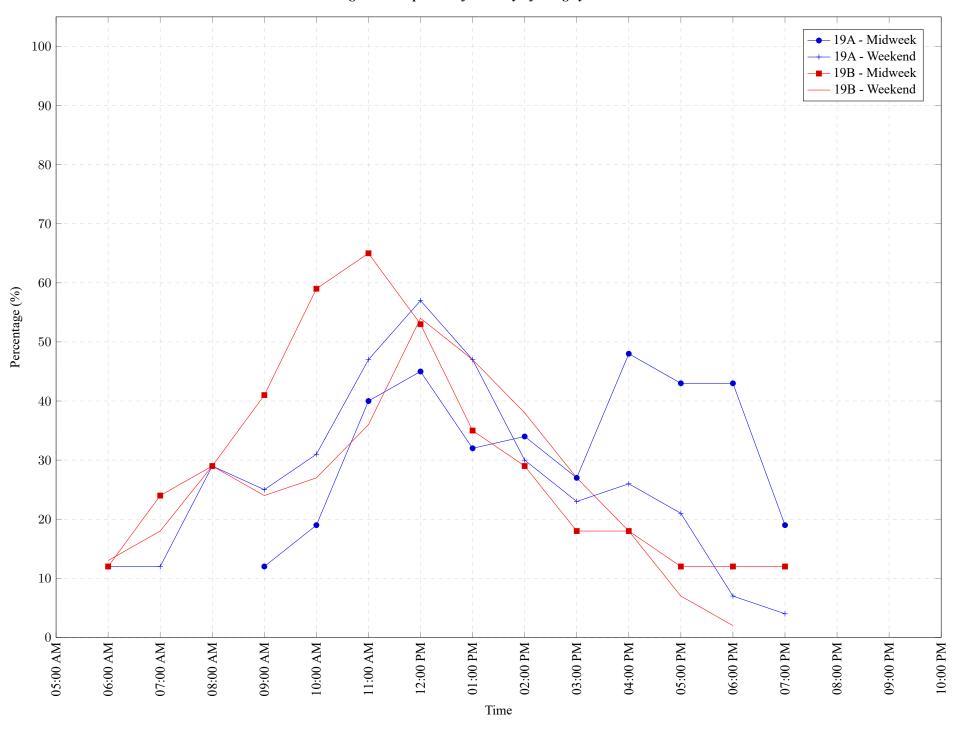
Table 5: Sport Head Recovery Review.

| 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 | 23                       | 0%                |
| iRec Anglers     | 286                      | 0%                |
| iRec Responses   | 10                       | 10%               |

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



Area 19 (GS) May 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%   | 0%   | 0%   | 12%  | 19%   | 40%   | 45%   | 32%   | 34%   | 27%   | 48%   | 43%   | 43%   | 19%   | 0%    | 0%    | 0%    |
| 19A   | Weekend  | 12%  | 12%  | 29%  | 25%  | 31%   | 47%   | 57%   | 47%   | 30%   | 23%   | 26%   | 21%   | 7%    | 4%    | 0%    | 0%    | 0%    |
| 19B   | Midweek  | 12%  | 24%  | 29%  | 41%  | 59%   | 65%   | 53%   | 35%   | 29%   | 18%   | 18%   | 12%   | 12%   | 12%   | 0%    | 0%    | 0%    |
| 19B   | Weekend  | 13%  | 18%  | 29%  | 24%  | 27%   | 36%   | 54%   | 47%   | 38%   | 27%   | 18%   | 7%    | 2%    | 0%    | 0%    | 0%    | 0%    |

Table 8: Daily Fishing Conditions.

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