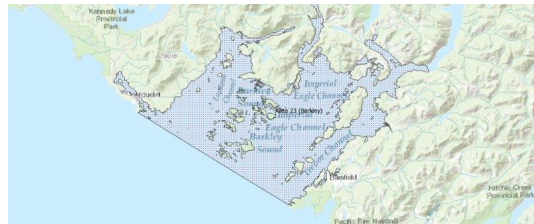


FISHERIES AND OCEANS CANADA

SOUTH COAST ASSESSMENT BULLETIN

CREEL SURVEY DATA REVIEW PACKAGE

Area 23 (Barkley) June 2021



Prepared By:
South Coast Salmon Stock Assessment Section

Thursday 19th 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.

| Date | Day Type | China Creek | | | Clutesi Marina | Clutesi Ramp | | | Eagle Marine (Fuel Dock) | | | Island West | | McKay Bay Gas Dock | | | Mills Landing | | Poett Nook | | Tyee Landing (Fuel Dock) | Ucluelet Gov Dock | | |
|-------------|----------|-------------|----|----|----------------|--------------|----|----|--------------------------|----|----|-------------|----|--------------------|----|----|---------------|----|------------|----|--------------------------|-------------------|----|----|
| | | AM | MD | PM | MD | AM | MD | PM | AM | MD | PM | MD | PM | AM | MD | PM | MD | PM | AM | PM | AM | AM | MD | PM |
| 29 May 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |
| 30 May 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |
| 31 May 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 01 Jun 2021 | Midweek | | | | | | | 3 | | | | | | | | | | | | | | | 2 | |
| 02 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | 2 |
| 03 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 04 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 05 Jun 2021 | Weekend | | | | | | | 1 | | | | | | | | | | 2 | | | | | 2 | |
| 06 Jun 2021 | Weekend | | | | | | | | | | | | | | | | | 2 | | | | | 7 | |
| 07 Jun 2021 | Midweek | 1 | | | | | | | | | | | | | | | | | | | | | | |
| 08 Jun 2021 | Midweek | 2 | | | | | | | | | | | | | | | | 1 | | | | | 6 | |
| 09 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 10 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 11 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 12 Jun 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |
| 13 Jun 2021 | Weekend | 2 | | | | | | | | | | | | | | | | | | | | | | 7 |
| 14 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 16 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 17 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 18 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 19 Jun 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |
| 20 Jun 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |
| 21 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 22 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 23 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 24 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 25 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 26 Jun 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |
| 27 Jun 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |
| 28 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 29 Jun 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 30 Jun 2021 | Midweek | 1 | | | | | | | | | | | | | | | | | | | | | | |
| 01 Jul 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |
| 02 Jul 2021 | Midweek | | | | | | | | | | | | | | | | | | | | | | | |
| 03 Jul 2021 | Weekend | | | | | | | | | | | | | | | | | | | | | | | |

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-2021 | Saturday | | 2 | 8 | | | | | | |
| 30-May-2021 | Sunday | | 1 | 3 | | | | | | |
| 31-May-2021 | Monday | | 0 | | | | | | | |
| 01-Jun-2021 | Tuesday | choppy | 5 | 10 | | | | | | |
| 02-Jun-2021 | Wednesday | choppy | 2 | 4 | | | | | | |
| 03-Jun-2021 | Thursday | | 0 | | | | | | | |
| 04-Jun-2021 | Friday | choppy | 3 | 4 | | | | 18 | 0729 | 26 |
| 05-Jun-2021 | Saturday | large swells | 9 | 19 | | | | 39 | 0727 | 51 |
| 06-Jun-2021 | Sunday | choppy | 5 | 20 | | | | | | |
| 07-Jun-2021 | Monday | choppy | 3 | 1 | | | | | | |
| 08-Jun-2021 | Tuesday | choppy | 9 | 12 | | 4 | 2 | 28 | 0735 | 38 |
| 09-Jun-2021 | Wednesday | calm/rippled | 3 | 1 | | | | | | |
| 10-Jun-2021 | Thursday | calm/rippled | 6 | 21 | | | | | | |
| 11-Jun-2021 | Friday | choppy | 5 | 15 | 1 | | | | | |
| 12-Jun-2021 | Saturday | choppy | 8 | 24 | | | | 46 | 0727 | 59 |
| 13-Jun-2021 | Sunday | choppy | 10 | 18 | 3 | | | | | |
| 14-Jun-2021 | Monday | calm/rippled | 5 | 13 | | | | | | |
| 15-Jun-2021 | Tuesday | calm/rippled | 12 | 22 | | | | | | |
| 16-Jun-2021 | Wednesday | choppy | 7 | 18 | | | | | | |
| 17-Jun-2021 | Thursday | calm/rippled | 5 | 16 | | | | 40 | 0724 | 55 |
| 18-Jun-2021 | Friday | choppy | 6 | 5 | 1 | | | | | |
| 19-Jun-2021 | Saturday | choppy | 19 | 59 | 8 | | 1 | 123 | 0725 | 162 |
| 20-Jun-2021 | Sunday | choppy | 18 | 34 | 15 | | | | | |
| 21-Jun-2021 | Monday | choppy | 20 | 29 | 21 | | | 45 | 0724 | 62 |
| 22-Jun-2021 | Tuesday | choppy | 14 | 25 | 3 | | | | | |
| 23-Jun-2021 | Wednesday | choppy | 9 | 14 | 1 | | 1 | | | |
| 24-Jun-2021 | Thursday | choppy | 7 | 7 | 3 | | | | | |
| 25-Jun-2021 | Friday | choppy | 8 | 15 | | | | | | |
| 26-Jun-2021 | Saturday | choppy | 27 | 36 | 8 | | | 83 | 0726 | 107 |
| 27-Jun-2021 | Sunday | calm/rippled | 27 | 47 | 16 | | | | | |
| 28-Jun-2021 | Monday | calm/rippled | 8 | 11 | 7 | | | | | |
| 29-Jun-2021 | Tuesday | choppy | 17 | 36 | 5 | | | | | |
| 30-Jun-2021 | Wednesday | choppy | 6 | 15 | 1 | | | 40 | 0806 | 53 |
| 01-Jul-2021 | Thursday (Canada Day) | calm/rippled | 15 | 26 | 20 | | | | | |
| 02-Jul-2021 | Friday | calm/rippled | 12 | 25 | 1 | 4 | | | | |
| 03-Jul-2021 | Saturday | frequent whitecaps | 13 | 24 | | | | | | |
| | Totals | choppy | 160 | 294 | 43 | 4 | 3 | 34* | | 47* |
| | Totals | choppy | 123 | 257 | 50 | | 1 | 73* | | 95* |

* 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 | 95 | 8 | 760 | 2.089 | 0.407 | | 0.008 | 1588 | 309 | | 6 |
| Midweek | 47 | 22 | 1034 | 1.838 | 0.269 | 0.025 | 0.019 | 1900 | 278 | 26 | 20 |

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

| Year | Month | Total Effort | Chinook Kept | Coho Kept | Sockeye Kept | Halibut Kept |
|----------|-------|--------------|--------------|-----------|--------------|--------------|
| 2016 | June | 881 | 587 | 20 | 277 | 8 |
| 2017 | June | 2093 | 1902 | 733 | | 2 |
| 2018 | June | 2114 | 5084 | 405 | | 8 |
| 2019 | June | 2970 | 4951 | 287 | 36 | 15 |
| 2020 | June | 1844 | 1772 | 315 | | 169 |
| 2021 | June | 1674 | 3129 | 485 | 24 | 2 |
| 5-Yr Avg | June | 1980 | 2859 | 352 | 157 | 40 |

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 |
|---------|--------------------|-----------------|-----------------------|-------------------|----------------|----------------------|-----------------------|
| Coho | 167 | 39% | 11% | 404 | 53% | 4% | 18 |
| Chinook | 1460 | 54% | 27% | 1209 | 41% | 32% | 387 |

Table 6: Guided Proprtions Review.

| Data Source | Interviews / Angler Days | Guided Proportion |
|------------------|--------------------------|-------------------|
| Creel Interivews | 282 | 33% |
| iRec Anglers | 3707 | 20% |

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

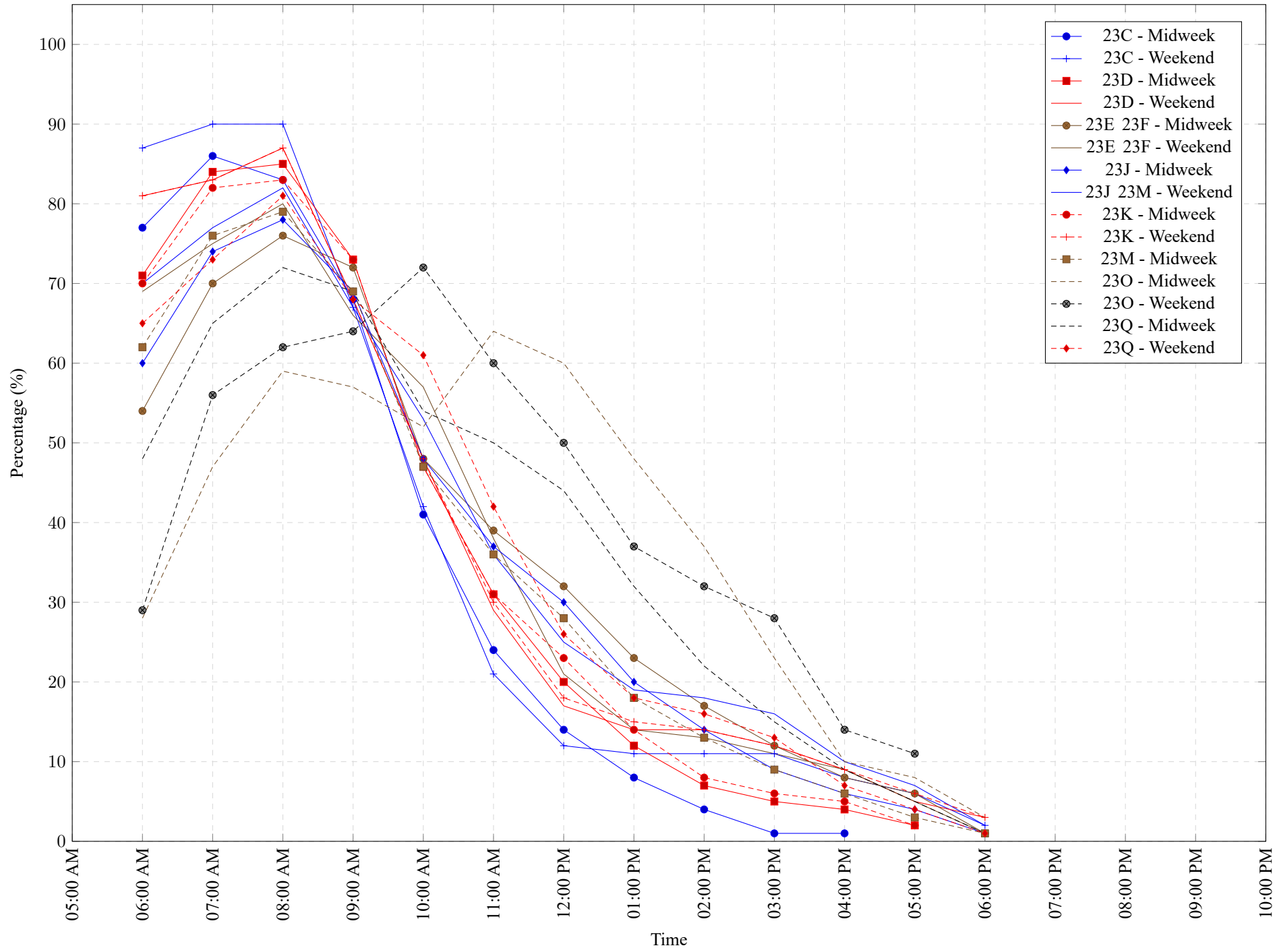


Table 7: Proportion of each day's fishing by hour.

| 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 |
|---------|----------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 23C | Midweek | 77% | 86% | 83% | 68% | 41% | 24% | 14% | 8% | 4% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% |
| 23C | Weekend | 87% | 90% | 90% | 67% | 42% | 21% | 12% | 11% | 11% | 11% | 8% | 6% | 2% | 0% | 0% | 0% | 0% |
| 23D | Midweek | 71% | 84% | 85% | 73% | 47% | 31% | 20% | 12% | 7% | 5% | 4% | 2% | 0% | 0% | 0% | 0% | 0% |
| 23D | Weekend | 81% | 83% | 87% | 68% | 48% | 29% | 17% | 14% | 14% | 12% | 9% | 5% | 3% | 0% | 0% | 0% | 0% |
| 23E 23F | Midweek | 54% | 70% | 76% | 72% | 48% | 39% | 32% | 23% | 17% | 12% | 8% | 6% | 1% | 0% | 0% | 0% | 0% |
| 23E 23F | Weekend | 69% | 75% | 80% | 66% | 57% | 38% | 21% | 14% | 13% | 11% | 9% | 5% | 1% | 0% | 0% | 0% | 0% |
| 23J | Midweek | 60% | 74% | 78% | 69% | 48% | 37% | 30% | 20% | 14% | 9% | 6% | 4% | 1% | 0% | 0% | 0% | 0% |
| 23J 23M | Weekend | 70% | 77% | 82% | 67% | 53% | 36% | 25% | 19% | 18% | 16% | 10% | 7% | 2% | 0% | 0% | 0% | 0% |
| 23K | Midweek | 70% | 82% | 83% | 73% | 47% | 31% | 23% | 14% | 8% | 6% | 5% | 2% | 0% | 0% | 0% | 0% | 0% |
| 23K | Weekend | 81% | 83% | 87% | 68% | 48% | 30% | 18% | 15% | 14% | 12% | 9% | 6% | 3% | 0% | 0% | 0% | 0% |
| 23M | Midweek | 62% | 76% | 79% | 69% | 47% | 36% | 28% | 18% | 13% | 9% | 6% | 3% | 1% | 0% | 0% | 0% | 0% |
| 23O | Midweek | 28% | 47% | 59% | 57% | 52% | 64% | 60% | 48% | 37% | 23% | 10% | 8% | 3% | 0% | 0% | 0% | 0% |
| 23O | Weekend | 29% | 56% | 62% | 64% | 72% | 60% | 50% | 37% | 32% | 28% | 14% | 11% | 0% | 0% | 0% | 0% | 0% |
| 23Q | Midweek | 48% | 65% | 72% | 69% | 54% | 50% | 44% | 32% | 22% | 15% | 9% | 5% | 1% | 0% | 0% | 0% | 0% |
| 23Q | Weekend | 65% | 73% | 81% | 68% | 61% | 42% | 26% | 18% | 16% | 13% | 7% | 4% | 1% | 0% | 0% | 0% | 0% |

Table 8: Daily Fishing Conditions.

| Date | Day Type | China Creek | Clutesi Marina | Clutesi Ramp | Eagle Marine (Fuel Dock) | Island West | McKay Bay Gas Dock | Mills Landing | Poett Nook | Tyee Landing (Fuel Dock) | Ucluelet Gov Dock |
|-------------|----------|--------------------|----------------|--------------|--------------------------|-------------|--------------------|--------------------|------------|--------------------------|--------------------|
| 29 May 2021 | Weekend | | | | | | | | | | |
| 30 May 2021 | Weekend | | | | | | | | | | |
| 31 May 2021 | Midweek | | | | | | | | | | |
| 01 Jun 2021 | Midweek | | | choppy | | | | | | | choppy |
| 02 Jun 2021 | Midweek | | | | | | | | | | choppy |
| 03 Jun 2021 | Midweek | | | | | | | | | | |
| 04 Jun 2021 | Midweek | | | choppy | | | | | | | choppy |
| 05 Jun 2021 | Weekend | | | | | | | large swells | | | large swells |
| 06 Jun 2021 | Weekend | | | | choppy | | | | | | |
| 07 Jun 2021 | Midweek | calm/rippled | | | | | | | | | choppy |
| 08 Jun 2021 | Midweek | calm/rippled | | | | | | choppy | | | choppy |
| 09 Jun 2021 | Midweek | | | | calm/rippled | | calm/rippled | | | | |
| 10 Jun 2021 | Midweek | | | choppy | calm/rippled | | | | | | |
| 11 Jun 2021 | Midweek | | | calm/rippled | | | | | | | frequent whitecaps |
| 12 Jun 2021 | Weekend | | | | | | | | | | choppy |
| 13 Jun 2021 | Weekend | frequent whitecaps | | | | | | | | | choppy |
| 14 Jun 2021 | Midweek | | | calm/rippled | calm/rippled | | | | | | |
| 15 Jun 2021 | Midweek | | | | | | choppy | | | | calm/rippled |
| 16 Jun 2021 | Midweek | | | calm/rippled | | | choppy | | | | |
| 17 Jun 2021 | Midweek | | | calm/rippled | | | | | | | |
| 18 Jun 2021 | Midweek | frequent whitecaps | | | | choppy | | | | | |
| 19 Jun 2021 | Weekend | | | | | | | choppy | | | choppy |
| 20 Jun 2021 | Weekend | | | | choppy | | | | choppy | | |
| 21 Jun 2021 | Midweek | | | | | | choppy | | | | choppy |
| 22 Jun 2021 | Midweek | | | choppy | | choppy | | frequent whitecaps | | | |
| 23 Jun 2021 | Midweek | | | choppy | calm/rippled | | | choppy | | | |
| 24 Jun 2021 | Midweek | | calm/rippled | | | | | | | | choppy |
| 25 Jun 2021 | Midweek | | | calm/rippled | | | | | | | choppy |
| 26 Jun 2021 | Weekend | frequent whitecaps | | calm/rippled | | | | | choppy | | choppy |
| 27 Jun 2021 | Weekend | | | | calm/rippled | | calm/rippled | | | choppy | calm/rippled |
| 28 Jun 2021 | Midweek | | | | | | | | | | calm/rippled |
| 29 Jun 2021 | Midweek | | | | choppy | | choppy | | | | |
| 30 Jun 2021 | Midweek | frequent whitecaps | | | | | | choppy | | | |
| 01 Jul 2021 | Weekend | | | | | | | | | | calm/rippled |
| 02 Jul 2021 | Midweek | | | calm/rippled | | choppy | | | | | |
| 03 Jul 2021 | Weekend | | | | choppy | | | | | | frequent whitecaps |