

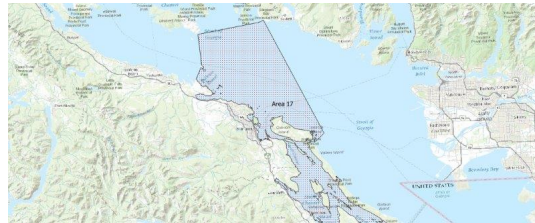
# FISHERIES AND OCEANS CANADA

## SOUTH COAST ASSESSMENT BULLETIN

### CREEL SURVEY DATA REVIEW PACKAGE

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## Area 17 June 2022



*Prepared By:*

South Coast Salmon Stock Assessment Section

Thursday 19<sup>th</sup> January, 2023



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada



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

|             |          | Brechin |    | Cowichan Bay | Crofton Ramp |    | French Ck | Ladysmith |    | McDonald Beach |    | Planetarium | Schooner |    | Sidney | Thunderbird Marina |
|-------------|----------|---------|----|--------------|--------------|----|-----------|-----------|----|----------------|----|-------------|----------|----|--------|--------------------|
| Date        | Day Type | AM      | PM | PM           | AM           | PM | PM        | AM        | PM | AM             | PM | PM          | AM       | PM | PM     | AM                 |
| 29 May 2022 | Weekend  |         |    |              |              |    |           |           |    |                |    |             | 4        | 13 |        |                    |
| 30 May 2022 | Midweek  |         |    |              |              | 5  |           | 1         |    |                |    |             |          |    |        |                    |
| 31 May 2022 | Midweek  |         |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 01 Jun 2022 | Midweek  |         |    |              |              |    |           |           |    |                |    |             |          | 2  |        |                    |
| 02 Jun 2022 | Midweek  |         |    |              |              |    |           | 1         | 3  |                |    |             |          |    |        |                    |
| 03 Jun 2022 | Midweek  |         |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 04 Jun 2022 | Weekend  |         |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 05 Jun 2022 | Weekend  |         | 4  |              | 2            |    |           |           |    |                |    |             |          | 5  |        |                    |
| 06 Jun 2022 | Midweek  |         |    |              |              | 2  |           |           | 3  |                |    |             |          |    |        |                    |
| 07 Jun 2022 | Midweek  |         |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 08 Jun 2022 | Midweek  |         |    |              |              |    |           |           |    |                | 1  |             |          |    |        |                    |
| 09 Jun 2022 | Midweek  |         |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 10 Jun 2022 | Midweek  | 1       |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 11 Jun 2022 | Weekend  | 8       |    |              | 1            |    |           |           |    |                |    |             |          | 6  |        |                    |
| 12 Jun 2022 | Weekend  |         | 10 |              |              |    |           | 3         |    |                |    |             |          |    |        |                    |
| 13 Jun 2022 | Midweek  |         |    |              | 6            |    |           |           |    |                |    |             |          |    |        |                    |
| 14 Jun 2022 | Midweek  |         |    |              |              | 1  |           |           |    |                |    |             |          |    |        |                    |
| 15 Jun 2022 | Midweek  |         | 15 |              |              |    |           |           |    |                |    |             |          | 3  |        |                    |
| 16 Jun 2022 | Midweek  |         |    |              |              | 4  |           |           |    |                |    |             |          |    |        |                    |
| 17 Jun 2022 | Midweek  |         | 3  |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 18 Jun 2022 | Weekend  | 4       |    |              |              | 1  |           |           |    | 1              |    |             |          |    |        |                    |
| 19 Jun 2022 | Weekend  |         |    |              |              |    |           | 5         |    |                |    |             |          | 8  |        |                    |
| 20 Jun 2022 | Midweek  | 3       |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 21 Jun 2022 | Midweek  |         |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 22 Jun 2022 | Midweek  |         |    |              | 3            |    |           |           |    |                |    |             |          |    |        |                    |
| 23 Jun 2022 | Midweek  |         |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 24 Jun 2022 | Midweek  |         |    |              |              |    |           |           | 3  |                |    |             | 1        |    |        |                    |
| 25 Jun 2022 | Weekend  |         |    | 1            |              |    | 2         |           | 17 |                |    |             |          |    |        |                    |
| 26 Jun 2022 | Weekend  |         |    |              |              | 6  |           |           | 14 |                |    |             |          |    |        |                    |
| 27 Jun 2022 | Midweek  |         | 16 |              |              |    |           |           |    |                |    |             | 2        |    |        |                    |
| 28 Jun 2022 | Midweek  |         |    |              |              |    |           | 1         |    |                |    |             |          |    |        |                    |
| 29 Jun 2022 | Midweek  |         |    |              |              |    |           |           |    |                |    |             |          |    |        |                    |
| 30 Jun 2022 | Midweek  |         |    |              |              |    |           | 3         |    |                |    | 1           |          | 3  |        |                    |
| 01 Jul 2022 | Weekend  |         |    |              |              | 9  |           |           |    |                |    |             |          | 15 | 1      | 1                  |
| 02 Jul 2022 | Weekend  |         |    |              |              |    | 2         | 4         |    |                |    |             |          |    |        |                    |
| 03 Jul 2022 | Weekend  | 5       |    |              |              |    |           |           |    |                |    |             | 3        |    |        |                    |

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

| Date        | Day                 | Average Fishing Conditions | Interviews & Log Trips | Chinook | Coho | Sockeye | Halibut | Observed Fishing | Flight Time | Expanded Fishing |
|-------------|---------------------|----------------------------|------------------------|---------|------|---------|---------|------------------|-------------|------------------|
| 29-May-2022 | Sunday              | calm/rippled               | 17                     |         |      |         |         |                  |             |                  |
| 30-May-2022 | Monday              | calm/rippled               | 6                      |         |      |         |         |                  |             |                  |
| 31-May-2022 | Tuesday             |                            | 0                      |         |      |         |         |                  |             |                  |
| 01-Jun-2022 | Wednesday           | choppy                     | 2                      |         |      |         |         | 10               | 1128        | 31               |
| 02-Jun-2022 | Thursday            | choppy                     | 5                      |         |      |         |         |                  |             |                  |
| 03-Jun-2022 | Friday              |                            | 0                      |         |      |         |         |                  |             |                  |
| 04-Jun-2022 | Saturday            |                            | 0                      |         |      |         |         |                  |             |                  |
| 05-Jun-2022 | Sunday              | choppy                     | 11                     |         |      |         |         | 9                | 1056        | 28               |
| 06-Jun-2022 | Monday              | choppy                     | 5                      |         |      |         |         |                  |             |                  |
| 07-Jun-2022 | Tuesday             | choppy                     | 2                      |         |      |         |         |                  |             |                  |
| 08-Jun-2022 | Wednesday           |                            | 0                      |         |      |         |         |                  |             |                  |
| 09-Jun-2022 | Thursday            |                            | 0                      |         |      |         |         |                  |             |                  |
| 10-Jun-2022 | Friday              | choppy                     | 1                      |         |      |         |         | 5                | 1219        | 15               |
| 11-Jun-2022 | Saturday            | choppy                     | 16                     |         |      |         |         | 21               | 1114        | 60               |
| 12-Jun-2022 | Sunday              | choppy                     | 13                     |         |      |         |         |                  |             |                  |
| 13-Jun-2022 | Monday              | choppy                     | 6                      |         |      |         |         |                  |             |                  |
| 14-Jun-2022 | Tuesday             | choppy                     | 1                      |         |      |         |         |                  |             |                  |
| 15-Jun-2022 | Wednesday           | choppy                     | 19                     | 1       |      |         |         |                  |             |                  |
| 16-Jun-2022 | Thursday            | choppy                     | 5                      |         |      |         |         |                  |             |                  |
| 17-Jun-2022 | Friday              | frequent whitecaps         | 3                      |         |      |         |         | 2                | 1132        | 6                |
| 18-Jun-2022 | Saturday            | calm/rippled               | 6                      |         |      |         |         |                  |             |                  |
| 19-Jun-2022 | Sunday              | choppy                     | 13                     |         |      |         |         | 41               | 1148        | 117              |
| 20-Jun-2022 | Monday              | calm/rippled               | 3                      |         |      |         |         |                  |             |                  |
| 21-Jun-2022 | Tuesday             |                            | 0                      |         |      |         |         |                  |             |                  |
| 22-Jun-2022 | Wednesday           | choppy                     | 3                      |         |      |         |         |                  |             |                  |
| 23-Jun-2022 | Thursday            |                            | 0                      |         |      |         |         |                  |             |                  |
| 24-Jun-2022 | Friday              | choppy                     | 4                      |         |      |         |         | 6                | 1130        | 19               |
| 25-Jun-2022 | Saturday            | calm/rippled               | 20                     | 2       |      |         |         | 19               | 1147        | 56               |
| 26-Jun-2022 | Sunday              | calm/rippled               | 21                     |         |      |         |         |                  |             |                  |
| 27-Jun-2022 | Monday              | calm/rippled               | 19                     |         |      |         |         |                  |             |                  |
| 28-Jun-2022 | Tuesday             | choppy                     | 1                      |         |      |         |         |                  |             |                  |
| 29-Jun-2022 | Wednesday           |                            | 0                      |         |      |         |         |                  |             |                  |
| 30-Jun-2022 | Thursday            | choppy                     | 7                      |         |      |         |         |                  |             |                  |
| 01-Jul-2022 | Friday (Canada Day) | choppy                     | 27                     |         |      |         |         |                  |             |                  |
| 02-Jul-2022 | Saturday            | calm/rippled               | 7                      |         |      |         |         | 36               | 1142        | 101              |
| 03-Jul-2022 | Sunday              | choppy                     | 8                      | 2       |      |         |         |                  |             |                  |
|             | Totals              | choppy                     | 86                     | 1       |      |         |         | 6*               |             | 18*              |
|             | Totals              | choppy                     | 100                    | 2       |      |         |         | 23*              |             | 65*              |

\* Average number of boats Observed and Expanded

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

| Day Type | Average Expanded Boats | Number of Days | Total Estimated Effort | CPUE    |      |         |         | Retained |      |         |         |
|----------|------------------------|----------------|------------------------|---------|------|---------|---------|----------|------|---------|---------|
|          |                        |                |                        | Chinook | Coho | Sockeye | Halibut | Chinook  | Coho | Sockeye | Halibut |
| Weekend  | 65                     | 8              | 520                    | 0.02    |      |         |         | 10       |      |         |         |
| Midweek  | 18                     | 22             | 396                    | 0.012   |      |         |         | 5        |      |         |         |

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

| Year     | Month | Total Effort | Chinook Kept | Coho Kept | Sockeye Kept | Halibut Kept |
|----------|-------|--------------|--------------|-----------|--------------|--------------|
| 2017     | June  | 2044         | 457          | 31        |              |              |
| 2018     | June  | 1411         | 827          | 516       |              |              |
| 2019     | June  | 1267         | 16           | 246       |              | 0            |
| 2020     | June  | 1310         |              | 65        |              |              |
| 2021     | June  | 1656         | 0            | 1         |              | 0            |
| 2022     | June  | 946          | 6            | 0         |              | 0            |
| 5-Yr Avg | June  | 1538         | 325          | 172       |              | 0            |

**Table 5: Sport Head Recovery Review.**

| Species | Creel Marked Catch | Creel Mark Rate | Creel Submission Rate | iRec Marked Catch | iRec Mark Rate | iRec Submission Rate | Sport Head Recoveries |
|---------|--------------------|-----------------|-----------------------|-------------------|----------------|----------------------|-----------------------|
| Chinook | 6                  | 100%            | 17%                   |                   | %              |                      | 1                     |

**Table 6: Guided Proprtions Review.**

| Data Source      | Interviews / Angler Days | Guided Proportion |
|------------------|--------------------------|-------------------|
| Creel Interivews | 186                      | 5%                |
| iRec Anglers     | 1520                     | 28%               |

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

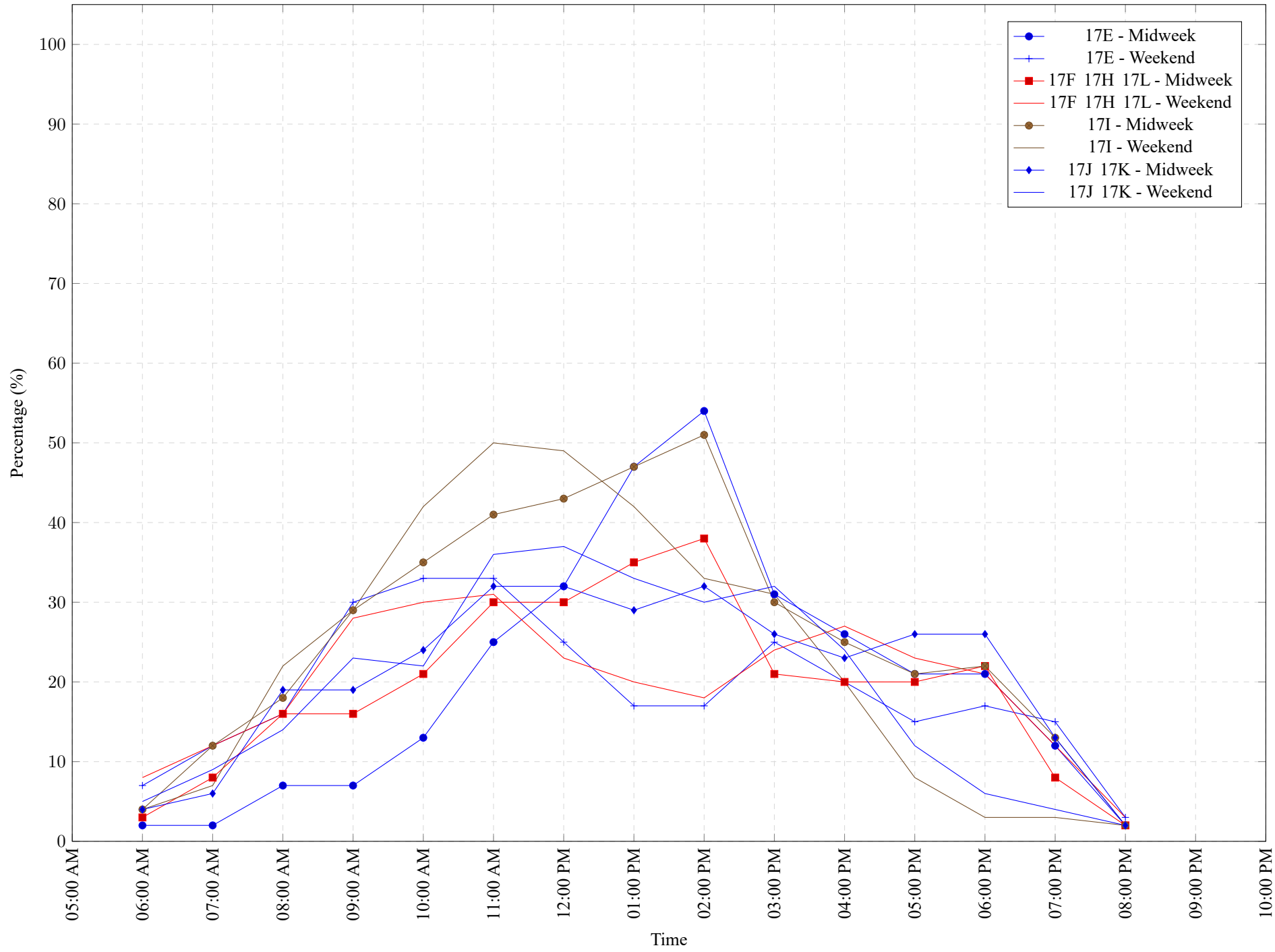


Table 7: Proportion of each day's fishing by hour.

| Areas       | Day Type | 6:00 AM | 7:00 AM | 8:00 AM | 9:00 AM | 10:00 AM | 11:00 AM | 12:00 PM | 01:00 PM | 02:00 PM | 03:00 PM | 04:00 PM | 05:00 PM | 06:00 PM | 07:00 PM | 08:00 PM | 09:00 PM | 10:00 PM |
|-------------|----------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 17E         | Midweek  | 2%      | 2%      | 7%      | 7%      | 13%      | 25%      | 32%      | 47%      | 54%      | 31%      | 26%      | 21%      | 21%      | 12%      | 2%       | 0%       | 0%       |
| 17E         | Weekend  | 7%      | 12%     | 16%     | 30%     | 33%      | 33%      | 25%      | 17%      | 17%      | 25%      | 20%      | 15%      | 17%      | 15%      | 3%       | 0%       | 0%       |
| 17F 17H 17L | Midweek  | 3%      | 8%      | 16%     | 16%     | 21%      | 30%      | 30%      | 35%      | 38%      | 21%      | 20%      | 20%      | 22%      | 8%       | 2%       | 0%       | 0%       |
| 17F 17H 17L | Weekend  | 8%      | 12%     | 16%     | 28%     | 30%      | 31%      | 23%      | 20%      | 18%      | 24%      | 27%      | 23%      | 21%      | 12%      | 3%       | 0%       | 0%       |
| 17I         | Midweek  | 4%      | 12%     | 18%     | 29%     | 35%      | 41%      | 43%      | 47%      | 51%      | 30%      | 25%      | 21%      | 22%      | 13%      | 2%       | 0%       | 0%       |
| 17I         | Weekend  | 4%      | 7%      | 22%     | 29%     | 42%      | 50%      | 49%      | 42%      | 33%      | 31%      | 20%      | 8%       | 3%       | 3%       | 2%       | 0%       | 0%       |
| 17J 17K     | Midweek  | 4%      | 6%      | 19%     | 19%     | 24%      | 32%      | 32%      | 29%      | 32%      | 26%      | 23%      | 26%      | 26%      | 13%      | 2%       | 0%       | 0%       |
| 17J 17K     | Weekend  | 5%      | 9%      | 14%     | 23%     | 22%      | 36%      | 37%      | 33%      | 30%      | 32%      | 24%      | 12%      | 6%       | 4%       | 2%       | 0%       | 0%       |

**Table 8: Daily Fishing Conditions.**

| Date        | Day Type | Brechin            | Cowichan Bay | Crofton Ramp | French Ck | Ladysmith    | McDonald Beach | Planetarium | Schooner           | Sidney | Thunderbird Marina |
|-------------|----------|--------------------|--------------|--------------|-----------|--------------|----------------|-------------|--------------------|--------|--------------------|
| 29 May 2022 | Weekend  |                    |              | calm/rippled |           | calm/rippled |                |             | calm/rippled       |        |                    |
| 30 May 2022 | Midweek  |                    |              |              |           |              |                |             |                    |        |                    |
| 31 May 2022 | Midweek  |                    |              |              |           |              |                |             |                    |        |                    |
| 01 Jun 2022 | Midweek  |                    |              |              |           |              |                |             | choppy             |        |                    |
| 02 Jun 2022 | Midweek  |                    |              |              |           | calm/rippled |                |             |                    |        |                    |
| 03 Jun 2022 | Midweek  |                    |              |              |           |              |                |             |                    |        |                    |
| 04 Jun 2022 | Weekend  |                    |              |              |           |              |                |             |                    |        |                    |
| 05 Jun 2022 | Weekend  | choppy             |              | calm/rippled |           |              |                |             | choppy             |        |                    |
| 06 Jun 2022 | Midweek  |                    |              | calm/rippled |           | choppy       |                |             |                    |        |                    |
| 07 Jun 2022 | Midweek  |                    |              |              |           |              | choppy         |             |                    |        |                    |
| 08 Jun 2022 | Midweek  |                    |              |              |           |              |                |             |                    |        |                    |
| 09 Jun 2022 | Midweek  |                    |              |              |           |              |                |             |                    |        |                    |
| 10 Jun 2022 | Midweek  | choppy             |              |              |           |              |                |             |                    |        |                    |
| 11 Jun 2022 | Weekend  | choppy             |              | choppy       |           |              |                |             | choppy             |        |                    |
| 12 Jun 2022 | Weekend  | choppy             |              |              |           | choppy       |                |             |                    |        |                    |
| 13 Jun 2022 | Midweek  |                    |              | choppy       |           |              |                |             |                    |        |                    |
| 14 Jun 2022 | Midweek  |                    |              | choppy       |           |              |                |             |                    |        |                    |
| 15 Jun 2022 | Midweek  | choppy             |              |              |           |              |                |             | choppy             |        |                    |
| 16 Jun 2022 | Midweek  |                    |              | choppy       |           |              |                |             |                    |        |                    |
| 17 Jun 2022 | Midweek  | frequent whitecaps |              |              |           |              |                |             |                    |        |                    |
| 18 Jun 2022 | Weekend  | calm/rippled       |              | choppy       |           |              | calm/rippled   |             |                    |        |                    |
| 19 Jun 2022 | Weekend  |                    |              |              |           | choppy       |                |             | choppy             |        |                    |
| 20 Jun 2022 | Midweek  | calm/rippled       |              |              |           |              |                |             |                    |        |                    |
| 21 Jun 2022 | Midweek  |                    |              |              |           |              |                |             |                    |        |                    |
| 22 Jun 2022 | Midweek  |                    |              | choppy       |           |              |                |             |                    |        |                    |
| 23 Jun 2022 | Midweek  |                    |              |              |           |              |                |             |                    |        |                    |
| 24 Jun 2022 | Midweek  |                    |              |              |           | choppy       |                |             | choppy             |        |                    |
| 25 Jun 2022 | Weekend  |                    | calm/rippled |              | choppy    | calm/rippled |                |             |                    |        |                    |
| 26 Jun 2022 | Weekend  |                    |              | calm/rippled |           | calm/rippled |                |             |                    |        |                    |
| 27 Jun 2022 | Midweek  | calm/rippled       |              |              |           |              |                |             | choppy             |        |                    |
| 28 Jun 2022 | Midweek  |                    |              |              |           | choppy       |                |             |                    |        |                    |
| 29 Jun 2022 | Midweek  |                    |              |              |           |              |                |             |                    |        |                    |
| 30 Jun 2022 | Midweek  |                    |              |              |           | calm/rippled |                | choppy      | choppy             | choppy | calm/rippled       |
| 01 Jul 2022 | Weekend  |                    |              | choppy       |           |              |                |             | choppy             |        |                    |
| 02 Jul 2022 | Weekend  |                    |              |              | choppy    | calm/rippled |                |             |                    |        |                    |
| 03 Jul 2022 | Weekend  | choppy             |              |              |           |              |                |             | frequent whitecaps |        |                    |