Wild Juvenile Salmonid Monitoring Program 2023 Discovery Islands, BC

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Summary

Beach seine sampling was conducted on behalf of MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd. in the Discovery Islands, BC in 2023. The intent of the sampling program was to monitor sea lice abundance, prevalence, and intensity on juvenile wild salmon within the Discovery Islands. Despite many of the aquaculture sites becoming inactive after the December 2020 decision by Fisheries and Oceans Canada (DFO) to not permit re-stocking as part of the strategy to phase out net pen fish farms, the wild juvenile salmon monitoring program continued over the entire region in 2023.

Sampling was conducted at 29 sites within the Discovery Islands, BC during three separate sampling events in April, May, and June 2023, selected to coincide with the peak outmigration period of juvenile salmonids. The sampling sites were chosen based on their locations relative to existing or previously existing aquaculture sites in the area and adapted from historical purse seine sites sampled by DFO with three additional new sites.

The data presented, including water quality, fish sample composition, fish size and sea lice infestation rates, has in previous years (2017-2020) been divided into two sections based on the locations of the sample sites relative to aquaculture sites in the area and salmon migration routes. Due to the December 2020 decision to not allow many of the sites to restock, the data since 2021 has been divided into three sub-areas, the south area without farms (Pre-Exposure), the central area where farms were again not active in the 2023 sample period (Inactive) and the north area where at least one farm was active during the 2023 sample period (Post-Exposure).

A total of 29 sites were sampled in 2023. Seven of the sites were in locations on the salmon migration route where out-migrating juvenile salmon would be unlikely to be exposed to existing aquaculture sites. These are considered 'Pre-Exposure' sites. Twelve sites were in locations where aquaculture sites were not restocked after December 2020 due to the change in licensing and inability to obtain a transfer permit to introduce new fish after being harvested or fallowed. These are situated in the 'Inactive' sub-area. Ten sites were in locations where migrating salmon would be exposed to at least one existing aquaculture site at some point along their migration route. These are considered 'Post-Exposure' sites.

Thirty individuals from each target fish species or the total number of captured individuals from each target species (if less than 30 were captured) were collected from each of the 29 sites during the sampling events. Total catch numbers of each species were recorded. Water temperature, salinity and dissolved oxygen were recorded at each site during each sampling event.

Retained fish were frozen and delivered to the Center for Aquatic Health Sciences (CAHS) for laboratory analysis. Sea lice infestation data was tabulated by CAHS and provided to Mainstream Biological Consulting for analysis and reporting. Sea lice observed on the individual fish specimens during laboratory analysis were identified as either *Lepeophtheirus spp.* or *Caligus sp.* These lice are assumed to be *Lepeophtheirus salmonis* and *Caligus clemensi* due to the lack of documented infestation of Pacific salmon by other species. The lice were recorded by life stage and the sex of pre-adult or adult motile lice was determined.

This report documents the observed sea lice infestation rate on wild juvenile chum and pink salmon retained in the Pre-Exposure, Inactive and Post-Exposure sub-areas in the

Discovery Islands in 2023. Results for wild juvenile coho, chinook and sockeye salmon infestation rate have not been presented but results of sample analysis are included in Appendix III.

A total of 141 individual samples from Pre-Exposure beach seine sites underwent lab analysis for sea lice infestation in 2023. This included 67 chum (*Oncorhynchus keta*), 56 pink (*O. gorbushca*), three coho (*O. kisutch*) and 15 chinook (*O. tshawytscha*) salmon. Of the 123 chum and pink salmon collected from Pre-Exposure sites, two individuals were infested with two sea lice. The calculated prevalence for the total Pre-Exposure chum and pink salmon sample population was 1.6%. The sea lice abundance was 0.02 and the average intensity was 1.0 for the Pre-Exposure sample population collected in the Discovery Islands in 2023.

A total of 135 chum salmon were captured, representing 51.3 % of all captured Pre-Exposure salmonids. Of the 135 chum captured, 67 were retained for lab analysis for sea lice infestation. Two chum smolts were found to be infested with two sea lice resulting in a calculated prevalence of 3.0 %, and abundance of 0.03 and an average intensity of 1.0 for the Pre-Exposure chum salmon sample population. The sea lice were identified as one *L. salmonis* copepodid sea louse and one chalimus life stage *C. clemensi* sea louse.

A total of 86 pink salmon were captured, representing 32.7 % of all captured Pre-Exposure salmonids. Of the 86 pink captured, 56 were retained for lab analysis for sea lice infestation. Zero pink smolts were found to be infested with sea lice resulting in a calculated prevalence, abundance, and average intensity of zero for the Pre-Exposure pink salmon population.

A total of 708 individual samples from the beach seine sites within the Inactive sub-area underwent lab analysis for sea lice infestation including 344 pink, 322 chum, 28 chinook, 13 coho and 1 sockeye salmon. From the Inactive sub-area chum and pink salmon sample population, 27 individuals were infested with 33 sea lice. The calculated prevalence for the Inactive sub-area chum and pink salmon sample population collected in 2023 was 4.1 %; the sea lice abundance was 0.05 and the average intensity was 1.2.

A total of 788 chum salmon were captured in the Inactive sub-area, representing 12.2 % of all captured salmonids for that area. Of the 788 chum captured, 322 were retained for lab analysis for sea lice infestation. A total of 13 chum smolts were found to be infested with 15 sea lice resulting in a calculated prevalence of 4.0 %, an abundance of 0.05 and an average intensity of 1.2 for the Inactive sub-area chum salmon sample population.

A total of 5612 pink salmon were captured, representing 86.7 % of all captured salmonids in the Inactive sub-area. Of the 5612 pinks captured, 344 were kept for lab analysis for sea lice infestation. A total of 14 pink salmon were found to be infested with 18 sea lice resulting in a calculated prevalence of 4.1 %, an abundance of 0.05 and an average intensity of 1.3 for the pink salmon sample population in the Inactive sub-area.

For the Inactive sub-area chum and pink salmon sample population (n=666), a total of nine *L. salmonis* sea lice of copepodid and chalimus life stages were identified on eight individuals and 24 *C. clemensi* sea lice of copepodid and chalimus life stages were found on 20 individuals analyzed in the lab. One juvenile chum salmon was infested with both one *L. salmonis* sea louse and one *C. clemensi* sea louse.

For the Inactive sub-area chum salmon sample population, a total of eight *L. salmonis* sea lice of copepodid and chalimus life stages were identified on seven juvenile chum

salmon and seven *C. clemensi* sea lice of copepodid and chalimus life stages were found on seven of the juvenile chum salmon.

For the Inactive sub-area pink salmon sample population, one *L. salmonis* sea louse of chalimus life stage was identified on one juvenile pink salmon and 17 *C. clemensi* sea lice of copepodid and chalimus life stages were found on 13 of the juvenile pink salmon.

A total of 265 individual samples from the Post-Exposure beach seine sites underwent lab analysis for sea lice infestation including 162 pink, 65 chum, 23 chinook and 15 coho salmon. From the Post-Exposure chum and pink salmon sample population, 11 individuals were infested with 13 sea lice. The calculated prevalence for the Post-Exposure chum and pink salmon sample population collected in the Discovery Islands in 2023 was 4.8 %; the sea lice abundance was 0.06 and the average intensity was 1.2 for the Post-Exposure salmon sample population.

A total of 108 chum salmon were captured in the Post-Exposure sub-area, representing 13.4 % of all captured salmonids in that area. Of the 108 chum captured, 65 were retained for lab analysis for sea lice infestation. Two chum smolts were found to be infested with two sea lice resulting in a calculated prevalence of 3.1 %, an abundance of 0.03 and an average intensity of 1.0 for the Post-Exposure chum salmon sample population.

A total of 658 pink salmon were captured in the Post-Exposure sub-area, representing 81.8 % of all captured salmonids in that area. Of the 658 pink captured, 162 were kept for lab analysis for sea lice infestation. Nine pink salmon were found to be infested with 11 sea lice resulting in a calculated prevalence of 5.6 %, an abundance of 0.07 and an average intensity of 1.2 for the Post-Exposure pink salmon sample population.

For the Post-Exposure chum and pink salmon sample population, a total of seven *L. salmonis* sea lice of various life stages were identified on five individuals and six *C. clemensi* sea lice were found on six of the samples analyzed in the lab. There were zero samples that were infested with both *L. salmonis* and *C. clemensi*.

For the Post-Exposure sub-area chum salmon sample population, two *L. salmonis* sea lice of pre-adult and adult male stages were identified on two juvenile chum salmon. Zero *C. clemensi* sea lice were identified on the juvenile chum salmon sample population.

For the Post-Exposure pink salmon sample population, five *L. salmonis* sea lice of chalimus life stage were identified on three juvenile pink salmon and six *C. clemensi* sea lice of copepodid and chalimus life stages were found on six of the juvenile pink salmon.

The following summary table provides a comparison of Pre-Exposure, Inactive and Post-Exposure sub areas sea lice infestation statistics on pink and chum salmon collected in the Discovery Islands in 2023.

Species	Sample Sub- area	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
	Pre-Exposure	67	2	2	3.0	0.03	1.0
chum	Inactive	322	15	13	4.0	0.05	1.2
	Post-Exposure	65	2	2	3.1	0.03	1.0
-	Pre-Exposure	56	0	0	0.0	0.00	0.0
pink	Inactive	344	3	3	0.9	0.01	1.0
	Post-Exposure	162	11	9	5.6	0.07	1.2

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1.0 Introduction

At the request of MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd. beach seine sampling to capture wild juvenile salmon to be analyzed for sea lice infestation took place at 29 sites in the Discovery Islands, BC (Figure 1). Three sampling events occurred on April 19-21, May 17-19, and June 6-8, 2023. Retained fish were analyzed by the Center for Aquatic Health Sciences (CAHS) for sea lice infestation. Sampling dates were selected to coincide with the estimated peak outmigration dates of juvenile chum (*Oncorhynchus keta*) and pink (*O. nerka*) salmon.

Parasitic copepods from the family Caligidae (sea lice) found in the coastal waters of British Columbia are divided into two genera: *Lepeophtheirus* and *Caligus*. Eleven species of *Lepeophtheirus* have been identified infesting fish in the Pacific Ocean, while only one species of *Caligus* (*Caligus clemensi*) has been identified (Margolis and Arthur 1979; McDonald and Margolis, 1995). *C. clemensi* infest an extremely wide range of natural hosts in the marine environment including salmonids and non-salmonids; while *L. salmonis* natural hosts on the Pacific coast have been found to include Pacific salmon, threespine stickleback and Pacific herring. During this analysis, *Lepeophtheirus spp.* sea lice found on salmonid specimens were assumed to be *L. salmonis* due to the lack of documented infestations of Pacific salmon by other *Lepeophtheirus* lice species (Jones and Nemec, 2004).

Both Caligidae genera have similar life histories and developmental stages (Kabata, 1972; Johnson and Albright, 1991a). Sea lice hatch from eggs and go through two free-swimming naupilii stages before developing into an infectious free-swimming copepodid. The copepodids attach to their host and develop through several chalimus stages. The chalimus are non-motile and are attached to their host by a frontal filament. The final chalimus stage terminates as the sea lice become motile and are no longer attached to their hosts by the frontal filament. The sea lice can now move freely on the fish as they develop through a pre-adult stage before becoming reproductively viable adults.

Water temperature and salinity are two environmental variables known to influence sea lice development, growth, survival, and reproductive rate. In British Columbia, surface seawater temperatures range from approximately 6 °C to 13 °C. Research on sea lice abundance conducted in the Broughton Archipelago and elsewhere on the coast of British Columbia indicates that surface water temperature during the winter months does not appear to hinder the season abundance of *L. salmonis* (Saksida et al. 2007a, b). The rate of development and the generation times for *C. elongates* are strongly temperature dependent (Tully, 1992) and although this research has not been conducted, similar relationships with water temperature may be expected for *C. clemensi* (Jones and Johnson, 2015). Survival and development of *L. salmonis* is optimal in high salinity seawater. Under laboratory conditions copepodid survival was limited to conditions where salinity was greater than 10 ppt (Johnson and Albright, 1991b).

MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd. have undertaken annual monitoring of sea lice abundance, prevalence, and intensity on juvenile wild salmon within the Discovery Islands in support of the Aquaculture Stewardship Certification for their active aquaculture sites within the region since 2017. In December 2020, DFO implemented a strategy to phase out 19 finfish farms in the Discovery Islands¹. This resulted in many previously active sites to be inactive in 2021, 2022 and

¹ https://www.canada.ca/en/fisheries-oceans/news/2020/12/measures-to-phase-out-salmon-farming-in-the-discovery-islands-area.html

2023 sampling seasons. The decision was made to continue with annual wild juvenile salmon monitoring over the entire region in 2023.

This data report documents the observed sea lice infestation statistics on retained chum and pink juvenile salmonids collected in the Discovery Islands in 2023. Data for retained coho and chinook salmon are included in Appendices II and III. Data presented, including water quality, fish sample composition, fish size and sea lice infestation rates, have in previous years (2017-2020) been divided into two areas based on the locations of the sample sites relative to aquaculture sites in the area and salmon migration routes. With many of the sites in the area inactive since 2021 the data for 2023 has been divided into three sub-areas, including the southern area without farms (Pre-Exposure), the central area where farms were not active in the 2023 sample period (Inactive) and the north area where farms were active during the 2023 sample period (Post-Exposure) (Table 1; Figure 2).

A total of 29 sites were sampled in 2023. Seven of the sites were in locations on the salmon migration route where out-migrating juvenile salmon would be unlikely to be exposed to existing aquaculture sites. These are considered 'Pre-Exposure' sites. Twelve sites were in locations where aquaculture sites were inactive due to the December 2020 DFO licensing conditions. These are in the 'Inactive' sub-area. Ten sites were in locations where migrating salmon would be exposed to at least one existing (active) aquaculture site at some point along their migration route. These are considered 'Post-Exposure' sites

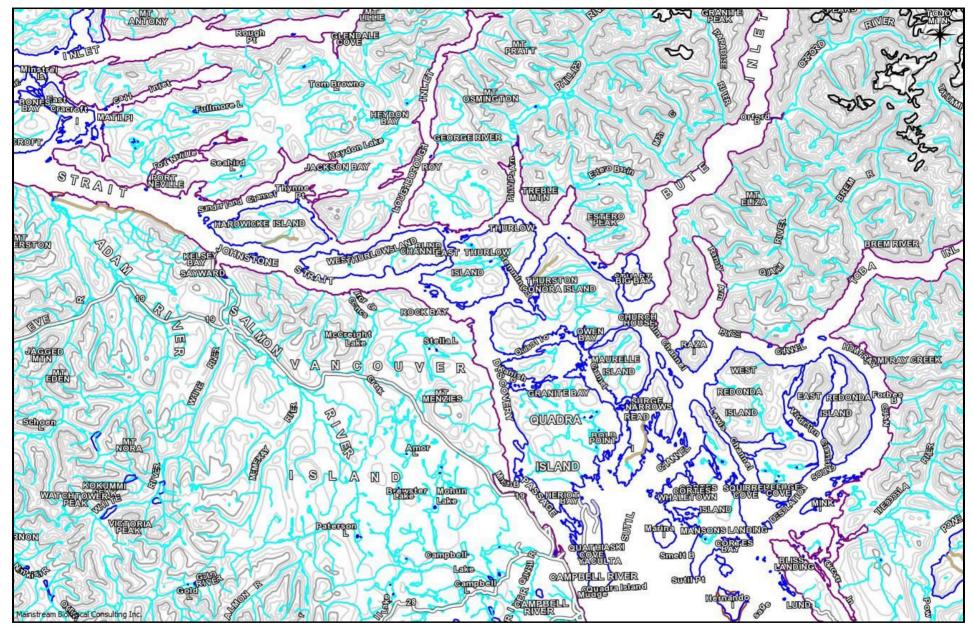


Figure 1: An overview map showing the extent of the Discovery Islands survey area.

2.0 Methods

The fish inspected for sea lice infestation were collected from 29 sites in the Discovery Islands, BC (Figure 2). These sites were chosen based on their locations relative to active or inactive aquaculture sites in the area and adapted from historical purse seine sites sampled by Fisheries and Oceans Canada with the addition of three sites. Three sampling events were completed in 2023, with the goal of sampling each site once during each sampling event. Beach seining sampling was conducted on April 19-21, May 17-19, and June 6-8, 2023. Hazardous weather conditions prevented the collection of beach seining samples and water quality measurements at Beautiful Bay, Bessborough Bay, Blenkinshop Bay, Chancellor, Primary 3, Sunderland and Wellborne Channel during the April sampling dates.

2.1 Site Locations

The approximate locations of the 29 sampling sites are shown in Figure 2. GPS coordinates collected in the field for the sites are presented in Table 1.

Table 1: The site name and location coordinates of the 29 beach seine sites where fish were collected for sea lice analysis in the Discovery Islands in 2023.

Sub-area	Site Name	Latitude	Longitude	
	Deepwater Bay	50 11.112	125 19.901	
D. F	Francisco Point	50 00.355	125 09.191	
	Marina Island	50 04.698	125 04.219	
Pre-Exposure	Penn Island	50 11.006	125 01.460	
	Rebecca Spit	50 06.342	125 11.886	
	SE Hill Island	50 09.595	125 03.639	
	Viner Point	50 07.883	125 07.818	
	Bear Bay	50 21.812	125 38.094	
	Bickley Bay	50 26.685	125 23.813	
	Discovery	50 20.499	125 23.963	
	Fanny Bay	50 31.179	125 23.190	
	Knox Bay	50 23.590	125 36.369	
Inactive	Nodales	50 24.101	125 20.939	
mactive	Okisollo	50 18.718	125 18.880	
	Owen Bay	50 19.438	125 12.978	
	Raza	50 19.206	124 58.981	
	Raza North	50 20.923	125 02.022	
	Rock Bay	50 19.686	125 28.403	
	Shoal Bay	50 27.458	125 21.916	
	Beautiful Bay	50 26.904	126 05.074	
	Bessborough Bay	50 29.502	125 46.460	
	Blenkinsop Bay	50 28.745	125 59.967	
	Chancellor	50 24.532	125 43.867	
Doot Evpooure	Cordero	50 26.941	125 32.667	
Post-Exposure	Primary 1	50 25.823	126 01.786	
	Primary 3	50 28.846	126 04.097	
	Race Passage	50 23.078	125 53.246	
	Sunderland	50 28.209	125 50.593	
	Wellbore Channel	50 27.185	125 46.139	

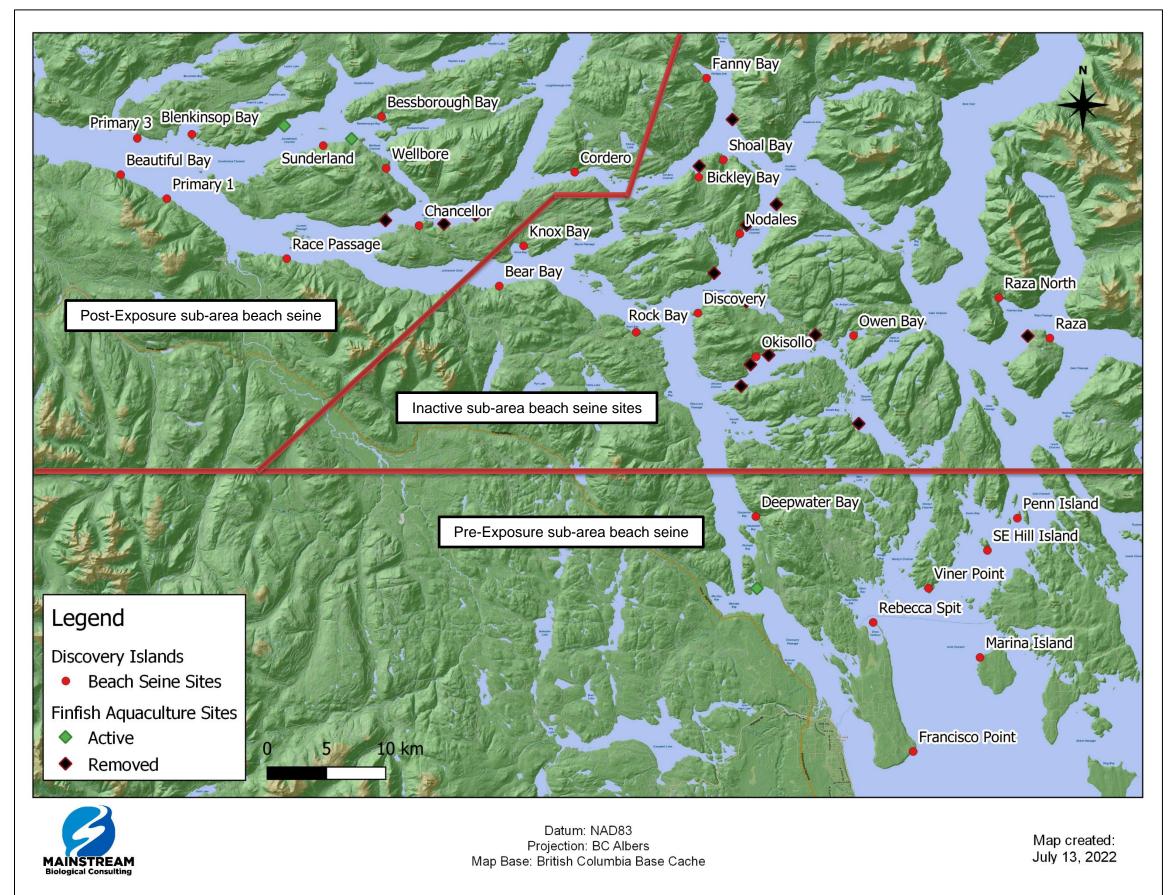


Figure 2: The approximate locations of the 29 beach seine sites (red dots) sampled in the Discovery Islands in 2023, separated into Pre-Exposure, Inactive and Post-Exposure sub-areas shown relative to existing and removed finfish aquaculture sites.

2.2 Field Procedures

The procedures implemented for beach seining, fish collection and field data recording in the Discovery Islands during the 2023 sampling period were adapted from those utilized by Fisheries and Oceans Canada (DFO).

An 18 ft Boston Whaler powered by a 70 horsepower outboard motor was used to access the beach seine sites. A 150 ft (45.7 m) long by 12 ft (3.7 m) deep beach seine net was used to capture specimens. The net was constructed in three 50 ft (15.2 m) sections. The centre bunt section consisted of one-quarter inch diameter diamond mesh, with two side panels (wings) of half-inch diameter diamond mesh. Floats were located every 30 cm along the top-line and a lead line weighted the bottom of the net.

Sampling was completed at some sites with assistance of a Wei Wai Kum Fisheries Guardian.

A three or four-person crew conducted the beach seine sets. All sampling sites were approached slowly by boat and the first crewmember was put ashore with the towline from one end of the beach seine net. The onshore crewmember held the towline at one side of the sample site, while another crewmember ensured the net deployed smoothly off the bow or side of the boat. The boat operator backed the boat in a wide semicircle towards the opposite side of the sample site and remained on the boat. When the net was fully deployed, the second crewmember on the bow of the boat stepped into the shallow water with the towline or tossed it to the awaiting crewmember on shore. A slow retrieval of the net began immediately.

As the net was slowly retrieved, the probe of a YSI Professional Plus multiparameter meter was used to collect salinity, dissolved oxygen and water temperature data at the surface (0.2 m) and 1 m depth. The surface parameters were always measured and additional depths were measured if the depth at the site during the tide cycle permitted.

Crewmembers retrieved the net evenly from both ends ensuring that the lead line remained as close to the bottom as possible. All retrieved netting was piled on the beach above the water level. As the retrieval reached the net bunt, the lead line was retrieved at a faster rate than the floats to allow the netting of the bunt to form a bag under the captured fish. The lead line was then pulled up onto the beach above the water level. One crewmember worked their way around the outside of the net in the shallow water to ensure the floats stayed above the surface of the water. In this manner a small, shallow bag formed from the bunt of the net held the captured fish in the water.

All crew members participated in the collection of individual fish to ensure that captured fish remained in the net for as short a period as possible. The net was manipulated as needed in response to changing tides to ensure the captured fish remained in the net and were held in sufficient water to minimize contact with the net or with other fish.

A total of 30 individuals from each target species captured or all of the individuals present (if less than 30) were collected as samples for sea lice infestation analysis. Individual fish were randomly "swam" into an appropriately sized whirl-pak bag. All handling of fish was kept to a minimum.

Once all fish for retention were bagged, a total catch number for each species was recorded. The fish remaining in the net were counted out of the seine net, or an estimate of the remaining fish was made (estimates were used when it appeared that more than 500 individuals from any given species remained in the net). The total of fish

remaining in the net was added to the number of retained individuals to calculate a total capture number for a given species.

Information from each beach seine set was recorded in a standardized field form. The information recorded included the following:

- Site name:
- Date:
- Time at the end of the individual fish collection:
- Comments on weather and oceanic conditions;
- Total capture and retained fish numbers for each specimen group;
- Water temperature (°C) and salinity (ppt) to one decimal place;
- GPS coordinates; and
- The number of salmonid mortalities.

The retained fish from each site were packaged separately in re-sealable bags and labelled with the site name, the date, sample numbers and species. Site sample bags were placed in a cooler with sufficient ice packs during sampling. A portable freezer, which was plugged into the truck was used to transport the specimens from the boat launch to the office. The specimens were transferred to a freezer immediately upon return from the field.

The beach seine net was reloaded onto the bow of the boat. Crewmembers scanned the net for obvious holes, which were repaired immediately if found.

A fourth person remained on a crew boat for additional support. Two out of the three shore crew were transferred to the crew boat for transportation between sites.

The above procedures for beach seine net deployment and retrieval, as well as those described for fish collection, were repeated at all sample locations.

2.3 Laboratory Procedures

Collected sample fish were frozen and delivered to the Center for Aquatic Health Sciences (CAHS) for laboratory analysis. Sea lice observed on the individual fish specimens during laboratory analysis were identified as either non-motile chalimus, or motile pre-adults and adults. Lice were identified as either of the two chalimus stages for *Lepeophtheirus salmonis* (Hamre et al., 2013) or four chalimus stages for *Caligus clemensi*. Motile lice, either pre-adults or adults, were identified as either *L. salmonis* or *C. clemensi* and the sex of the louse was determined. Sea lice infestation data was tabulated by CAHS and provided to Mainstream Biological Consulting for reporting.

Data provided by CAHS also included measured fork length in millimetres and weight (recorded to the nearest hundredth of a gram). Lengths and weights were recorded with the specimen's corresponding sea lice analysis results.

2.4 Data Analysis

All data collected was analysed and has been summarized into three separate sub-areas based on location of the sample sites: Pre-Exposure, Inactive and Post-Exposure. Pre-Exposure sites included the seven southernmost sites where no fish farm tenures currently exist. These included Francisco Point, Marina Island, Rebecca Spit, Viner Point, SE Hill Island, Penn Island and Deepwater Bay. Fish collected from this area are considered to not have been exposed to fish farms (Table 1, Figure 2). Post-Exposure

sites included the 10 northern most sites in the vicinity of at least one existing active farm tenure. Fish captured at these sites may or may not have migrated past fish farms (Table 1, Figure 2). The remaining 12 Inactive sites are located in the area of the Discovery Islands between the Pre-Exposure and Post-Exposure sites where farms did not restock prior to and during the 2023 sampling period.

Surface water quality data collected for temperature, salinity and dissolved oxygen was summarized to report the minimum and maximum values as well as the calculated averages for each sample week.

This report contains analysis of the results for the chum and pink salmon sample population. Data for analyzed coho salmon and chinook salmon has been included in Appendices II and III.

Beach seine fish sample composition was summarized by species and site for each week. The fork lengths and weights of the juvenile salmon sample population were summarized to present minimum and maximum values as well as calculated averages. Sea lice infestation rates, including the number of infested fish and the number of sea lice identified, were determined for the Pre-Exposure, Inactive and Post-Exposure subareas sample population.

Prevalence, as defined as the number of host fish found to have one or more sea lice compared to the total number of host fish examined, was determined for the combined sample population and for chum and pink salmon.

Abundance, as defined as the total number of sea lice observed compared to the total number of host fish examined, was also determined for the combined sample population and chum and pink salmon.

The intensity of sea lice infestation, as described by the number of sea lice found on a single salmon was summarized. Average intensity was calculated by dividing the total number of sea lice identified by the number of infested fish.

Statistical analysis of the spatial and temporal distribution of sea lice was not conducted. Spatial and temporal analysis has been limited to the presentation and discussion of the number of sea lice found on fish specimens collected from each site within the Pre-Exposure, Inactive, and Post-Exposure sub-areas during each of the sampling events in 2023.

3.0 Results

The following sections outline the results of beach seine collection and subsequent sea lice infestation analysis of juvenile salmonids collected from the Discovery Islands, BC, in 2023. The results are presented in three separate sections based on whether data was collected from Pre-Exposure (southern), Inactive (central) or Post-Exposure (northern) sites.

Water quality field data is presented in Appendix I, beach seine fish capture data is included in Appendix II and data on the sample population including sea lice lab analysis results provided by CAHS are provided in Appendix III.

3.1 Pre-Exposure Water Quality Parameters

Surface measurements of water temperature, salinity and dissolved oxygen collected at each of the seven Pre-Exposure sites are presented in Table 2. Water parameters measured at 1 m depth are presented in Table 3 for the Pre-Exposure sites. The complete environmental dataset is also included in Appendix I.

Recorded surface water temperatures at Pre-Exposure sub- area sites ranged from a low of 7.4 °C recorded at Rebecca Spit on April 21, 2023, to a high of 19.9 °C recorded at Marina Island on May 19, 2023 (Table 2; Appendix I). Average surface water temperatures varied from 8.3 °C to 16.8 °C in 2023 (Table 2).

Recorded surface water salinity at Pre-Exposure sites ranged from a low of 18.5 ppt recorded at Penn Island on June 8, 2023, to a high of 25.4 ppt recorded at SE Hill Island on April 21, 2023 (Table 2; Appendix I). Average surface water salinity decreased from 24.8 ppt to 21.4 ppt, over the sampling period (Table 2).

Recorded surface water dissolved oxygen ranged from a low of 7.0 mg/L recorded at Marina Island on May 19, 2023, to a high of 11.2 mg/L recorded at SE Hill Island on June 8, 2023 (Table 2; Appendix I). Average surface dissolved oxygen increased slightly from 9.1 mg/L to 10.0 mg/L, over the sampling period (Table 2).

Recorded water temperatures at 1 m depth ranged from a low of 7.7 °C recorded at Rebecca Spit on April 21, 2023, to a high of 19.9 °C recorded at Marina Island on May 19, 2023 (Table 3; Appendix I). Average water temperatures at 1 m depth varied from 8.3 °C to 16.0 °C, over the sampling period (Table 3).

Recorded water salinity at 1 m depth ranged from a low of 19.9 ppt recorded at Penn Island on June 8, 2023, to a high of 25.6 ppt recorded at Deepwater Bay on May 17, 2023 (Table 3; Appendix I). Average water salinity at 1 m depth decreased over the sampling period from 25.0 ppt to 21.5 ppt (Table 3).

Dissolved oxygen recorded at 1 m depth ranged from a low of 7.1 mg/L recorded at Marina Island on May 19, 2023, to a high of 12.8 mg/L recorded at Rebecca Spit on June 8, 2023 (Table 3; Appendix I). Average dissolved oxygen at 1 m depth increased slightly over the sampling period from 9.1 mg/L to 10.8 mg/L (Table 3).

Table 2: Surface water quality parameters collected at Pre-Exposure beach seine sites in the Discovery Islands in 2023.

	April 19 - 21, 2023			May	17 - 19,	2023	June 6 - 8, 2023		
Site	Salinity (ppt)	Temp . (°C)	DO (mg/L)	Salinity (ppt)	Temp . (°C)	DO (mg/L)	Salinity (ppt)	Temp . (°C)	DO (mg/L)
Deepwater Bay	24.9	8.6	8.7	25.2	13.5	8.8	24.7	12.9	9.2
Francisco Point	25.3	8.1	9.1	22.5	16.9	8.1	20.9	13.9	10.5
Marina Island	25.2	8.3	9.0	22.3	19.9	7.0	22.8	14.7	8.1
Penn Island	25.3	8.5	9.4	22.2	15.4	9.7	18.5	14.9	10.3
Rebecca Spit	22.3	7.4	9.9	20.7	19.0	9.6	21.5	14.6	10.4
SE Hill Island	25.4	8.4	8.9	22.3	16.6	10.2	20.4	14.5	11.2
Viner Point	25.2	8.5	8.6	22.0	16.6	10.1	20.9	14.2	10.4
Average	24.8	8.3	9.1	22.5	16.8	9.1	21.4	14.2	10.0

Table 3: Water quality parameters at 1 m depth collected at Pre-Exposure beach seine sites in the Discovery Islands in 2023.

	April 19 - 21, 2023			May	17 - 19,	2023	June 6 - 8, 2023		
Site	Salinity (ppt)	Temp . (°C)	DO (mg/L)	Salinity (ppt)	Temp . (°C)	DO (mg/L)	Salinity (ppt)	Temp . (°C)	DO (mg/L)
Deepwater Bay	25.5	8.7	8.9	25.6	10.4	10.1	24.7	12.9	8.9
Francisco Point	25.3	8.2	9.1	22.6	16.8	8.6	20.9	13.8	10.3
Marina Island	25.3	8.3	8.8	22.5	19.9	7.1	-	-	-
Penn Island	25.3	8.5	9.3	22.2	15.4	10.5	19.9	14.0	10.8
Rebecca Spit	22.9	7.7	9.9	22.0	17.2	12.1	21.6	14.5	12.8
SE Hill Island	25.4	8.4	8.8	22.3	16.3	10.9	20.4	14.3	11.4
Viner Point	25.3	8.4	8.7	22.8	16.3	11.1	21.6	14.1	10.4
Average	25.0	8.3	9.1	22.9	16.0	10.1	21.5	13.9	10.8

3.2 Inactive Sub-area Water Quality Parameters

Surface measurements of water temperature and salinity collected at each of the 12 sites in the Inactive sub-area are presented in Table 4. Water parameters measured at 1 m depth are presented in Table 5 for the Inactive sub-area. The complete environmental dataset is also included in Appendix I.

Recorded surface water temperatures at sites in this sub-area ranged from a low of 7.7 °C recorded at Knox Bay on April 19, 2023, to a high of 18.2 °C recorded at Raza on June 8, 2023 (Table 4; Appendix I). Average surface water temperatures increased from 8.3 °C to 12.0 °C, over the sampling period (Table 4).

Recorded surface water salinity at the Inactive sub-area sites ranged from a low of 0.9 ppt recorded at Fanny Bay on May 17, 2023, to a high of 25.7 ppt recorded at Bear Bay on April 19, and May 17, 2023 (Table 4; Appendix I). Average surface water salinity ranged from 18.3 ppt for May 17-19, 2023, to 24.2 ppt for April 19-21, 2023 (Table 4).

Recorded surface water dissolved oxygen ranged from a low of 8.0 mg/L recorded at Okisollo on June 6, 2023, to a high of 12.0 mg/L recorded at Rock Bay and Shoal Bay on May 17, 2023 (Table 4; Appendix I). Average surface water dissolved oxygen ranged from 8.7 mg/L for April 19-21, 2023, to 9.7 mg/L for May 17-19, 2023 (Table 4).

Recorded water temperatures at 1 m depth ranged from a low of 7.9 °C recorded at Knox Bay on April 19, 2023, to a high of 17.5 °C recorded at Raza North on May 19, 2023 (Table 5; Appendix I). Average water temperatures at 1 m depth increased from 8.3 °C to 11.6 °C, over the sampling period (Table 5).

Recorded water salinity at 1 m ranged from a low of 3.9 ppt recorded at Shoal Bay on May 17, 2023, to a high of 25.7 ppt recorded at Bear Bay on April 19, and May 17, 2023 (Table 5; Appendix I). Average water salinity at 1 m depth ranged from 20.5 ppt for May 17-19, 2023, to 25.0 ppt for April 19-21, 2023 (Table 5).

Dissolved oxygen recorded at 1 m ranged from a low of 7.9 mg/L recorded at Knox Bay on May 17, 2023, and at Okisollo on June 6, 2023, to a high of 12.4 mg/L recorded at Rock Bay on May 17, 2023 (Table 5; Appendix I). Average dissolved oxygen at 1 m depth ranged from 8.6 mg/L for April 19-21, 2023, to 9.7 mg/L for May 17-19, 2023 (Table 5).

Table 4: Surface water quality parameters collected at the Inactive sub-area beach seine sites in the Discovery Islands in 2023.

	April 19 - 21, 2023			May	17 - 19, 2	2023	June 6 - 8, 2023		
Site	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp . (°C)	DO (mg/L)
Bear Bay	25.7	8.0	8.1	25.7	8.9	9.0	25.2	9.7	8.4
Bickley Bay	21.9	8.0	9.0	22.0	10.5	8.7	23.5	11.3	10.3
Discovery	24.6	8.1	8.2	24.8	10.1	8.7	24.9	10.0	9.1
Fanny Bay	18.3	8.8	9.2	0.9	13.2	11.0	10.4	12.2	10.5
Knox Bay	24.8	7.7	8.4	25.3	9.0	8.2	25.1	9.8	8.4
Nodales	24.7	8.4	8.1	24.5	10.4	10.2	24.7	10.3	9.7
Okisollo	25.4	8.4	8.2	25.3	9.9	8.2	24.8	10.5	8.0
Owen Bay	25.3	9.6	8.9	24.3	16.9	9.0	24.9	13.8	10.5
Raza	24.2	8.3	10.0	7.9	17.2	10.4	11.9	18.2	9.6
Raza North	24.3	8.4	9.4	9.4	17.6	9.5	15.6	17.1	9.9
Rock Bay	25.6	8.0	8.2	25.6	9.0	12.0	23.7	9.7	8.8
Shoal Bay	25.0	8.4	8.3	3.4	10.8	12.0	21.9	10.8	9.5
Average	24.2	8.3	8.7	18.3	12.0	9.7	21.4	12.0	9.4

Table 5: Water quality parameters collected at 1 m depth at the Inactive sub-area beach seine sites in the Discovery Islands in 2023.

	April 19 - 21, 2023			May	17 - 19, 2	2023	June 6 - 8, 2023		
Site	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp . (°C)	DO (mg/L)
Bear Bay	25.7	8.0	8.0	25.7	8.8	8.1	25.2	9.7	8.2
Bickley Bay	24.6	8.2	8.6	22.1	10.4	8.6	23.7	11.3	9.9
Discovery	24.9	8.1	8.2	25.2	9.6	8.6	24.9	9.9	8.3
Fanny Bay	23.9	8.8	9.0	18.5	12.1	11.3	20.6	11.3	11.3
Knox Bay	25.2	7.9	8.2	25.6	9.0	7.9	25.1	9.8	8.2
Nodales	25.3	8.4	8.0	25.6	10.3	9.4	24.7	10.2	9.5
Okisollo	25.5	8.4	8.1	25.3	9.9	8.0	24.8	10.4	7.9
Owen Bay	25.4	9.0	8.9	25.0	12.5	9.9	-	-	-
Raza	24.2	8.2	9.8	12.7	16.8	10.4	16.5	16.9	10.4
Raza North	24.4	8.3	9.6	10.5	17.5	9.7	20.1	15.3	10.6
Rock Bay	25.6	8.0	8.3	25.6	9.0	12.4	-	-	-
Shoal Bay	25.3	8.4	8.3	3.9	10.9	11.6	22.0	10.8	9.0
Average	25.0	8.3	8.6	20.5	11.4	9.7	22.8	11.6	9.3

3.3 Post-Exposure Water Quality Parameters

Surface measurements of water temperature and salinity collected at each of the 10 Post-Exposure sub-area sites are presented in Table 6. For the same sites, water parameters measured at 1 m depth are presented in Table 7. A complete dataset is also included in Appendix I. Hazardous weather conditions prevented the collection of beach seining samples and water quality measurements at Beautiful Bay, Bessborough Bay, Blenkinshop Bay, Chancellor, Primary 3, Sunderland and Wellborne Channel during the April sampling dates.

Recorded surface water temperatures at Post-Exposure sites ranged from a low of 7.4 °C recorded at Primary 1 on April 20, 2023, to a high of 13.6 °C recorded at Chancellor on May 18, 2023 (Table 6; Appendix I). Average surface water temperatures ranged from 7.7 °C for April 19-20, 2023, to 10.3 °C for May 17-18, 2023 (Table 6).

Recorded surface water salinity ranged from a low of 22.5 ppt recorded at Chancellor on May 18, 2023, to a high of 26.2 ppt recorded at Race Passage and Wellborne Channel on May 18, 2023 (Table 6; Appendix I). Average surface salinity decreased from 25.7 ppt to 25.1 ppt, over the sampling period (Table 6).

Recorded surface water dissolved oxygen ranged from a low of 8.2 mg/L recorded at Race Passage on April 20, 2023, to a high of 12.7 mg/L recorded at Sunderland on May 18, 2023 (Table 6; Appendix I). Average surface dissolved oxygen ranged from 8.4 mg/L for April 19-20, 2023, to 10.9 mg/L for May 17-18, 2023 (Table 6).

Water temperatures at 1 m depth ranged from a low 7.4 °C recorded at Primary 1 on April 20, 2023, to a high of 10.7 °C recorded at Sunderland on May 18, 2023 (Table 7; Appendix I). Average water temperatures at 1 m depth increased from 7.8 °C to 9.6 °C, over the sampling period (Table 7).

Recorded water salinity at 1 m depth ranged from a low of 24.7 ppt recorded at Chancellor on May 18, 2023, to a high of 26.1 ppt recorded at Beautiful Bay on May 18, 2023 (Table 7; Appendix I). Average water salinity at 1 m depth decreased slightly from 25.8 ppt to 25.4 ppt, over the sampling period (Table 7).

Dissolved oxygen recorded at 1 m depth ranged from a low of 7.9 mg/L recorded at Cordero on May 17, 2023, to a high of 12.5 mg/L recorded at Sunderland on May 18, 2023 (Table 7; Appendix I). Average dissolved oxygen at 1 m depth ranged from 8.3 mg/L for April 19-20, 2023, to 10.4 mg/L for May 17-18, 2023 (Table 7).

Table 6: Surface water quality parameters collected at the Post-Exposure beach seine sites in the Discovery Islands in 2023.

	April 19 - 20, 2023			May	17 - 18,	2023	June 6 - 7, 2023		
Site	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)
Beautiful Bay	-	-	-	26.0	9.5	11.7	25.6	9.3	8.9
Bessborough Bay	-	-	-	25.7	12.8	9.6	25.5	10.2	10.5
Blenkinsop Bay	-	-	-	25.9	11.0	10.2	25.7	9.2	8.3
Chancellor	-	-	-	22.5	13.6	11.9	24.1	10.6	9.8
Cordero	25.4	8.0	8.4	25.3	9.0	8.2	25.1	9.4	8.5
Primary 1	25.9	7.4	8.6	26.0	8.8	10.7	23.7	9.0	9.9
Primary 3	-	-	-	26.0	9.8	11.9	25.7	9.3	8.9
Race Passage	25.9	7.8	8.2	26.2	8.7	11.1	25.5	10.2	9.3
Sunderland	-	-	-	25.7	11.3	12.7	25.3	10.6	9.7
Wellbore Channel	-	_	-	26.2	8.8	10.8	25.1	9.7	9.1
Average	25.7	7.7	8.4	25.6	10.3	10.9	25.1	9.8	9.3

Table 7: Water quality parameters collected at 1 m depth at the Post-Exposure beach seine sites in the Discovery Islands in 2023.

	April	19 - 20,	2023	May	17 - 18,	2023	June 6 - 7, 2023			
Site	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)	Salinity (ppt)	Temp. (°C)	DO (mg/L)	
Beautiful Bay	-	-	-	26.1	8.9	10.3	25.7	9.2	9.0	
Bessborough Bay	-	-	-	25.7	10.3	10.1	25.5	9.6	9.5	
Blenkinsop Bay	-	-	-	25.8	10.0	10.1	25.7	9.2	8.3	
Chancellor	-	-	-	24.7	10.0	12.3	24.8	10.2	9.5	
Cordero	25.5	8.1	8.2	25.3	8.9	7.9	25.2	9.4	8.3	
Primary 1	25.9	7.4	8.6	26.0	8.7	10.4	25.1	9.0	9.6	
Primary 3	-	-	-	26.0	9.2	10.8	25.8	9.0	8.8	
Race Passage	25.9	7.8	8.2	26.0	8.6	9.9	25.5	10.2	9.1	
Sunderland	-	-	-	25.8	10.7	12.5	25.4	10.5	9.6	
Wellbore Channel	_	-	_	26.0	8.7	9.8	25.2	9.7	8.6	
Average	25.8	7.8	8.3	25.7	9.4	10.4	25.4	9.6	9.0	

3.4 Fish Sample Composition

A total of 7541 fish were captured from all sites during beach seine sampling conducted in the Discovery Islands in 2023. Of those, 1114 individual fish (14.8 %) were retained as sample specimens and underwent analysis for sea lice infestation (Table 8). The total collected fish and the representative percentage of the total beach seine capture population for each species are presented in Table 8. Pink salmon and chum salmon were the most common species captured during sampling in 2023. Of the 6356 pink salmon captured, 562 individuals (8.8 %) were retained and underwent lab analysis. Of the 1031 chum salmon captured, 454 (44.0 %) were retained and underwent lab analysis. Of the 83 chinook salmon captured, 66 individuals (79.5 %) were retained and underwent lab analysis. Of the 70 coho salmon captured, 31 (44.3 %) were retained and underwent lab analysis. Lastly, one sockeye was captured and retained for lab analysis. No threespine stickleback or Atlantic salmon were captured during 2023 sampling in the Discovery Islands.

A summary of the total number of fish captured and collected as specimens at each site over the collection period is provided in Table 12. A complete dataset showing fish capture and collection totals by site in 2023 can be found in Appendix II. Zero salmonids were captured at Penn Island and Viner Point during the three sampling events in 2023.

Table 8: The total of collected individuals of each fish species captured in the Discovery Islands, BC in 2023, and the percentage of the total capture population that they represent.

Common Name	Capture Totals (% of total capture population)	Collection Totals	Collection%
pink salmon	6356 (84.3 %)	562	8.8
chum salmon	1031 (13.7 %)	454	44.0
chinook salmon	83 (1.1 %)	66	79.5
coho salmon	70 (0.9%)	31	44.3
sockeye salmon	1 (0.01%)	1	100.0
All species	7541	1114	14.8

3.4.1 Pre-Exposure Sample Composition

A total of 263 fish were captured during beach seine sampling conducted at the Pre-Exposure sites in the Discovery Islands in 2023. Of those, 141 individual fish (53.6 %) were collected as sample specimens and underwent analysis for sea lice infestation (Table 9). The total collected fish from each species and the percentage that it represents of the total Pre-Exposure capture population are shown in Table 9. Of the 135 chum salmon captured, 67 individuals (49.6 %) were retained and underwent lab analysis. Of the 86 pink salmon captured, 56 individuals (65.1 %) were retained and underwent lab analysis. Of the 32 chinook salmon captured, 15 individuals (46.9 %) were retained and underwent lab analysis. Of the 10 coho salmon captured, three individuals (30.0 %) were retained and underwent lab analysis. Zero sockeye salmon were captured or retained in the Pre-Exposure sub-area.

Table 9: The total number of collected individuals of each fish species captured in the Pre-Exposure sites in the Discovery Islands, BC, in 2023, and the percentage of the total Pre-Exposure capture population that they represent.

Common Name	Capture Totals	Collection	Collection%		
Common Hame	(% of total capture population)	Totals	33330.131170		
pink salmon	86 (32.7 %)	56	65.1		
chum salmon	135 (51.3 %)	67	49.6		
chinook salmon	32 (12.2 %)	15	46.9		
coho salmon	10 (3.8 %)	3	30.0		
sockeye salmon	0 (0.0 %)	0	0.0		
All species	263	141	53.6		

3.4.2 Inactive Sub-area Sample Composition

A total of 6474 fish were captured during beach seine sampling conducted at the sites in the Inactive sub-area in the Discovery Islands in 2023. Of those, 708 individual fish (10.9 %) were collected as sample specimens and underwent analysis for sea lice infestation (Table 10). The total collected fish from each species and the percentage that it represents of the total beach seine Inactive capture population is shown in Table 10. Of the 5612 pink salmon captured, 344 individuals (6.1 %) were retained and underwent lab analysis. Of the 788 chum salmon captured, 322 individuals (40.9 %) were retained and underwent lab analysis. Of the 28 chinook salmon captured, 28 individuals (100.0 %) were retained and underwent lab analysis. Of the 45 coho salmon captured, 13 individuals (28.9 %) were retained and underwent lab analysis. One sockeye salmon was captured and retained for lab analysis.

Table 10: The total of collected individuals of each fish species captured in the Inactive sub-area sites in the Discovery Islands BC, in 2023, and the percentage of the total Inactive sub-area capture population that they represent.

O N	Capture Totals	Collection	0-11410/
Common Name	(% of total capture population)	Totals	Collection%
pink salmon	5612 (86.7 %)	344	6.1
chum salmon	788 (12.2 %)	322	40.9
chinook salmon	28 (0.4 %)	28	100.0
coho salmon	45 (0.7 %)	13	28.9
sockeye salmon	1 (0.02 %)	1	100.0
All species	6474	708	10.9

3.4.3 Post-Exposure Sample Composition

A total of 804 fish were captured during beach seine sampling conducted at the Post-Exposure sites in the Discovery Islands in 2023. Of those, 265 individual fish (33.0 %) were collected as sample specimens and underwent analysis for sea lice infestation (Table 11). The total collected fish from each species and the percentage that it represents of the total beach seine Post-Exposure capture population is shown in Table 11. Of the 658 pink salmon captured, 162 individuals (24.6 %) were retained and underwent lab analysis. Of the 108 chum salmon captured, 65 individuals (60.2 %) were retained and underwent lab analysis. All of the 23 chinook salmon captured were

retained and underwent lab analysis. All of the 15 coho salmon captured were retained and underwent lab analysis. Zero Sockeye salmon were captured or retained.

Table 11: The total of collected individuals of each fish species captured in the Post-Exposure sites in the Discovery Islands BC, in 2023, and the percentage of the total Post-Exposure capture population that they represent.

Common Name	Capture Totals	Collection	Collection%		
Common Name	(% of total capture population)	Totals	Conection%		
pink salmon	658 (81.8 %)	162	24.6		
chum salmon	108 (13.4 %)	65	60.2		
chinook salmon	23 (2.9 %)	23	100.0		
coho salmon	15 (1.9 %)	15	100.0		
sockeye salmon	0 (0.0 %)	0	0.0		
All species	804	265	33.0		

Table 12: The number of captured fish (Capture Total) and the number of individual fish collected (Sample Total) from each of the 29 sample sites in the Discovery Islands, BC in 2023, separated into Pre-Exposure, Inactive and Post-Exposure sub-area totals.

		Piı	nk	Ch	um	Chir	nook	Co	ho	Soc	keye	0	01
Site Location (Sub-area)	Site Name	Capture Total	Sample Total										
	Deepwater Bay	12	12	110	42	32	15	0	0	0	0	154	69
·	Francisco Point	66	36	16	16	0	0	3	3	0	0	85	55
	Marina Island	2	2	1	1	0	0	0	0	0	0	3	3
Pre-Exposure	Penn Island	0	0	0	0	0	0	0	0	0	0	0	0
· ·	Rebecca Spit	5	5	4	4	0	0	0	0	0	0	9	9
	SE Hill Island	1	1	4	4	0	0	7	0	0	0	12	5
	Viner Point	0	0	0	0	0	0	0	0	0	0	0	0
Pre-Exposure Sites Subtotals		86	56	135	67	32	15	10	3	0	0	263	141
	Bear Bay	102	32	21	21	19	19	36	6	0	0	178	78
	Bickley Bay	201	51	124	74	2	2	0	0	0	0	327	127
	Discovery	7	7	2	2	0	0	1	1	0	0	10	10
.	Fanny Bay	20	20	6	6	4	4	0	0	0	0	30	30
	Knox Bay	6	6	0	0	0	0	0	0	0	0	6	6
	Nodales	3132	87	21	21	0	0	0	0	0	0	3153	108
Inactive	Okisollo	13	13	71	59	2	2	0	0	0	0	86	74
	Owen Bay	0	0	0	0	1	1	6	6	1	1	8	8
.	Raza	0	0	26	26	0	0	0	0	0	0	26	26
	Raza North	4	4	56	42	0	0	2	0	0	0	62	46
	Rock Bay	114	34	150	30	0	0	0	0	0	0	264	64
	Shoal Bay	2013	90	311	41	0	0	0	0	0	0	2324	131
Inactive S	ites Subtotals	5612	344	788	322	28	28	45	13	1	1	6474	708
	Beautiful Bay	12	12	0	0	0	0	0	0	0	0	12	12
	Bessborough Bay	12	12	3	3	3	3	1	1	0	0	19	19
.	Blenkinsop Bay	1	1	0	0	0	0	2	2	0	0	3	3
	Chancellor	5	5	2	2	17	17	8	8	0	0	32	32
Post-	Cordero	28	28	75	32	0	0	0	0	0	0	103	60
Exposure	Primary 1	6	6	1	1	0	0	0	0	0	0	7	7
	Primary 3	1	1	0	0	0	0	0	0	0	0	1	1
	Race Passage	188	62	2	2	2	2	0	0	0	0	192	66
	Sunderland	3	3	0	0	1	1	4	4	0	0	8	8
-	Wellbore Channel	402	32	25	25	0	0	0	0	0	0	427	57
Post-Exposu	re Sites Subtotals	658	162	108	65	23	23	15	15	0	0	804	265
	Islands Totals	6356	562	1031	454	83	66	70	31	1	1	7541	1114

3.5 Pre-Exposure Fish Sample Size Statistics

Summary statistics for the Pre-Exposure sub-area sample population were completed for weight and fork length of chum and pink salmon (Table 13).

3.5.1 Chum Salmon

The weight of the 67 chum smolts collected during the three sample events at the Pre-Exposure sub-area sites in the Discovery Islands in 2023 ranged from 0.26 g to 5.10 g and averaged 0.98 g (SD = 0.92). The fork length of the chum smolts ranged from 33 mm to 80 mm and averaged 44 mm (SD = 9). Chum salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to June 2023 (Table 13).

3.5.2 Pink Salmon

The weight of 56 pink smolts collected during the three sample events at the Pre-Exposure sub- area sites in the Discovery Islands in 2023 ranged from 0.20 g to 6.23 g and averaged 0.78 g (SD = 1.23). The fork length of the pink smolts ranged from 27 mm to 80 mm and averaged 37 mm (SD = 12). Pink salmon weight and length were summarized by month, showing an increase in both parameters in the sample population from April to June 2023 (Table 13).

Table 13: Average weights and lengths of the chum and pink salmon collected in the Pre-Exposure sub-area in the Discovery Islands in 2023, summarized by month.

Species	Ave	erage Weight	(g)	Average Length (mm)					
Species	April	May	June	April	May	June			
Pink	0.30	0.93	4.02	32	4.4	70			
FILIK	(n=43)	(n=7)	(n=6)	32	44	70			
Chum	0.50	1.06	3.52	38	46	67			
Chum	(n=27)	(n=36)	(n=4)	30	40	67			

3.6 Inactive Sub-area Fish Sample Size Statistics

Summary statistics for the Inactive sub-area sample population were completed for weight and fork length of chum and pink salmon (Table 14).

3.6.1 Chum Salmon

The weight of the 322 chum smolts collected during the three sample events at the Inactive sub-area sites in the Discovery Islands in 2023 ranged from 0.25 g to 14.47 g and averaged 1.25 g (SD = 1.35). The fork length of the chum smolts ranged from 32 mm to 117 mm and averaged 46 mm (SD = 12). Chum salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to June 2023 (Table 14).

3.6.2 Pink Salmon

The weight of 344 pink smolts collected during the three sample events at the Inactive sub-area sites in the Discovery Islands in 2023 range from 0.18 g to 6.46 g and averaged 0.52 g (SD = 0.73). The fork length of the pink smolts ranged from 23 mm to

87 mm and averaged 35 mm (SD = 9). Pink salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to June 2023 (Table 14).

Table 14: Average weights and lengths of the chum and pink salmon collected in the Inactive sub-area in the Discovery Islands in 2023, summarized by month.

Chasias	Ave	erage Weight	(g)	Average Length (mm)					
Species	April	May	June	April	May	June			
Pink	0.29 (n=156)	0.41 (n=110)	1.16 (n=78)	31	34	45			
Chum	0.62 (n=156)	1.31 (n=111)	2.88 (n=55)	39	49	61			

3.7 Post-Exposure Sub-area Fish Sample Size Statistics

Summary statistics for the Post-Exposure sub-area sample population were completed for weight and fork length of chum and pink salmon (Table 15).

3.7.1 Chum Salmon

The weight of 65 chum smolts collected during the three sample events at sites in the Post-Exposure sub-area in the Discovery Islands in 2023 ranged from 0.33 g to 3.80 g and averaged 1.30 g (SD = 0.93). The fork length of the chum smolts ranged from 33 mm to 72 mm and averaged 48 mm (SD = 11). Chum salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to June 2023 (Table 15).

3.7.2 Pink Salmon

The weight of 162 pink smolts collected during the three sample events at the Post-Exposure sub- area sites in the Discovery Islands in 2023 ranged from 0.18 g to 3.27 g and averaged 0.96 g (SD = 0.79). The fork length of the pink smolts ranged from 26 to 73 mm and averaged 43 mm (SD = 12). Pink salmon weight and length data were summarized by month, showing an increase in both parameters in the sample population from April to June 2023 (Table 15).

Table 15: Average weights and lengths of the Post-Exposure chum and pink salmon collected in the Discovery Islands in 2023, summarized by month.

Species	Av	erage Weight	(g)	Average Length (mm)					
Species	April	May	June	April	May	June			
Pink	0.20 (n=2)	0.52 (n=84)	1.47 (n=76)	27	36	51			
Chum	0.70 (n=1)	0.69 (n=39)	2.26 (n=25)	40	41	60			

3.8 Pre-Exposure Sub-area Sea Lice Infestation Rates

The results of the laboratory analysis for the presence of sea lice on the Pre-Exposure sub-area sample population collected in the Discovery Islands in 2023 are presented in Table 16 and lab analysis data is included in Appendix III. A total of 123 chum and pink salmon samples were collected at the seven Pre-Exposure sites in the Discovery Islands in 2023 and inspected for sea lice infestation. Two chum salmonids in the sample population were found to be infested with two sea lice (Table 16).

The sea lice prevalence in the 2023 Pre-Exposure sub-area sample population was 1.6 % and the abundance was 0.02. The intensity of sea lice infestation, defined as the number of sea lice on a single infested salmon was 1.0 (Table 16). Sea lice counts of both lice species (*L. salmonis and C. clemensi*) were combined for the prevalence and abundance calculations.

Table 16: Results of analysis for sea lice infestation on Pre-Exposure sub-area salmonid smolts collected by beach seine in the Discovery Islands, BC in 2023.

Species	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
chum	67	2	2	3.0	0.03	1.0
pink	56	0	0	0.0	0.00	0.0
Total	123	2	2	1.6	0.02	1.0

3.8.1 Pre-Exposure Sub-area Infestation Rates on Chum Salmon

The results of the laboratory analysis for sea lice infestation for the Pre-Exposure chum salmon sample population are presented by site in Table 17. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined (Table 16 and 17) for the presentation of sea lice infestation, prevalence, intensity, and abundance on the Pre-Exposure chum salmon sample population.

A total of 67 chum salmon were collected from the Pre- Exposure sites; the highest number of chum salmon retained were collected in May (n=36) and lowest number of chum salmon retained were collected in June (n=4). Two individuals were found to be infested with two sea lice from the chum salmon sample population (n=67). Both infested chum salmonids were collected in May and June, with zero infested chum found on samples retained from April.

The sea lice prevalence and abundance were higher in June than May. The highest sea lice prevalence (25.0 %) and abundance (0.25) was found at SE Hill Island. The average intensity of sea lice on Pre-Exposure was 1.0 for both infested chum salmon collected in May and June.

3.8.2 Pre-Exposure Sub-area Infestation Rates on Pink Salmon

None of the 56 pink salmon retained for analysis from the Pre-Exposure sub-area were infested with sea lice, resulting in an abundance, prevalence and intensity of 0 for the pink salmon population.

Table 17: The number of sea lice found on chum salmon collected from the Pre-Exposure sub-area sample sites in the Discovery Islands in 2023, summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

										S	Sample	Week										Total Pre-E	xposure Chur	n Sample
				April 1	9- 21				May 17- 18						June 6- 8					Population				
Site	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Deepwater Bay	13	0	-	0	0.0	0.00	0.0	29	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Francisco Point	10	0	-	0	0.0	0.00	0.0	6	1	2.31	1	16.7	0.17	1.00	0	-	-	-	-	-	-	16.7	0.17	1.0
Marina Island	1	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Penn Island	0	-	-	0	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Rebecca Spit	3	0	-	0	0.0	0.00	0.0	1	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
SE Hill Island	0	-	-	-	-	-	-	0	-	-	-	-	-	-	4	1	1.41	1	25.0	0.25	1.0	25.0	0.25	1.0
Viner Point	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Total	27	0	-	0	0.0	0.00	0.0	36	1	2.31	1	16.7	0.17	1.0	4	1	1.41	1	25.0	0.25	1.0	3.0	0.03	1.0
								•							•									

3.9 Inactive Sub-area Sea Lice Infestation Rates

The results of the laboratory analysis for the presence of sea lice on the Inactive subarea sample population collected in the Discovery Islands in 2023 are presented in Table 18. The data recorded for each fish in the sample population during lab analysis are included in Appendix III. A total of 666 chum and pink salmon samples were collected at the 12 Inactive sites in the Discovery Islands in 2023 and were inspected for sea lice infestation. A total of 27 individuals, consisting of 13 chum and 14 pink salmon were found to be infested with 33 sea lice in the Inactive sub-area sample population (Table 19). This data included sea lice of either species (*L. salmonis and C. clemensi*).

The sea lice prevalence in the Inactive sub-area sample population collected in 2023 was 4.1 % and the abundance was 0.05 (Table 18). Sea lice counts of both species observed (*L. salmonis and C. clemensi*) were combined for the prevalence and abundance calculations.

The intensity of sea lice infestation is defined as the number of sea lice on a single infested salmon. There were 22 samples infested with one louse, four with two lice and one individual infested with three lice. The average intensity (1.2) was calculated by dividing the total number of sea lice by the number of infested fish of both species (Table 18).

Table 18:	Results of analysis for sea lice infestation on Inactive sub-area samples
	collected by beach seine in 2023.

Species	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
chum	322	15	13	4.0	0.05	1.2
pink	344	18	14	4.1	0.05	1.3
Total	666	33	27	4.1	0.05	1.2

3.9.1 Inactive Sub-area Sea Lice Infestation Rates on Chum Salmon

The results of the laboratory analysis for sea lice infestation for the Inactive sub-area chum salmon sample population are presented by site in Table 19. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined for the presentation of sea lice infestation, prevalence, and abundance on the Inactive sub-area chum salmon sample population (Table 18 and 19).

A total of 13 chum salmon were found to be infested with at least one sea louse. The prevalence of sea lice on the chum salmon sample population (n=322) collected in the Inactive sub-area sites in 2023 was 4.0 %. The highest sea lice prevalence (19.2 %) was at Okisollo (n=26) in May (Table 19).

A total of 15 sea lice were identified during laboratory analysis of the retained Inactive sub-area chum salmon. The abundance of sea lice on the Inactive sub-area chum salmon sample population (n=322) collected in the Discovery Islands in 2023 was 0.05. Sea lice abundance was calculated by site and sampling event and is presented in Table 19. The highest sea lice abundance (0.27) was at Okisollo in May 2023 (Table 19).

A total of 15 sea lice were observed on 13 chum salmon during laboratory analysis of the retained chum salmon from Inactive sub-area sites. Sea lice intensity was calculated by site and sampling event and is presented in Table 19. The average intensity of sea lice on the Inactive sub-area chum salmon sample population (n=322) collected in 2023 was 1.2. The highest sea lice intensity was (1.4) was observed at Okisollo in May 2023.

3.9.2 Inactive Sub-area Sea Lice Infestation Rates on Pink Salmon

The results of the laboratory analysis for sea lice infestation for the Inactive sub-area pink salmon sample population are presented by site in Table 20. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined for the presentation of sea lice infestation, prevalence, and abundance on the Inactive pink salmon sample population (Table 18 and 20).

A total of 14 pink salmon were found to be infested with at least one louse. The prevalence of sea lice on the pink salmon sample population (n=344) collected in the Inactive sub-area sites in 2023 was 4.1 %. The highest sea lice prevalence (50.0 %) was found at Okisollo in June 2023 (Table 20). Infested pink salmon were only found on samples retained in June.

A total of 18 sea lice were identified during laboratory analysis of retained Inactive subarea pink salmon. The abundance of sea lice on the Inactive sub-area pink salmon sample population (n=344) collected in 2023 was 0.05. Sea lice abundance calculated by site and sampling event for Inactive sub-area pink sample population ranged from 0.00 at five sites to 0.05 at Okisollo in June (Table 20).

The average intensity of sea lice on the Inactive sub-area pink salmon sample population (n=344) collected in 2023 was 1.3. Sea lice abundance was calculated by sampling event and by site and is presented in Table 20. During 2023 sampling, sea lice intensity on pink salmon was highest at Nodales in June (1.4). Sea lice intensity in April and May is 0.0 as zero pink salmon were infested with sea lice (Table 20).

Table 19: The number of sea lice found on chum salmon collected from the Inactive sub-area sites in the Discovery Islands in 2023, summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

	Sample Week														Total Post-Exposure Chum Sample									
April 19- 21								May 17- 19							June 6- 8							Population		
Site	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence	Abundance	Average
Bear Bay	17	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	4	0		0	0.0	0.00	0.0	0.0	0.00	0.0
Bickley Bay	21	0	-	0	0.0	0.00	0.0	30	0	-	0	0.0	0.00	0.0	23	2	3.40	2	8.7	0.09	1.0	2.7	0.03	1.0
Discovery	0	-	-	-	-	-	-	2	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Fanny Bay	4	0	-	0	0.0	0.00	0.0	0	-	-	_	-	-	-	2	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Knox Bay	0	-	-	-	-	-	-	0	-	-	_	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Nodales	12	0	-	0	0.0	0.00	0.0	7	0	-	0	0.0	0.00	0.0	2	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Okisollo	30	2	1.30	2	6.7	0.07	1.0	26	5	1.39	7	19.2	0.27	1.4	3	0	-	0	0.0	0.00	0.0	11.9	0.15	1.3
Owen Bay	0	-	-	-	-	-	-	0	-	-	_	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Raza	0	-	-	-	-	-	-	12	0	-	0	0.0	0.00	0.0	14	1	0.88	1	7.1	0.07	1.0	3.8	0.04	1.0
Raza North	12	0	-	0	0.0	0.00	0.0	30	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Rock Bay	30	2	1.72	2	6.7	0.07	1.0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	6.7	0.07	1.0
Shoal Bay	30	0	-	0	0.0	0.00	0.0	4	0	-	0	0.0	0.00	0.0	7	1	1.84	1	14.3	0.14	1.0	2.4	0.02	1.0
Total	156	4	1.51	4	2.6	0.03	1.0	111	5	1.39	7	19.2	0.27	1.4	55	4	2.38	4	7.3	0.07	1.0	4.0	0.05	1.2

Table 20: The number of sea lice found on pink salmon collected from the Inactive sub-area sites in the Discovery Islands in 2023 summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

			۸nri			Sample Week											Total Post-Exposure Chum Sample						
			April 19- 21				May 17- 19						June 6- 8							Population			
Site # of Pin Analyze		ed Infect	nt # o ed Lice		Abundance	Average Intensity	# of Pink Analyzed	# of Infested Pink	Average Weight of Infested Pink (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Pink Analyzed	# of Infested Pink	Average Weight of Infested Pink (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence	Abundance	Average
Bear Bay 31	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	1	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Bickley Bay 15	0	-	0	0.0	0.00	0.0	30	0	-	0	0.0	0.00	0.0	6	1	1.94	1	16.7	0.17	1.0	2.0	0.02	1.0
Discovery 1	0	-	0	0.0	0.00	0.0	3	0	-	0	0.0	0.00	0.0	3	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Fanny Bay 17	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	3	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Knox Bay 6	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Nodales 17	0	-	0	0.0	0.00	0.0	40	0	-	0	0.0	0.00	0.0	30	9	0.99	13	30.0	0.43	1.4	10.3	0.15	1.4
Okisollo 8	0	-	0	0.0	0.00	0.0	3	0	-	0	0.0	0.00	0.0	2	1	5.61	1	50.0	0.50	1.0	7.7	0.08	1.0
Owen Bay 0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Raza 0	-	-	-	_	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Raza North 1	0	-	0	0.0	0.00	0.0	1	0	-	0	0.0	0.00	0.0	2	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Rock Bay 30	0	-	0	0.0	0.00	0.0	3	0	-	0	0.0	0.00	0.0	1	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Shoal Bay 30	0	-	0	0.0	0.00	0.0	30	0	-	0	0.0	0.00	0.0	30	3	0.47	3	10.0	0.10	1.0	3.3	0.03	1.0
Total 156	0	-	0	0.0	0.00	0.0	110	0	-	0	0.0	0.00	0.0	78	14	1.28	18	17.9	0.23	1.3	4.1	0.05	1.3

3.10 Post-Exposure Sub-area Sea Lice Infestation Rates

The results of the laboratory analysis for the presence of sea lice on the Post-Exposure sub-area chum and pink salmon sample population collected in 2023 are presented in Table 21. The data recorded for each fish in the sample population during lab analysis are included in Appendix III. A total of 230 samples were collected at the ten Post-Exposure sites in 2023 and were inspected for sea lice infestation. A total of 11 individuals consisting of two chum and nine pink salmon were found to be infested with 13 sea lice in the Post-Exposure sample population (Table 21). This data included sea lice of either species (*L. salmonis and C. clemensi*).

The sea lice prevalence in the Post-Exposure sub-area sample population collected in in 2023 was 4.8 % and the abundance was 0.06 (Table 21). Sea lice counts of both species observed (*L. salmonis and C. clemensi*) were combined for the prevalence and abundance calculations.

The intensity of sea lice infestation is defined as the number of sea lice on a single infested salmon. Two infested salmonid samples were infested with two sea lice and nine infested salmonid samples were infested with a single louse. The average intensity (1.2) was calculated by dividing the total number of sea lice by the number of infested fish of each species (Table 21).

Table 21:	Results of analysis for sea lice infestation on Post-Exposure sub-area								
	samples collected by beach seine in the Discovery Islands, BC in 2023.								

Species	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity	
chum	65	2	2	3.1	0.03	1.0	
pink	162	11	9	5.6	0.07	1.2	
Total	227	13	11	4.8	0.06	1.2	

3.10.1 Post-Exposure Sub-area Sea Lice Infestation Rates on Chum Salmon

The results of the laboratory analysis for sea lice infestation for the Post-Exposure chum salmon sample population are presented by site in Table 22. Sea lice counts of both sea lice species observed (*L. salmonis and C. clemensi*) were combined for the presentation of sea lice infestation, prevalence and abundance on the Post-Exposure sub-area chum salmon sample population (Table 21 and 22).

Two chum salmon were found to be infested with two sea lice. The prevalence of sea lice on the chum salmon sample population (n=65) collected in the Post-Exposure subarea sites in 2023 was 3.1 %. The highest sea lice prevalence (50.0 %) was at Race Passage in June (Table 22). For the chum salmon sample population collected in 2023 (n=65), infested chum individuals were only found from samples retained in June (n=25). Chum samples retained in April (n=1) and May (n=39) were not infested with sea lice.

Two sea lice were identified during laboratory analysis of the retained Post-Exposure sub-area chum salmon. The abundance of sea lice on the Post-Exposure chum salmon sample population (n=65) collected in the Discovery Islands in 2023 was 0.03. Sea lice

abundance was calculated by site and sampling event and is presented in Table 22. The highest sea lice abundance (0.50) was at Race Passage in June 2023 (Table 22).

Two sea lice were observed on two chum salmon during laboratory analysis of retained chum salmon from the Post-Exposure sub-area sites. The average intensity of sea lice on the Post-Exposure chum salmon sample population (n=65) collected in the Discovery Islands in 2023 was 1.0. During 2023 sampling, sea lice intensity on chum salmon was both 1.0 for the two infested chum found at Race Passage and Wellbore Channel collected in June (Table 22). Sea lice average intensity was calculated by site and sampling event and is presented in Table 22.

3.10.2 Post-Exposure Sub-area Sea Lice Infestation Rates on Pink Salmon

The results of the laboratory analysis for sea lice infestation for the Post-Exposure subarea pink salmon sample population are presented by site in Table 23. Sea lice counts of both sea lice species observed (*L. salmonis* and *C. clemensi*) were combined for the presentation of sea lice infestation, prevalence and abundance on the Post-Exposure pink salmon sample population (Table 21 and 23).

A total of nine pink salmon were found to be infested with at least one louse. The prevalence of sea lice on the pink salmon sample population (n=162) collected in the Post-Exposure sub-area sites in 2023 was 5.6 %. Sea lice prevalence is highest in June (7.9 %) and lowest April (0.0%). The highest sea lice prevalence calculated by site was 66.7% found at Sunderland in June 2023. Zero sea lice infestations were found on retained samples from April (n=2).

Eleven sea lice were identified during laboratory analysis of the retained Post-Exposure sub-area pink salmon. The abundance of sea lice on the Post-Exposure pink salmon sample population (n=162) collected in 2023 was 0.07. Sea lice abundance is presented by sampling event and by site in Table 23. The highest sea lice abundance (1.0) was found at Wellbore Channel in May and Sunderland in June. Sea lice abundance was similar across May (0.05) and June (0.09) (Table 23).

A total of 11 sea lice were observed on nine pink salmon during laboratory analysis of retained pink salmon from Post-Exposure sub-area sites. The average intensity of sea lice on the Post-Exposure pink salmon sample population (n=162) collected in the Discovery Islands in 2023 was 1.2. Sea lice intensity was calculated by site and sampling event and is presented in Table 23. During 2023 sampling, sea lice intensity on pink salmon was similar across May (1.3) and June (1.2). The highest sea lice intensity was 2.0 at Wellbore Channel in May 2023(Table 23).

Table 22: The number of sea lice found on chum salmon collected from the Post-Exposure sub-area sites in the Discovery Islands in 2023 summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

										9	Sample	Week										Total Pre-E	xposure Chun	n Sample
				April 1	9- 21						May 1	7- 18						June	6- 8				Population	
Site	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Chum Analyzed	# of Infested Chum	Average Weight of Infested Chum (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Beautiful Bay	-	-	-	-	-	-	-	0	-	-	_	-	-	-	0	-	-	-	-	_	-	0.0	0.00	0.0
Bessborough Bay	-	-	-	-	-	-	-	2	0	-	0	0.0	0.00	0.0	1	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Blenkinsop Bay	-	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Chancellor	-	-	-	-	-	-	-	2	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Cordero	0	-	-	-	-	-	-	32	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Primary 1	1	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Primary 3	-	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Race Passage	0	-	-	-	-	-	-	0	-	-	-	-	-	-	2	1	2.09	1	50.0	0.50	1.0	50.0	0.50	1.0
Sunderland	-	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0.0	0.00	0.0
Wellbore Channel	-	-	-	-	-	-	-	3	0	-	0	0.0	0.00	0.0	22	1	1.48	1	4.5	0.05	1.0	4.0	0.04	1.0
Total	1	0	-	0	0.0	0.00	0.0	39	0	-	0	0.0	0.00	0.0	25	2	1.79	2	8.0	0.08	1.0	3.1	0.03	1.0

Table 23: The number of sea lice found on pink salmon collected from the Post-Exposure sub-area sites in the Discovery Islands in 2023 summarized by site. Calculated sea lice prevalence, abundance and average intensity is also included by site.

										Ç	Sample	Week										Total Pre-E	xposure Chun	n Sample
				April 19	9- 21						May 1	7- 18						June	6- 8				Population	
Site	# of Pink Analyzed	# of Infested Pink	Average Weight of Infested Pink (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	# of Pink Analyzed	# of Infested Pink	Average Weight of Infested Pink (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity		# of Infested Pink	Average Weight of Infested Pink (g)	# of Lice	Prevalence (%)	Abundance	Average Intensity	Prevalence (%)	Abundance	Average Intensity
Beautiful Bay	-	-	-	-	-	-	-	12	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Bessborough Bay	-	-	-	-	-	-	-	0	-	-	-	-	-	-	12	3	2.69	3	25.0	0.25	1.0	25.0	0.25	1.0
Blenkinsop Bay	-	-	-	-	-	-	-	1	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Chancellor	-	-	-	-	-	-	-	5	0	-	0	0.0	0.00	0.0	0	-	-	-	-	-	-	0.0	0.00	0.0
Cordero	0	-	-	-	-	-	-	28	1	0.57	1	3.6	0.04	1.0	0	-	-	-	-	-	-	3.6	0.04	1.0
Primary 1	0	-	-	-	-	-	-	6	1	0.33	1	16.7	0.17	1.0	0	-	-	-	-	-	-	16.7	0.17	1.0
Primary 3	-	-	-	-	-	-	-	0	-	-	-	-	-	-	1	0	-	0	0.0	0.00	0.0	0.0	0.00	0.0
Race Passage	2	0	-	0	0.0	0.00	0.0	30	0	-	0	0.0	0.00	0.0	30	1	0.50	1	3.3	0.03	1.0	1.7	0.02	1.0
Sunderland	-	-	-	-	-	-	-	0	-	-	-	-	-	-	3	2	0.58	3	66.7	1.00	1.5	66.7	1.00	1.5
Wellbore Channel	-	-	-	-	-	-	-	2	1	0.56	2	50.0	1.00	2.0	30	0	-	0	0.0	0.00	0.0	3.1	0.06	2.0
Total	2	0	-	0	0.0	0.00	0.0	84	3	0.49	4	3.6	0.05	1.3	76	6	1.62	7	7.9	0.09	1.2	5.6	0.07	1.2

3.11 Pre-Exposure Sub-area Infestation by Sea Lice Species

For the Pre-Exposure sub-area chum and pink salmon sample population (n=123), one *L. salmonis* sea louse of copepodid life stage was identified on one chum salmon individual, and one *C. clemensi* sea louse of chalimus life stage was found on one chum salmon individual (Appendix III). Zero pink salmon were found to be infested with sea lice.

3.11.1 Pre-Exposure Sub-area Infestation by Sea Lice Species on Chum Salmon

A breakdown of the species of sea lice (by life stage) identified on the 67 chum salmon collected at the Pre-Exposure sites in the Discovery Islands is presented in Table 24. One *L. salmonis* sea louse of copepodid life stage was identified on one juvenile chum salmon and one *C. clemensi* sea louse of chalimus life stage was found on one juvenile chum salmon analyzed in the lab (Appendix III). Zero juvenile chum salmon were infested with both *L. salmonis* and *C. clemensi*. The sea lice species identified on chum salmon are also presented by site and sampling event in Table 25.

Table 24: The number of sea lice in each life stage by species identified on the Pre-Exposure chum salmon sample population from the Discovery Islands in 2023. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19- 21	May 17- 18	June 6-8
LEP Co	0	0	1
LEP C1	0	0	0
LEP C2	0	0	0
LEP PAM	0	0	0
LEP PAF	0	0	0
LEP AM	0	0	0
LEP AF	0	0	0
Total LEP	0	0	1
CAL Co	0	0	0
CAL C1	0	1	0
CAL C2	0	0	0
CAL C3	0	0	0
CAL C4	0	0	0
CAL PAM	0	0	0
CAL PAF	0	0	0
CAL AM	0	0	0
CAL AF	0	0	0
Total CAL	0	1	0
11: "	" 1 04 4 1 "	4 4 5444	1 BAE 11

¹ Lice life stage codes: Co = copepodid, C1-4 = chalimus 1-4, PAM = pre-adult male, PAF = pre-adult female, AM = adult male, AF = adult female.

Table 25: The species of sea lice found on Pre-Exposure sub-area chum salmon collected in the Discovery Islands in 2023 summarized by site. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

						Sample We	eek							TOTAL	
		April 19-2	21			May 17-	18			June 6-	8			TOTAL	
Site	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of Lice
Deepwater Bay	13	0	0	0	29	0	0	0	0	-	-	-	42	0	0
Francisco Point	10	0	0	0	6	1	0	1	0	-	-	-	16	1	1
Marina Island	1	0	0	0	0	-	-	-	0	-	-	-	1	0	0
Penn Island	0	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Rebecca Spit	3	0	0	0	1	0	0	0	0	-	-	-	4	0	0
SE Hill Island	0	-	-	-	0	-	-	-	4	1	1	0	4	1	1
Viner Point	0	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Total	27	0	0	0	36	1	0	1	4	1	1	0	67	2	2

3.12 Inactive Sub-area Sea Lice Infestation by Sea Lice Species

Within the Inactive sub-area sample population (n=666), a total of nine *L. salmonis* sea lice of copepodid and chalimus life stages were identified on eight individuals and 24 *C. clemensi* sea lice of copepodid and chalimus life stages were found on 20 of the samples analyzed in the lab (Appendix III). One salmonid sample was infested with both one *L. salmonis* sea louse and one *C. clemensi* sea louse.

3.12.1 Inactive Sub-area Infestation by Sea Lice Species on Chum Salmon

A breakdown of the species of sea lice (by life stage) identified on the 322 chum salmon collected in the Inactive sites in the Discovery Islands is presented in Table 26. A total of eight *L. salmonis* sea lice of copepodid and chalimus life stages were identified on seven juvenile chum salmon ands seven *C. clemensi* sea lice of copepodid and chalimus life stages were found on seven of the juvenile chum salmon analyzed in the lab (Appendix III). One juvenile chum salmon was infested with both one *L. salmonis* sea louse and one *C. clemensi* sea louse. The sea lice species identified on chum salmon are also presented by site and sampling event in Table 28.

For the chum salmon sample population infested with *L. salmonis* sea lice (n=7), one individual was infested with two lice and six individuals were infested with one louse. For the chum salmon sample population infested with *C. clemensi* lice (n=7), all samples were infested with one louse.

Table 26: The number of sea lice in each life stage by species identified on the Inactive sub-area chum salmon sample population from the Discovery Islands in 2023. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19- 21	May 17- 18	June 6- 8
LEP Co	1	3	0
LEP C1	1	1	0
LEP C2	0	0	2
LEP PAM	0	0	0
LEP PAF	0	0	0
LEP AM	0	0	0
LEP AF	0	0	0
Total LEP	2	4	2
CAL Co	1	0	0
CAL C1	0	1	1
CAL C2	1	1	1
CAL C3	0	1	0
CAL C4	0	0	0
CAL PAM	0	0	0
CAL PAF	0	0	0
CAL AM	0	0	0
CAL AF	0	0	0
Total CAL	2	3	2

 $^{^{1}}$ Lice life stage codes: Co = copepodid, C1-4 = chalimus 1-4, PAM = pre-adult male, PAF = pre-adult female, AM = adult male, AF = adult female.

3.12.2 Inactive Sub-area Infestation by Sea Lice Species on Pink Salmon

A breakdown of the species of sea lice (by life stage) identified on the 344 pink salmon collected at the Inactive sub-area sites in the Discovery Islands is presented in Table 27. One *L. salmonis* sea louse of chalimus life stage was identified on one juvenile pink salmon and 17 *C. clemensi* sea lice of copepodid and chalimus life stages were found on 13 of the juvenile pink salmon analyzed in the lab (Appendix III). Zero juvenile pink salmon were infested with both *L. salmonis* and *C. clemensi*. The sea lice species identified on pink salmon are also presented by site and sampling event in Table 29.

For the pink salmon sample population infested with *C. clemensi* sea lice (n=13) there were 10 samples infested with one louse, two samples infested with two lice, and one sample infested with three lice.

Table 27: The number of sea lice in each life stage by species identified on the Inactive sub-area pink salmon sample population from the Discovery Islands in 2023. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19- 21	May 17- 18	June 6- 8
LEP Co	0	0	0
LEP C1	0	0	0
LEP C2	0	0	1
LEP PAM	0	0	0
LEP PAF	0	0	0
LEP AM	0	0	0
LEP AF	0	0	0
Total LEP	0	0	1
CAL Co	0	0	3
CAL C1	0	0	9
CAL C2	0	0	4
CAL C3	0	0	1
CAL C4	0	0	0
CAL PAM	0	0	0
CAL PAF	0	0	0
CAL AM	0	0	0
CAL AF	0	0	0
Total CAL	0	0	17

¹ Lice life stage codes: Co = copepodid, C1-4 = chalimus 1-4, PAM = pre-adult male, PAF = pre-adult female, AM = adult male, AF = adult female.

Table 28: The species of sea lice found on Inactive sub-area chum salmon collected in the Discovery Islands in 2023 summarized by site. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

					5	Sample We	ek							TOTAL	
		April 19- 2	<u>.</u> 1			May 17- 1	8			June 6-8	3			TOTAL	
Site	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of Lice
Bear Bay	17	0	0	0	0	-	-	-	4	0	0	0	21	0	0
Bickley Bay	21	0	0	0	30	0	0	0	23	2	1	1	74	2	2
Discovery	0	-	-	-	2	0	0	0	0	-	-	-	2	0	0
Fanny Bay	4	0	0	0	0	-	-	-	2	0	0	0	6	0	0
Knox Bay	0	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Nodales	12	0	0	0	7	0	0	0	2	0	0	0	21	0	0
Okisollo	30	2	1	1	26	5	4	3	3	0	0	0	59	7	9
Owen Bay	0	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Raza	0	-	-	-	12	0	0	0	14	1	0	1	26	1	1
Raza North	12	0	0	0	30	0	0	0	0	-	-	-	42	0	0
Rock Bay	30	2	1	1	0	-	-	-	0	-	-	-	30	2	2
Shoal Bay	30	0	0	0	4	0	0	0	7	1	1	0	41	1	1
Total	156	4	2	2	111	5	4	3	55	4	2	2	322	13	15

Table 29: The species of sea lice found on Inactive sub-area pink salmon collected in the Discovery Islands in 2023 summarized by site. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

					5	Sample We	ek							TOTAL	
0		April 19- 2	21			May 17- 1	8			June 6-8	}			IOIAL	
Site	# of Pink Analyzed	# of Infested Pink	# of LEP	# of CAL	# of Pink Analyzed	# of Infested Pink	# of LEP	# of CAL	# of Pink Analyzed	# of Infested Pink	# of LEP	# of CAL	# of Pink Analyzed	# of Infested Pink	# of Lice
Bear Bay	31	0	0	0	0	-	-	-	1	-	-	-	32	0	0
Bickley Bay	15	0	0	0	30	0	0	0	6	1	1	0	51	1	1
Discovery	1	0	0	0	3	0	0	0	3	0	0	0	7	0	0
Fanny Bay	17	0	0	0	0	-	-	-	3	0	0	0	20	0	0
Knox Bay	6	0	0	0	0	-	-	-	0	-	-	-	6	0	0
Nodales	17	0	0	0	40	0	0	0	30	9	0	13	87	9	13
Okisollo	8	0	0	0	3	0	0	0	2	1	0	1	13	1	1
Owen Bay	0	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Raza	0	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Raza North	1	0	0	0	1	0	0	0	2	0	0	0	4	0	0
Rock Bay	30	0	0	0	3	0	0	0	1	0	0	0	34	0	0
Shoal Bay	30	0	0	0	30	0	0	0	30	3	0	3	90	3	3
Total	156	0	0	0	110	0	0	0	78	14	1	17	344	14	18

3.13 Post-Exposure Sub-area Sea Lice Infestation by Sea Lice Species

Within the 2023 Post-Exposure sub-area sample population, a total of seven *L. salmonis* sea lice of various life stages were identified on five individuals and six *C. clemensi* sea lice were found on six of the samples analyzed in the lab (Appendix III). There were zero samples infested with both *L. salmonis* and *C. clemensi*.

3.13.1 Post-Exposure Sub-area Infestation by Sea Lice Species on Chum Salmon

An analysis of the species of sea lice identified on the 65 chum salmon collected in the Post-Exposure sites in the Discovery Islands is presented in Table 30. Two *L. salmonis* sea lice of pre-adult and adult male stages were identified on two juvenile chum salmon. Zero *C. clemensi* sea lice were identified on the juvenile chum salmon analyzed in the lab (Appendix III). The sea lice species identified on chum salmon are also presented by site and by sampling event in Table 32.

Table 30: The number of sea lice in each life stage by species identified on the Post-Exposure sub-area chum salmon sample population from the Discovery Islands in 2023. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19- 21	May 17- 18	June 6- 8
LEP Co	0	0	0
LEP C1	0	0	0
LEP C2	0	0	0
LEP PAM	0	0	1
LEP PAF	0	0	0
LEP AM	0	0	1
LEP AF	0	0	0
Total LEP	0	0	2
CAL Co	0	0	0
CAL C1	0	0	0
CAL C2	0	0	0
CAL C3	0	0	0
CAL C4	0	0	0
CAL PAM	0	0	0
CAL PAF	0	0	0
CAL AM	0	0	0
CAL AF	0	0	0
Total CAL	0	0	0

¹ Lice life stage codes: Co = copepodid, C1-4 = chalimus 1-4, PAM = pre-adult male, PAF = pre-adult female, AM = adult male, AF = adult female.

3.13.2 Post Exposure Sub-area Infestation by Sea Lice Species on Pink Salmon

An analysis of the species of sea lice identified on the 162 pink salmon collected at the Post-Exposure sites in the Discovery Islands is presented in Table 31. Five *L. salmonis* sea lice of chalimus life stage were identified on three juvenile pink salmon and six *C. clemensi* sea lice of copepodid and chalimus life stages were found on six of the juvenile pink salmon analyzed in the lab (Appendix III). Zero juvenile pink salmon were infested with both *L. salmonis* and *C. clemensi*. The sea lice species identified on pink salmon are also presented by site and by sampling event in Table 33.

For the pink salmon sample population infested with *L. salmonis* sea lice (n=4), two of the samples were infested with two lice and one sample was infested with one louse. For the pink salmon sample population infested with *C. clemensi* sea lice (n=6), all samples were infested with one louse.

Table 31: The number of sea lice in each life stage by species identified on the Post-Exposure sub-area pink salmon sample population from the Discovery Islands in 2023. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

Life Stage ¹	April 19- 21	May 17- 18	June 6- 8
LEP Co	0	1	0
LEP C1	0	1	2
LEP C2	0	0	1
LEP PAM	0	0	0
LEP PAF	0	0	0
LEP AM	0	0	0
LEP AF	0	0	0
Total LEP	0	2	3
CAL Co	0	1	1
CAL C1	0	0	0
CAL C2	0	1	3
CAL C3	0	0	0
CAL C4	0	0	0
CAL PAM	0	0	0
CAL PAF	0	0	0
CAL AM	0	0	0
CAL AF	0	0	0
Total CAL	0	2	4

¹ Lice life stage codes: Co = copepodid, C1-4 = chalimus 1-4, PAM = pre-adult male, PAF = pre-adult female, AM = adult male, AF = adult female.

Table 32: The species of sea lice found on Post-Exposure sub-area chum salmon collected in the Discovery Islands in 2023 summarized by site. LEP = Lepeophtheirus salmonis CAL = Caligus clemensi

					5	Sample We	ek							TOTAL	
		April 19- 2	21			May 17- 1	8			June 6-8	3			IOIAL	
Site	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of LEP	# of CAL	# of Chum Analyzed	# of Infested Chum	# of Lice
Beautiful Bay	-	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Bessborough Bay	-	-	-	-	2	0	0	0	1	0	0	0	2	0	0
Blenkinsop Bay	-	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Chancellor	-	-	-	-	2	0	0	0	0	-	-	-	2	0	0
Cordero	0	-	-	-	32	0	0	0	0	-	-	-	32	0	0
Primary 1	1	0	0	0	0	-	-	-	0	-	-	-	1	0	0
Primary 3	-	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Race Passage	0	-	-	-	0	-	-	-	2	1	1	0	1	1	1
Sunderland	-	-	-	-	0	-	-	-	0	-	-	-	0	0	0
Wellbore Channel	-	-	-	-	3	0	0	0	22	1	1	0	25	1	1
Total	1	0	0	0	39	0	0	0	25	2	2	0	65	2	2

Table 33: The species of sea lice found on Post-Exposure sub-area pink salmon collected in the Discovery Islands in 2023 summarized by site. LEP = *Lepeophtheirus salmonis* CAL = *Caligus clemensi*

					5	Sample We	ek							TOTAL	
		April 19- 2	1			May 17- 1	8			June 6-8	3		_	TOTAL	
Site	# of Pink Analyzed	# of Infested Pink	# of LEP	# of CAL	# of Pink Analyzed	# of Infested Pink	# of LEP	# of CAL	# of Pink Analyzed	# of Infested Pink	# of LEP	# of CAL	# of Pink Analyzed	# of Infested Pink	# of Lice
Beautiful Bay	-	-	-	-	12	0	0	0	0	-	-	-	12	0	0
Bessborough Bay	-	-	-	-	0	-	-	-	12	3	1	2	12	3	3
Blenkinsop Bay	-	-	-	-	1	0	0	0	0	-	-	-	1	0	0
Chancellor	-	-	-	-	5	0	0	0	0	-	-	-	5	0	0
Cordero	0	-	-	-	28	1	0	1	0	-	-	-	28	1	1
Primary 1	0	-	-	-	6	1	0	1	0	-	-	-	6	1	1
Primary 3	-	-	-	-	0	-	-	-	1	0	0	0	1	0	0
Race Passage	2	0	0	0	30	0	0	0	30	1	0	1	62	1	1
Sunderland	-	-	-	-	0	-	-	-	3	2	2	1	3	2	3
Wellbore Channel	-	-	-	-	2	1	2	0	30	0	0	0	32	1	2
Total	2	0	0	0	84	3	2	2	76	6	3	4	162	9	11

4.0 Conclusions

This report presents the data from the seventh year of industry supported beach seining and sea lice analysis for wild juvenile salmonid monitoring in the Discovery Islands region of BC by MOWI Canada West, Cermaq Canada and Grieg Seafood BC Ltd. This report is focused on the summary and presentation of data collected in 2023.

In 2023, a total of 1114 individual samples underwent lab analysis for sea lice infestation including 562 pink salmon, 454 chum salmon, 66 chinook salmon, 31 coho salmon and one sockeye salmon.

The following summary table compares the Pre-Exposure, Inactive and Post-Exposure sub-area sea lice infestation statistics for pink and chum salmon collected during the three sample periods completed in the Discovery Islands in 2023. Table 34 presents the infestation for the species as a combination of both *L. salmonis* and *C. clemensi* sea lice.

Table 34: A comparison of sea lice infestation rates on the chum and pink salmon sample populations collected at Pre-Exposure, Inactive and Post-Exposure sub-area sites in the Discovery Islands in 2023.

Species	Sample Location (Sub-area)	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
	Pre-Exposure	67	2	2	3.0	0.03	1.0
chum	Inactive	322	15	13	4.0	0.05	1.2
	Post-Exposure	65	2	2	3.1	0.03	1.0
	Pre-Exposure	56	0	0	0.0	0.00	0.0
pink	Inactive	344	3	3	0.9	0.01	1.0
	Post-Exposure	162	11	9	5.6	0.07	1.2

5.0 References

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Appendix I – Field Data

Date	Time	Site Name	Salinity (ppt)	Temperature (°C)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (°C)	Dissolved Oxygen (mg/L)
			0.2m	0.2m	0.2m	1.0m	1.0m	1.0m
19-Apr-23	10:03	Bear Bay	25.7	8	8.1	25.7	8	8
19-Apr-23	13:03	Bickley Bay	21.9	8	9	24.6	8.2	8.6
19-Apr-23	12:36	Cordero	25.4	8	8.4	25.5	8.1	8.2
19-Apr-23	17:39	Deepwater Bay	24.9	8.6	8.7	25.5	8.7	8.9
19-Apr-23 19-Apr-23	15:32 14:28	Discovery Fanny Bay	24.6 18.3	8.1 8.8	8.2 9.2	24.9	8.1 8.8	8.2 9
21-Apr-23	9:20	Francisco Point	25.3	8.1	9.1	25.3	8.2	9.1
19-Apr-23	10:25	Knox Bay	24.8	7.7	8.4	25.2	7.9	8.2
21-Apr-23	9:05	Marina Island	25.2	8.3	9	25.3	8.3	8.8
19-Apr-23	15:13	Nodales	24.7	8.4	8.1	25.3	8.4	8
19-Apr-23	16:17	Okisollo	25.4	8.4	8.2	25.5	8.4	8.1
19-Apr-23	16:40	Owen Bay	25.3	9.6	8.9	25.4	9	8.9
21-Apr-23	10:42	Penn Island	25.3	8.5	9.4	25.3	8.5	9.3
20-Apr-23	7:27	Primary 1	25.9	7.4	8.6	25.9	7.4	8.6
20-Apr-23	9:18	Race Passage	25.9	7.8	8.2	25.9	7.8	8.2
21-Apr-23	11:22	Raza	24.2	8.3	10	24.2	8.2	9.8
21-Apr-23	11:42	Raza North	24.3	8.4	9.4	24.4	8.3	9.6
21-Apr-23	9:37	Rebecca Spit	22.3	7.4	9.9	22.9	7.7	9.9
19-Apr-23	9:13	Rock Bay	25.6	8 4	8.2	25.6	8 4	8.3
21-Apr-23 19-Apr-23	10:21 13:29	SE Hill Island Shoal Bay	25.4 25	8.4 8.4	8.9 8.3	25.4 25.3	8.4 8.4	8.8 8.3
21-Apr-23	9:56	Viner Point	25.2	8.5	8.6	25.3 25.3	8.4	8.7
17-May-23	8:21	Bear Bay	25.7	8.9	9	25.7	8.8	8.1
18-May-23	12:27	Beautiful Bay	26	9.5	11.7	26.1	8.9	10.3
18-May-23	14:07	Bessborough Bay	25.7	12.8	9.6	25.7	10.3	10.1
17-May-23	10:13	Bickley Bay	22	10.5	8.7	22.1	10.4	8.6
18-May-23	13:06	Blenkinsop Bay	25.9	11	10.2	25.8	10	10.1
18-May-23	14:53	Chancellor	22.5	13.6	11.9	24.7	10	12.3
17-May-23	9:17	Cordero	25.3	9	8.2	25.3	8.9	7.9
17-May-23	14:39	Deepwater Bay	25.2	13.5	8.8	25.6	10.4	10.1
17-May-23	12:34	Discovery	24.8	10.1	8.7	25.2	9.6	8.6
17-May-23	11:07	Fanny Bay	0.9	13.2	11	18.5	12.1	11.3
19-May-23	7:59	Francisco Point	22.5	16.9	8.1	22.6	16.8	8.6
17-May-23	8:39	Knox Bay	25.3	9	8.2	25.6	9	7.9
19-May-23	8:51	Marina Island	22.3	19.9	7	22.5	19.9	7.1
17-May-23	12:05 13:10	Nodales Okisollo	24.5 25.3	9.9	10.2 8.2	25.6	9.9	9.4
17-May-23 17-May-23	13:41	Owen Bay	24.3	16.9	9	25.3 25	12.5	9.9
19-May-23	10:49	Penn Island	22.2	15.4	9.7	22.2	15.4	10.5
18-May-23	12:03	Primary 1	26	8.8	10.7	26	8.7	10.4
18-May-23	12:43	Primary 3	26	9.8	11.9	26	9.2	10.8
18-May-23	15:29	Race Passage	26.2	8.7	11.1	26	8.6	9.9
19-May-23	11:31	Raza	7.9	17.2	10.4	12.7	16.8	10.4
19-May-23	11:55	Raza North	9.4	17.6	9.5	10.5	17.5	9.7
19-May-23	9:33	Rebecca Spit	20.7	19	9.6	22	17.2	12.1
17-May-23	7:42	Rock Bay	25.6	9	12	25.6	9	12.4
19-May-23	10:29	SE Hill Island	22.3	16.6	10.2	22.3	16.3	10.9
17-May-23	10:32	Shoal Bay	3.4	10.8	12	3.9	10.9	11.6
18-May-23	13:38	Sunderland	25.7	11.3	12.7	25.8	10.7	12.5
19-May-23	10:00	Viner Point	22	16.6	10.1	22.8	16.3	11.1
18-May-23	14:28	Wellbore Channel	26.2	8.8	10.8	26	8.7	9.8
07-Jun-23 07-Jun-23	13:10 8:30	Bear Bay Beautiful Bay	25.2 25.6	9.7 9.3	8.4 8.9	25.2 25.7	9.7 9.2	8.2 9
07-Jun-23 07-Jun-23	10:31	Bessborough Bay	25.5	10.2	10.5	25.7	9.6	9.5
06-Jun-23	9:50	Bickley Bay	23.5	11.3	10.3	23.7	11.3	9.9
07-Jun-23	9:30	Blenkinsop Bay	25.7	9.2	8.3	25.7	9.2	8.3
07-Jun-23	11:55	Chancellor	24.1	10.6	9.8	24.8	10.2	9.5
06-Jun-23	9:15	Cordero	25.1	9.4	8.5	25.2	9.4	8.3
06-Jun-23	14:06	Deepwater Bay	24.7	12.9	9.2	24.7	12.9	8.9
06-Jun-23	12:01	Discovery	24.9	10	9.1	24.9	9.9	8.3
06-Jun-23	10:22	Fanny Bay	10.4	12.2	10.5	20.6	11.3	11.3
08-Jun-23	8:26	Francisco Point	20.9	13.9	10.5	20.9	13.8	10.3
07-Jun-23	12:55	Knox Bay	25.1	9.8	8.4	25.1	9.8	8.2
08-Jun-23	8:59	Marina Island	22.8	14.7	8.1			

Date	Time	Site Name	Salinity (ppt)	Temperature (°C)	Dissolved Oxygen (mg/L)	Salinity (ppt)	Temperature (°C)	Dissolved Oxygen (mg/L)
			0.2m	0.2m	0.2m	1.0m	1.0m	1.0m
06-Jun-23	11:29	Nodales	24.7	10.3	9.7	24.7	10.2	9.5
06-Jun-23	12:37	Okisollo	24.8	10.5	8	24.8	10.4	7.9
06-Jun-23	13:08	Owen Bay	24.9	13.8	10.5			
08-Jun-23	11:15	Penn Island	18.5	14.9	10.3	19.9	14	10.8
07-Jun-23	8:13	Primary 1	23.7	9	9.9	25.1	9	9.6
07-Jun-23	9:03	Primary 3	25.7	9.3	8.9	25.8	9	8.8
07-Jun-23	14:20	Race Passage	25.5	10.2	9.3	25.5	10.2	9.1
08-Jun-23	12:01	Raza	11.9	18.2	9.6	16.5	16.9	10.4
08-Jun-23	12:32	Raza North	15.6	17.1	9.9	20.1	15.3	10.6
08-Jun-23	9:36	Rebecca Spit	21.5	14.6	10.4	21.6	14.5	12.8
06-Jun-23	8:26	Rock Bay	23.7	9.7	8.8			
08-Jun-23	10:39	SE Hill Island	20.4	14.5	11.2	20.4	14.3	11.4
06-Jun-23	10:51	Shoal Bay	21.9	10.8	9.5	22	10.8	9
07-Jun-23	10:02	Sunderland	25.3	10.6	9.7	25.4	10.5	9.6
08-Jun-23	10:07	Viner Point	20.9	14.2	10.4	21.6	14.1	10.4
07-Jun-23	11:13	Wellbore Channel	25.1	9.7	9.1	25.2	9.7	8.6

Appendix II – Capture and Collection Sample Totals

Date	Site Name	Weather Comments	Pink Captured	Pink Retained	Chum Captured	Chum Retained	Coho Captured	Coho Retained	Chinook Captured	Chinook Retained		Sockeye Retained	TSB Captured	TSB Retained	Comments
19-Apr-23	Bear Bay	Calm, rain	101	31	17	17	0	0	0	0	0	0	0	0	6 green sea urchins, 2 sculpins
19-Apr-23	Bickley Bay	Calm, rain	15	15	21	21	0	0	0	0	0	0	0	0	Abundant juvenile shrimp, 1 sculpin
19-Apr-23	Cordero	Calm, rain	0	0	0	0	0	0	0	0	0	0	0	0	No bycatch
19-Apr-23	Deepwater Bay	Cloud, light wind	12	12	13	13	0	0	0	0	0	0	0	0	1 sculpin
19-Apr-23	Discovery	Calm, light rain	1	1	0	0	0	0	0	0	0	0	0	0	Sea lion swimming along beach prior to set
19-Apr-23	Fanny Bay	Calm, cloud	17	17	4	4	0	0	2	2	0	0	0	0	No bycatch
21-Apr-23	Francisco Point	Choppy, light rain	60	30	10	10	0	0	0	0	0	0	0	0	No bycatch
19-Apr-23	Knox Bay	Calm, rain	6	6	0	0	0	0	0	0	0	0	0	0	4 sculpins, 1 kelp clingfish, 1 juvenile lingcod
21-Apr-23	Marina Island	Calm, light rain	1	1	1	1	0	0	0	0	0	0	1	0	1 horned sculpin, 1 three spined stickleback
19-Apr-23	Nodales	Slight chop	17	17	12	12	0	0	0	0	0	0	0	0	No bycatch
19-Apr-23	Okisollo	Slight chop, cloud, sun	8	8	42	30	0	0	0	0	0	0	0	0	No bycatch
19-Apr-23	Owen Bay	Calm, cloud	0	0	0	0	0	0	0	0	0	0	0	0	No bycatch
21-Apr-23	Penn Island	Calm, cloud	0	0	0	0	0	0	0	0	0	0	0	0	1 green sea urchin, 1 sculpin
20-Apr-23	Primary 1	Cloud, wind, choppy	0	0	1	1	0	0	0	0	0	0	0	0	3 sculpins
20-Apr-23	Race Passage	Rain, slight chop	2	2	0	0	0	0	0	0	0	0	0	0	No bycatch
21-Apr-23	Raza	Calm, cloud	0	0	0	0	0	0	0	0	0	0	0	0	3 sea urchins, 4 jellyfish
21-Apr-23	Raza North	Calm, cloud	1	1	12	12	0	0	0	0	0	0	0	0	Abundant jellyfish
21-Apr-23	Rebecca Spit	Calm, light rain	0	0	3	3	0	0	0	0	0	0	0	0	3 needle fish, 2 sculpins
19-Apr-23	Rock Bay	Calm, light rain	110	30	150	30	0	0	0	0	0	0	0	0	5 sculpins, 3 flatfish
21-Apr-23	SE Hill Island	Calm, cloud	0	0	0	0	0	0	0	0	0	0	0	0	3 sand lances
19-Apr-23	Shoal Bay	Sun, cloud, calm	1800	30	300	30	0	0	0	0	0	0	0	0	No bycatch
21-Apr-23	Viner Point	Calm, cloud	0	0	0	0	0	0	0	0	0	0	0	0	No bycatch
17-May-23	Bear Bay	Calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	No bycatch
18-May-23	Beautiful Bay	Choppy, sun, wind	12	12	0	0	0	0	0	0	0	0	0	0	No bycatch
18-May-23	Bessborough Bay	Calm, sun	0	0	2	2	0	0	0	0	0	0	0	0	No bycatch
17-May-23	Bickley Bay	Calm, sun	180	30	80	30	0	0	0	0	0	0	0	0	4 sculpins, 7 flatfish
18-May-23	Blenkinsop Bay	Calm, sun	1	1	0	0	2	2	0	0	0	0	0	0	1 sculpin
18-May-23	Chancellor	Calm, sun	5	5	2	2	0	0	0	0	0	0	0	0	1 shiner perch, 4 juvenile lingcod, 4 sculpins
17-May-23	Cordero	Calm, sun	28	28	75	32	0	0	0	0	0	0	0	0	No bycatch
17-May-23	Deepwater Bay	Calm, sun	0	0	97	29	0	0	0	0	0	0	0	0	Set performed to the North due to boat pulling lines across bay in the way
17-May-23	Discovery	Calm, sun	3	3	2	2	0	0	0	0	0	0	0	0	2 gunnels, 2 sculpins, 3 kelp clingfish, fish observed jumping in deeper water
17-May-23	Fanny Bay	Calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	No bycatch
19-May-23	Francisco Point	Calm, sun	6	6	6	6	3	3	0	0	0	0	0	0	4 needlefish

Date	Site Name	Weather Comments	Pink Captured	Pink Retained	Chum Captured	Chum Retained	Coho Captured	Coho Retained	Chinook Captured	Chinook Retained	Sockeye Captured	Sockeye Retained	TSB Captured	TSB Retained	Comments
17-May-23	Knox Bay	Calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	1 red rock crab, 1 gunnel, 2 flatfish, 5 juvenile lingcod, 3 sculpins
19-May-23	Marina Island	Calm, sun	1	1	0	0	0	0	0	0	0	0	0	0	35 sculpins
17-May-23	Nodales	Calm, sun	115	40	7	7	0	0	0	0	0	0	0	0	2 gunnels, 1 sculpin, 1 kelp clingfish, 8 juvenile lingcod
17-May-23	Okisollo	Calm, sun	3	3	26	26	0	0	0	0	0	0	0	0	5 sculpins
17-May-23	Owen Bay	Calm, sun	0	0	0	0	3	3	0	0	1	1	0	0	12 sculpins
19-May-23	Penn Island	Calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	Abundant sand lances, 7 green sea urchins
18-May-23	Primary 1	Calm, sun, wind	6	6	0	0	0	0	0	0	0	0	0	0	No bycatch
18-May-23	Primary 3	Choppy, sun, wind	0	0	0	0	0	0	0	0	0	0	0	0	1 shiner perch
18-May-23	Race Passage	Calm, sun	77	30	0	0	0	0	1	1	0	0	0	0	No bycatch
19-May-23	Raza	Calm, sun	0	0	12	12	0	0	0	0	0	0	0	0	No bycatch
19-May-23	Raza North	Calm, sun	1	1	44	30	0	0	0	0	0	0	0	0	1 juvenile greenling, 1 pipefish, 3 gobys, 1 sculpin
19-May-23	Rebecca Spit	Calm, sun	0	0	1	1	0	0	0	0	0	0	0	0	1 flatfish, 5 sculpins, 3 cutthroat
17-May-23	Rock Bay	Calm, sun	3	3	0	0	0	0	0	0	0	0	0	0	1 striped perch, 7 sculpins, 2 flatfish, 1 pipefish, 12 juvenile lingcod
19-May-23	SE Hill Island	Calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	No bycatch
17-May-23	Shoal Bay	Calm, sun	106	30	4	4	0	0	0	0	0	0	0	0	No bycatch
18-May-23	Sunderland	Calm, sun	0	0	0	0	1	1	1	1	0	0	0	0	1 stripped perch, 4 kelp perch, 1 sculpin
19-May-23	Viner Point	Calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	50 shiner perch, 20 kelp perch, 4 juvenile rockfish, 1 fried egg jellyfish
18-May-23	Wellbore Channel	Light chop, sun	2	2	3	3	0	0	0	0	0	0	0	0	2 sculpins
07-Jun-23	Bear Bay	calm, sun, strong tide	1	1	4	4	36	6	19	19	0	0	0	0	1 juvenile unknown species, 3 gunnel
07-Jun-23	Beautiful Bay	sun, light wind	0	0	0	0	0	0	0	0	0	0	0	0	1 greenling, 1 juvenile rockfish, 1 gunnel, 100 unknown juvenile fish.
07-Jun-23	Bessborough Bay	calm, sun	12	12	1	1	1	1	3	3	0	0	0	0	1200 perch, 100 gunnel, 40 midshipmen, 50 sculpin
06-Jun-23	Bickley Bay	wind, sun	6	6	23	23	0	0	2	2	0	0	0	0	2 kelp crab, 15 sculpin, 5 gunnel
07-Jun-23	Blenkinsop Bay	sun, light wind	0	0	0	0	0	0	0	0	0	0	0	0	13 sea urchin
07-Jun-23	Chancellor	calm, sun	0	0	0	0	8	8	17	17	0	0	0	0	2 gunnel, 2 sculpin
06-Jun-23	Cordero	wind, sun	0	0	0	0	0	0	0	0	0	0	0	0	5 sculpin
06-Jun-23	Deepwater Bay	wind, sun, rough	0	0	0	0	0	0	32	15	0	0	0	0	2 cuthroat, 1 greenling, 1 pile perch
06-Jun-23	Discovery	wind, sun	3	3	0	0	1	1	0	0	0	0	0	0	2 gunnel, 2 sculpin
06-Jun-23	Fanny Bay	wind, sun	3	3	2	2	0	0	2	2	0	0	0	0	20 shiner perch, 1 striped perch, 5 gunnel
08-Jun-23	Francisco Point	light wind, sun	0	0	0	0	0	0	0	0	0	0	0	0	lots of hangups, lots of logs in water along beach, found spot with least amount of logs
07-Jun-23	Knox Bay	calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	100 dolly varden, 4 striped perch, 15 sculpin
08-Jun-23	Marina Island	calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	Very shallow to set on, 200 sculpin

Date	Site Name	Weather Comments	Pink Captured	Pink Retained	Chum Captured	Chum Retained	Coho Captured	Coho Retained	Chinook Captured	Chinook Retained	Sockeye Captured	Sockeye Retained	TSB Captured	TSB Retained	Comments
06-Jun-23	Nodales	calm, sun	3000	30	2	2	0	0	0	0	0	0	0	0	4 crabs, 4 gunnel, 8 sculpin
06-Jun-23	Okisollo	calm, sun	2	2	3	3	0	0	2	2	0	0	0	0	3 gunnel, 5 sculpin
06-Jun-23	Owen Bay	wind, sun	0	0	0	0	3	3	1	1	0	0	0	0	1000 sculpin, 20 gunnel, 2 cuthroat trout
08-Jun-23	Penn Island	calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	15,000 juvenile herring, 2 sculpin, 1 cuthroat trout
07-Jun-23	Primary 1	sun, light wind	0	0	0	0	0	0	0	0	0	0	0	0	1 kelp greenling, 1 gunnel, 2 sculpin
07-Jun-23	Primary 3	calm, sun	1	1	0	0	0	0	0	0	0	0	0	0	1 pipefish, 2 sculpin
07-Jun-23	Race Passage	calm, sun	109	30	2	2	0	0	1	1	0	0	0	0	lots of snags
08-Jun-23	Raza	calm, sun	0	0	14	14	0	0	0	0	0	0	0	0	1 sculpin, 1 juvenile ling
08-Jun-23	Raza North	calm, sun, hot	2	2	0	0	2	0	0	0	0	0	0	0	2 pipefish
08-Jun-23	Rebecca Spit	calm, sun, clear	5	5	0	0	0	0	0	0	0	0	0	0	50 striped perch, 2 sculpin
06-Jun-23	Rock Bay	wind, sun	1	1	0	0	0	0	0	0	0	0	0	0	7 sculpin, 4 juvenile lingcod
08-Jun-23	SE Hill Island	calm, sun	1	1	4	4	7	0	0	0	0	0	0	0	800 juvenile herring
06-Jun-23	Shoal Bay	wind, sun	107	30	7	7	0	0	0	0	0	0	0	0	2 crab, 10 gunnel, 15 sculpin
07-Jun-23	Sunderland	sun, calm	3	3	0	0	3	3	0	0	0	0	0	0	2 gunnel
08-Jun-23	Viner Point	calm, sun	0	0	0	0	0	0	0	0	0	0	0	0	abundant sand lance, 50 shiner perch
07-Jun-23	Wellbore Channel	calm, sun	400	30	22	22	0	0	0	0	0	0	0	0	20 sculpin

Appendix III – Sea Lice Analysis Data

												,											
Date	Site Name	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL Total	Total Sea Lice
19-Apr-23	Bear Bay	Pink	29	0.23								0										0	0
19-Apr-23	Bear Bay	Pink	29	0.21								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.26								0										0	0
19-Apr-23	Bear Bay	Pink	29	0.2								0										0	0
19-Apr-23	Bear Bay	Pink	28	0.24								0										0	0
19-Apr-23	Bear Bay	Pink	31	0.26								0										0	0
19-Apr-23	Bear Bay	Pink	31	0.31								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.23								0										0	0
19-Apr-23	Bear Bay	Pink	31	0.25								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.21								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.26								0										0	0
19-Apr-23	Bear Bay	Pink	28	0.24								0										0	0
19-Apr-23	Bear Bay	Pink	29	0.23								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.3								0										0	0
19-Apr-23	Bear Bay	Pink	33	0.34								0										0	0
19-Apr-23	Bear Bay	Pink	29	0.21								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.24								0										0	0
19-Apr-23	Bear Bay	Pink	29	0.26								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.28								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.28								0										0	0
19-Apr-23	Bear Bay	Pink	31	0.24								0										0	0
19-Apr-23	Bear Bay	Pink	32	0.33								0										0	0
19-Apr-23	Bear Bay	Pink	31	0.23								0										0	0
19-Apr-23	Bear Bay	Pink	31	0.26								0										0	0
19-Apr-23	Bear Bay	Pink	31	0.28								0										0	0
19-Apr-23	Bear Bay	Pink	29	0.27								0										0	0
19-Apr-23	Bear Bay	Pink	29	0.21								0										0	0
19-Apr-23	Bear Bay	Pink	35	0.44								0										0	0
19-Apr-23	Bear Bay	Pink	32	0.33								0										0	0
19-Apr-23	Bear Bay	Pink	28	0.24								0										0	0
19-Apr-23	Bear Bay	Pink	30	0.28								0										0	0
19-Apr-23	Bear Bay	Chum	35	0.44								0										0	0
19-Apr-23	Bear Bay	Chum	37	0.42								0										0	0
19-Apr-23	Bear Bay	Chum	36	0.44								0										0	0
19-Apr-23	Bear Bay	Chum	35	0.47								0										0	0
19-Apr-23	Bear Bay	Chum	37	0.53								0										0	0
19-Apr-23	Bear Bay	Chum	35	0.37								0										0	0

Doto	Cita Nama	Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
19-Apr-23	Bear Bay	Chum	38	0.52								0										0	0
19-Apr-23	Bear Bay	Chum	35	0.41								0										0	0
19-Apr-23	Bear Bay	Chum	40	0.59								0										0	0
19-Apr-23	Bear Bay	Chum	35	0.44								0										0	0
19-Apr-23	Bear Bay	Chum	34	0.4								0										0	0
19-Apr-23	Bear Bay	Chum	37	0.42								0										0	0
19-Apr-23	Bear Bay	Chum	36	0.52								0										0	0
19-Apr-23	Bear Bay	Chum	40	0.58								0										0	0
19-Apr-23	Bear Bay	Chum	38	0.52								0										0	0
19-Apr-23	Bear Bay	Chum	35	0.41								0										0	0
19-Apr-23	Bear Bay	Chum	36	0.46								0										0	0
7-Jun-23	Bear Bay	Pink	87	6.46								0										0	0
7-Jun-23	Bear Bay	Chum	85	6.21								0										0	0
7-Jun-23	Bear Bay	Chum	89	7.87								0										0	0
7-Jun-23	Bear Bay	Chum	74	4.14								0										0	0
7-Jun-23	Bear Bay	Chum	70	3.6								0										0	0
7-Jun-23	Bear Bay	Chinook	95	10.01								0										0	0
7-Jun-23	Bear Bay	Coho	96	10.42								0			1							1	1
7-Jun-23	Bear Bay	Chinook	101	11.44								0										0	0
7-Jun-23	Bear Bay	Chinook	109	14.93								0										0	0
7-Jun-23	Bear Bay	Chinook	90	9.67								0										0	0
7-Jun-23	Bear Bay	Chinook	89	8.39		1						1										0	1
7-Jun-23	Bear Bay	Chinook	95	9.85								0										0	0
7-Jun-23	Bear Bay	Chinook	81	6.52								0										0	0
7-Jun-23	Bear Bay	Chinook	90	8.71								0										0	0
7-Jun-23	Bear Bay	Chinook	91	10.58								0										0	0
7-Jun-23	Bear Bay	Chinook	102	12.42								0										0	0
7-Jun-23	Bear Bay	Chinook	88	7.92								0										0	0
7-Jun-23	Bear Bay	Coho	92	8.48								0										0	0
7-Jun-23	Bear Bay	Chinook	95	12.03								0										0	0
7-Jun-23	Bear Bay	Chinook	53	1.85								0										0	0
7-Jun-23	Bear Bay	Coho	110	16.54								0										0	0
7-Jun-23	Bear Bay	Coho	111	16.08								0										0	0
7-Jun-23	Bear Bay	Chinook	110	18.14								0										0	0
7-Jun-23	Bear Bay	Chinook	89	8.14								0										0	0
7-Jun-23	Bear Bay	Coho	88	7.6								0										0	0
7-Jun-23	Bear Bay	Chinook	87	8.15								0										0	0
7-Jun-23	Bear Bay	Coho	96	10.08				1				1										0	1
7-Jun-23	Bear Bay	Chinook	81	8.33								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	Site Mairie	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
7-Jun-23	Bear Bay	Chinook	80	6.77								0										0	0
7-Jun-23	Bear Bay	Chinook	96	9.37								0										0	0
18-May-23	Beautiful Bay	Pink	48	1.11								0										0	0
18-May-23	Beautiful Bay	Pink	40	0.62								0										0	0
18-May-23	Beautiful Bay	Pink	49	1.09								0										0	0
18-May-23	Beautiful Bay	Pink	45	0.99								0										0	0
18-May-23	Beautiful Bay	Pink	41	0.7								0										0	0
18-May-23	Beautiful Bay	Pink	39	0.73								0										0	0
18-May-23	Beautiful Bay	Pink	35	0.5								0										0	0
18-May-23	Beautiful Bay	Pink	36	0.53								0										0	0
18-May-23	Beautiful Bay	Pink	40	0.59								0										0	0
18-May-23	Beautiful Bay	Pink	42	0.77								0										0	0
18-May-23	Beautiful Bay	Pink	39	0.69								0										0	0
18-May-23	Beautiful Bay	Pink	43	0.85								0										0	0
18-May-23	Bessborough Bay	Chum	37	0.41								0										0	0
18-May-23	Bessborough Bay	Chum	39	0.41								0										0	0
7-Jun-23	Bessborough Bay	Pink	64	2.7								0										0	0
7-Jun-23	Bessborough Bay	Pink	51	1.3								0										0	0
7-Jun-23	Bessborough Bay	Pink	68	2.87								0	1									1	1
7-Jun-23	Bessborough Bay	Pink	52	1.47								0										0	0
7-Jun-23	Bessborough Bay	Pink	61	2.67								0			1							1	1
7-Jun-23	Bessborough Bay	Pink	66	2.97								0										0	0
7-Jun-23	Bessborough Bay	Pink	73	3.27								0										0	0
7-Jun-23	Bessborough Bay	Pink	38	0.51								0										0	0
7-Jun-23	Bessborough Bay	Pink	65	2.52		1						1										0	1
7-Jun-23	Bessborough Bay	Pink	55	1.7								0										0	0
7-Jun-23	Bessborough Bay	Pink	52	1.3								0										0	0
7-Jun-23	Bessborough Bay	Pink	47	0.98								0										0	0
7-Jun-23	Bessborough Bay	Chum	55	1.59								0										0	0
7-Jun-23	Bessborough Bay	Coho	98	10.32	1							1										0	1
7-Jun-23	Bessborough Bay	Chinook	91	8.44								0										0	0
7-Jun-23	Bessborough Bay	Chinook	71	4.31								0										0	0
7-Jun-23	Bessborough Bay	Chinook	83	6.97								0										0	0
19-Apr-23	Bickley Bay	Pink	38	0.49								0										0	0
19-Apr-23	Bickley Bay	Pink	29	0.28								0										0	0
19-Apr-23	Bickley Bay	Pink	31	0.24								0										0	0
19-Apr-23	Bickley Bay	Pink	30	0.27								0										0	0
19-Apr-23	Bickley Bay	Pink	27	0.2								0										0	0
19-Apr-23	Bickley Bay	Pink	31	0.22								0	_									0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
19-Apr-23	Bickley Bay	Pink	30	0.26								0										0	0
19-Apr-23	Bickley Bay	Pink	31	0.25								0										0	0
19-Apr-23	Bickley Bay	Pink	31	0.25								0										0	0
19-Apr-23	Bickley Bay	Pink	32	0.31								0										0	0
19-Apr-23	Bickley Bay	Pink	31	0.28								0										0	0
19-Apr-23	Bickley Bay	Pink	31	0.24								0										0	0
19-Apr-23	Bickley Bay	Pink	28	0.2								0										0	0
19-Apr-23	Bickley Bay	Pink	32	0.28								0										0	0
19-Apr-23	Bickley Bay	Pink	31	0.26								0										0	0
19-Apr-23	Bickley Bay	Chum	34	0.4								0										0	0
19-Apr-23	Bickley Bay	Chum	35	0.38								0										0	0
19-Apr-23	Bickley Bay	Chum	35	0.36								0										0	0
19-Apr-23	Bickley Bay	Chum	35	0.36								0										0	0
19-Apr-23	Bickley Bay	Chum	37	0.43								0										0	0
19-Apr-23	Bickley Bay	Chum	38	0.55								0										0	0
19-Apr-23	Bickley Bay	Chum	36	0.45								0										0	0
19-Apr-23	Bickley Bay	Chum	36	0.45								0										0	0
19-Apr-23	Bickley Bay	Chum	37	0.52								0										0	0
19-Apr-23	Bickley Bay	Chum	33	0.35								0										0	0
19-Apr-23	Bickley Bay	Chum	36	0.48								0										0	0
19-Apr-23	Bickley Bay	Chum	34	0.38								0										0	0
19-Apr-23	Bickley Bay	Chum	35	0.4								0										0	0
19-Apr-23	Bickley Bay	Chum	39	0.49								0										0	0
19-Apr-23	Bickley Bay	Chum	36	0.5								0										0	0
19-Apr-23	Bickley Bay	Chum	40	0.69								0										0	0
19-Apr-23	Bickley Bay	Chum	35	0.39								0										0	0
19-Apr-23	Bickley Bay	Chum	35	0.39								0										0	0
19-Apr-23	Bickley Bay	Chum	35	0.45								0										0	0
19-Apr-23	Bickley Bay	Chum	34	0.38								0										0	0
19-Apr-23	Bickley Bay	Chum	35	0.44								0										0	0
16-May-23	Bickley Bay	Chum	53	1.4								0										0	0
16-May-23	Bickley Bay	Chum	60	2.24								0										0	0
16-May-23	Bickley Bay	Chum	41	0.86								0										0	0
16-May-23	Bickley Bay	Chum	57	1.97								0										0	0
16-May-23	Bickley Bay	Chum	50	1.1								0										0	0
16-May-23	Bickley Bay	Chum	52	1.44								0										0	0
16-May-23	Bickley Bay	Chum	53	1.55								0										0	0
16-May-23	Bickley Bay	Chum	49	1.23								0										0	0
16-May-23	Bickley Bay	Chum	52	1.67								0										0	0

_		Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Co	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
16-May-23	Bickley Bay	Chum	49	1.23								0										0	0
16-May-23	Bickley Bay	Chum	48	1.38								0										0	0
16-May-23	Bickley Bay	Chum	59	2.1								0										0	0
16-May-23	Bickley Bay	Chum	57	1.95								0										0	0
16-May-23	Bickley Bay	Chum	55	2.11								0										0	0
16-May-23	Bickley Bay	Chum	48	1.17								0										0	0
16-May-23	Bickley Bay	Chum	55	1.96								0										0	0
16-May-23	Bickley Bay	Chum	48	1.21								0										0	0
16-May-23	Bickley Bay	Chum	48	1.44								0										0	0
16-May-23	Bickley Bay	Chum	56	1.86								0										0	0
16-May-23	Bickley Bay	Chum	58	2.2								0										0	0
16-May-23	Bickley Bay	Chum	49	1.3								0										0	0
16-May-23	Bickley Bay	Chum	49	1.57								0										0	0
16-May-23	Bickley Bay	Chum	50	1.33								0										0	0
16-May-23	Bickley Bay	Chum	52	1.43								0										0	0
16-May-23	Bickley Bay	Chum	53	1.48								0										0	0
16-May-23	Bickley Bay	Chum	54	1.74								0										0	0
16-May-23	Bickley Bay	Chum	53	1.49								0										0	0
16-May-23	Bickley Bay	Chum	56	2.16								0										0	0
16-May-23	Bickley Bay	Chum	47	1.17								0										0	0
16-May-23	Bickley Bay	Pink	29	0.22								0										0	0
16-May-23	Bickley Bay	Pink	41	0.69								0										0	0
16-May-23	Bickley Bay	Pink	37	0.6								0										0	0
16-May-23	Bickley Bay	Pink	32	0.32								0										0	0
16-May-23	Bickley Bay	Pink	39	0.2								0										0	0
16-May-23	Bickley Bay	Pink	31	0.28								0										0	0
16-May-23	Bickley Bay	Pink	49	1.02								0										0	0
16-May-23	Bickley Bay	Pink	30	0.31								0										0	0
16-May-23	Bickley Bay	Pink	32	0.32								0										0	0
16-May-23	Bickley Bay	Pink	31	0.25								0										0	0
16-May-23	Bickley Bay	Pink	51	1.31								0										0	0
16-May-23	Bickley Bay	Pink	37	0.57								0										0	0
16-May-23	Bickley Bay	Pink	34	0.39								0										0	0
16-May-23	Bickley Bay	Pink	41	0.62								0										0	0
16-May-23	Bickley Bay	Pink	46	0.94								0										0	0
16-May-23	Bickley Bay	Pink	32	0.24								0										0	0
16-May-23	Bickley Bay	Pink	33	0.3								0										0	0
16-May-23	Bickley Bay	Pink	32	0.31								0										0	0
16-May-23	Bickley Bay	Pink	30	0.28								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
		Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
16-May-23	Bickley Bay	Pink	30	0.23								0										0	0
16-May-23	Bickley Bay	Pink	30	0.24								0										0	0
16-May-23	Bickley Bay	Pink	50	1.1								0										0	0
16-May-23	Bickley Bay	Pink	51	1.33								0										0	0
16-May-23	Bickley Bay	Pink	40	0.69								0										0	0
16-May-23	Bickley Bay	Pink	39	0.62								0										0	0
16-May-23	Bickley Bay	Pink	31	0.29								0										0	0
16-May-23	Bickley Bay	Pink	40	0.59								0										0	0
16-May-23	Bickley Bay	Chum	45	0.93								0										0	0
16-May-23	Bickley Bay	Pink	39	0.64								0										0	0
16-May-23	Bickley Bay	Pink	44	0.82								0										0	0
16-May-23	Bickley Bay	Pink	30	0.26								0										0	0
6-Jun-23	Bickley Bay	Chum	56	2.21								0										0	0
6-Jun-23	Bickley Bay	Chum	63	2.44								0										0	0
6-Jun-23	Bickley Bay	Chum	49	1.3								0										0	0
6-Jun-23	Bickley Bay	Chum	55	2.05								0										0	0
6-Jun-23	Bickley Bay	Chum	53	2.02								0										0	0
6-Jun-23	Bickley Bay	Chum	61	2.46								0		1								1	1
6-Jun-23	Bickley Bay	Chum	63	3.29								0										0	0
6-Jun-23	Bickley Bay	Chum	76	4.8								0										0	0
6-Jun-23	Bickley Bay	Chum	64	3.2								0										0	0
6-Jun-23	Bickley Bay	Chum	89	8.8								0										0	0
6-Jun-23	Bickley Bay	Chum	53	1.37								0										0	0
6-Jun-23	Bickley Bay	Chum	55	2.17								0										0	0
6-Jun-23	Bickley Bay	Chum	62	3								0										0	0
6-Jun-23	Bickley Bay	Chum	74	4.33			1					1										0	1
6-Jun-23	Bickley Bay	Chum	73	5.05								0										0	0
6-Jun-23	Bickley Bay	Chum	51	1.86								0										0	0
6-Jun-23	Bickley Bay	Chum	64	4.33								0										0	0
6-Jun-23	Bickley Bay	Chum	72	4.92								0										0	0
6-Jun-23	Bickley Bay	Chum	73	4.45								0										0	0
6-Jun-23	Bickley Bay	Chum	62	2.44								0										0	0
6-Jun-23	Bickley Bay	Chum	70	3.85								0										0	0
6-Jun-23	Bickley Bay	Chum	81	5.06								0										0	0
6-Jun-23	Bickley Bay	Pink	62	2.77								0										0	0
6-Jun-23	Bickley Bay	Pink	81	6.21								0										0	0
6-Jun-23	Bickley Bay	Pink	69	3.63								0										0	0
6-Jun-23	Bickley Bay	Pink	57	1.94			1					1										0	1
6-Jun-23	Bickley Bay	Pink	42	0.68								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Buio	One Hame	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
6-Jun-23	Bickley Bay	Pink	34	0.34								0										0	0
6-Jun-23	Bickley Bay	Chinook	49	1.33								0										0	0
6-Jun-23	Bickley Bay	Chinook	95	11.02								0										0	0
6-Jun-23	Bickley Bay	Chum	117	14.47								0										0	0
18-May-23	Blenkinsop Bay	Coho	80	7.33								0										0	0
18-May-23	Blenkinsop Bay	Coho	81	7.05								0										0	0
18-May-23	Blenkinsop Bay	Pink	55	1.46								0										0	0
18-May-23	Chancellor	Chum	37	0.4								0										0	0
18-May-23	Chancellor	Chum	43	0.7								0										0	0
18-May-23	Chancellor	Pink	41	0.55								0										0	0
18-May-23	Chancellor	Pink	42	0.7								0										0	0
18-May-23	Chancellor	Pink	51	1.29								0										0	0
18-May-23	Chancellor	Pink	33	0.36								0										0	0
18-May-23	Chancellor	Pink	31	0.2								0										0	0
7-Jun-23	Chancellor	Chinook	102	13.19								0										0	0
7-Jun-23	Chancellor	Chinook	85	7.76								0	1	3								4	4
7-Jun-23	Chancellor	Chinook	92	9.86								0										0	0
7-Jun-23	Chancellor	Chinook	88	9.5		1						1			1	1						2	3
7-Jun-23	Chancellor	Coho	100	13.84								0		1								1	1
7-Jun-23	Chancellor	Coho	95	9.86								0										0	0
7-Jun-23	Chancellor	Chinook	94	8.7								0		1								1	1
7-Jun-23	Chancellor	Coho	104	13.13								0										0	0
7-Jun-23	Chancellor	Chinook	84	7.72		1		1				2										0	2
7-Jun-23	Chancellor	Chinook	84	8.1	2	1						3										0	3
7-Jun-23	Chancellor	Chinook	97	10.25		1			1			2										0	2
7-Jun-23	Chancellor	Chinook	102	12.05								0										0	0
7-Jun-23	Chancellor	Chinook	95	9.55								0										0	0
7-Jun-23	Chancellor	Coho	99	11.77								0										0	0
7-Jun-23	Chancellor	Chinook	112	16.58								0										0	0
7-Jun-23	Chancellor	Coho	97	10.92								0			1							1	1
7-Jun-23	Chancellor	Coho	98	10.17								0										0	0
7-Jun-23	Chancellor	Chinook	95	10.81								0										0	0
7-Jun-23	Chancellor	Chinook	82	7.75	1		1		1			3										0	3
7-Jun-23	Chancellor	Coho	104	12.61								0										0	0
7-Jun-23	Chancellor	Coho	99	9.35								0			1							1	1
7-Jun-23	Chancellor	Chinook	88	10.23			1					1	1									1	2
7-Jun-23	Chancellor	Chinook	95	10.63								0										0	0
7-Jun-23	Chancellor	Chinook	92	9.97			1			1		1										0	1
7-Jun-23	Chancellor	Chinook	70	3.93		1						1										0	1

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	One Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
17-May-23	Cordero	Chum	40	0.64								0										0	0
17-May-23	Cordero	Chum	43	0.82								0										0	0
17-May-23	Cordero	Chum	39	0.56								0										0	0
17-May-23	Cordero	Chum	40	0.81								0										0	0
17-May-23	Cordero	Chum	44	1								0										0	0
17-May-23	Cordero	Chum	42	0.73								0										0	0
17-May-23	Cordero	Chum	39	0.61								0										0	0
17-May-23	Cordero	Chum	49	1.1								0										0	0
17-May-23	Cordero	Chum	42	0.77								0										0	0
17-May-23	Cordero	Chum	36	0.44								0										0	0
17-May-23	Cordero	Chum	41	0.87								0										0	0
17-May-23	Cordero	Chum	41	0.79								0										0	0
17-May-23	Cordero	Chum	42	0.72								0										0	0
17-May-23	Cordero	Chum	39	0.6								0										0	0
17-May-23	Cordero	Chum	46	0.95								0										0	0
17-May-23	Cordero	Chum	43	8.0								0										0	0
17-May-23	Cordero	Chum	50	1.3								0										0	0
17-May-23	Cordero	Chum	44	0.87								0										0	0
17-May-23	Cordero	Chum	40	0.74								0										0	0
17-May-23	Cordero	Chum	40	0.62								0										0	0
17-May-23	Cordero	Chum	36	0.51								0										0	0
17-May-23	Cordero	Chum	44	0.9								0										0	0
17-May-23	Cordero	Chum	51	1.34								0										0	0
17-May-23	Cordero	Chum	45	0.87								0										0	0
17-May-23	Cordero	Chum	37	0.58								0										0	0
17-May-23	Cordero	Chum	36	0.46								0										0	0
17-May-23	Cordero	Chum	38	0.51								0										0	0
17-May-23	Cordero	Chum	33	0.38								0										0	0
17-May-23	Cordero	Chum	35	0.33								0										0	0
17-May-23	Cordero	Chum	40	0.6								0										0	0
17-May-23	Cordero	Pink	46	1.09								0										0	0
17-May-23	Cordero	Pink	31	0.35								0										0	0
17-May-23	Cordero	Pink	40	0.67								0										0	0
17-May-23	Cordero	Pink	41	0.64								0										0	0
17-May-23	Cordero	Pink	41	0.71								0										0	0
17-May-23	Cordero	Pink	38	0.42								0										0	0
17-May-23	Cordero	Pink	36	0.45								0										0	0
17-May-23	Cordero	Pink	40	0.74								0										0	0
17-May-23	Cordero	Pink	36	0.53								0										0	0

Data	O'te News	Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Co	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
17-May-23	Cordero	Pink	35	0.47								0										0	0
17-May-23	Cordero	Pink	45	1.03								0										0	0
17-May-23	Cordero	Pink	35	0.44								0										0	0
17-May-23	Cordero	Pink	40	0.57								0			1							1	1
17-May-23	Cordero	Pink	40	0.75								0										0	0
17-May-23	Cordero	Pink	34	0.45								0										0	0
17-May-23	Cordero	Pink	42	0.78								0										0	0
17-May-23	Cordero	Chum	40	0.67								0										0	0
17-May-23	Cordero	Pink	32	0.49								0										0	0
17-May-23	Cordero	Pink	34	0.49								0										0	0
17-May-23	Cordero	Pink	39	0.7								0										0	0
17-May-23	Cordero	Pink	30	0.25								0										0	0
17-May-23	Cordero	Pink	33	0.33								0										0	0
17-May-23	Cordero	Pink	40	0.62								0										0	0
17-May-23	Cordero	Pink	31	0.28								0										0	0
17-May-23	Cordero	Pink	40	0.6								0										0	0
17-May-23	Cordero	Chum	42	0.69								0										0	0
17-May-23	Cordero	Pink	31	0.34								0										0	0
17-May-23	Cordero	Pink	30	0.33								0										0	0
17-May-23	Cordero	Pink	41	0.58								0										0	0
17-May-23	Cordero	Pink	36	0.55								0										0	0
19-Apr-23	Deepwater Bay	Chum	39	0.5								0										0	0
19-Apr-23	Deepwater Bay	Chum	41	0.7								0										0	0
19-Apr-23	Deepwater Bay	Chum	39	0.5								0										0	0
19-Apr-23	Deepwater Bay	Chum	40	0.6								0										0	0
19-Apr-23	Deepwater Bay	Chum	40	0.6								0										0	0
19-Apr-23	Deepwater Bay	Chum	37	0.5								0										0	0
19-Apr-23	Deepwater Bay	Chum	37	0.4								0										0	0
19-Apr-23	Deepwater Bay	Chum	43	0.8								0										0	0
19-Apr-23	Deepwater Bay	Chum	39	0.5								0										0	0
19-Apr-23	Deepwater Bay	Chum	41	0.8								0										0	0
19-Apr-23	Deepwater Bay	Chum	40	0.6								0										0	0
19-Apr-23	Deepwater Bay	Pink	43	0.7								0										0	0
19-Apr-23	Deepwater Bay	Chum	38	0.4								0										0	0
19-Apr-23	Deepwater Bay	Chum	40	0.5								0										0	0
19-Apr-23	Deepwater Bay	Pink	34	0.3								0										0	0
19-Apr-23	Deepwater Bay	Pink	33	0.3								0										0	0
19-Apr-23	Deepwater Bay	Pink	32	0.3								0										0	0
19-Apr-23	Deepwater Bay	Pink	33	0.3								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	One Hame	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
19-Apr-23	Deepwater Bay	Pink	32	0.26								0										0	0
19-Apr-23	Deepwater Bay	Pink	31	0.26								0										0	0
19-Apr-23	Deepwater Bay	Pink	31	0.3								0										0	0
19-Apr-23	Deepwater Bay	Pink	35	0.3								0										0	0
19-Apr-23	Deepwater Bay	Pink	32	0.3								0										0	0
19-Apr-23	Deepwater Bay	Pink	34	0.4								0										0	0
19-Apr-23	Deepwater Bay	Pink	34	0.4								0										0	0
17-May-23	Deepwater Bay	Chum	45	1.04								0										0	0
17-May-23	Deepwater Bay	Chum	43	0.92								0										0	0
17-May-23	Deepwater Bay	Chum	46	1.03								0										0	0
17-May-23	Deepwater Bay	Chum	47	1.14								0										0	0
17-May-23	Deepwater Bay	Chum	50	1.32								0										0	0
17-May-23	Deepwater Bay	Chum	46	1.26								0										0	0
17-May-23	Deepwater Bay	Chum	47	1.22								0										0	0
17-May-23	Deepwater Bay	Chum	41	0.68								0										0	0
17-May-23	Deepwater Bay	Chum	44	0.86								0										0	0
17-May-23	Deepwater Bay	Chum	50	1.13								0										0	0
17-May-23	Deepwater Bay	Chum	48	1.19								0										0	0
17-May-23	Deepwater Bay	Chum	40	0.71								0										0	0
17-May-23	Deepwater Bay	Chum	43	0.85								0										0	0
17-May-23	Deepwater Bay	Chum	40	0.67								0										0	0
17-May-23	Deepwater Bay	Chum	45	0.95								0										0	0
17-May-23	Deepwater Bay	Chum	40	0.74								0										0	0
17-May-23	Deepwater Bay	Chum	43	0.93								0										0	0
17-May-23	Deepwater Bay	Chum	43	0.81								0										0	0
17-May-23	Deepwater Bay	Chum	42	0.67								0										0	0
17-May-23	Deepwater Bay	Chum	46	1.11								0										0	0
17-May-23	Deepwater Bay	Chum	45	0.93								0										0	0
17-May-23	Deepwater Bay	Chum	42	0.82								0										0	0
17-May-23	Deepwater Bay	Chum	45	0.97								0										0	0
17-May-23	Deepwater Bay	Chum	46	1.09								0										0	0
17-May-23	Deepwater Bay	Chum	44	0.87								0										0	0
17-May-23	Deepwater Bay	Chum	44	0.77								0										0	0
17-May-23	Deepwater Bay	Chum	40	0.6								0										0	0
17-May-23	Deepwater Bay	Chum	43	0.81								0										0	0
17-May-23	Deepwater Bay	Chum	45	0.99								0										0	0
6-Jun-23	Deepwater Bay	Chinook	100	11.57								0										0	0
6-Jun-23	Deepwater Bay	Chinook	89	7.67								0										0	0
6-Jun-23	Deepwater Bay	Chinook	89	8.61								0										0	0

5.	O: 11	Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
6-Jun-23	Deepwater Bay	Chinook	90	8.01								0										0	0
6-Jun-23	Deepwater Bay	Chinook	107	15.39								0										0	0
6-Jun-23	Deepwater Bay	Chinook	73	5.09		1						1										0	1
6-Jun-23	Deepwater Bay	Chinook	84	6.59								0										0	0
6-Jun-23	Deepwater Bay	Chinook	96	9.98								0										0	0
6-Jun-23	Deepwater Bay	Chinook	100	10.86								0										0	0
6-Jun-23	Deepwater Bay	Chinook	86	8.27								0										0	0
6-Jun-23	Deepwater Bay	Chinook	85	7.24								0										0	0
6-Jun-23	Deepwater Bay	Chinook	99	11.75								0										0	0
6-Jun-23	Deepwater Bay	Chinook	86	7.71		1						1										0	1
6-Jun-23	Deepwater Bay	Chinook	88	8								0										0	0
6-Jun-23	Deepwater Bay	Chinook	92	9.72								0										0	0
19-Apr-23	Discovery	Pink	31	0.23								0										0	0
17-May-23	Discovery	Chum	34	0.38								0										0	0
17-May-23	Discovery	Chum	36	0.35								0										0	0
17-May-23	Discovery	Pink	33	0.28								0										0	0
17-May-23	Discovery	Pink	30	0.26								0										0	0
17-May-23	Discovery	Pink	32	0.21								0										0	0
6-Jun-23	Discovery	Pink	57	1.59								0										0	0
6-Jun-23	Discovery	Pink	48	1.1								0										0	0
6-Jun-23	Discovery	Coho	102	12								0										0	0
6-Jun-23	Discovery	Pink	53	1.57								0										0	0
19-Apr-23	Fanny Bay	Pink	33	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	30	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	33	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	33	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	31	0.2								0										0	0
19-Apr-23	Fanny Bay	Pink	34	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	36	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	33	0.25								0										0	0
19-Apr-23	Fanny Bay	Pink	33	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	29	0.2								0										0	0
19-Apr-23	Fanny Bay	Pink	35	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	35	0.4								0										0	0
19-Apr-23	Fanny Bay	Pink	34	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	32	0.3								0										0	0
19-Apr-23	Fanny Bay	Pink	38	0.5								0										0	0
19-Apr-23	Fanny Bay	Pink	36	0.4								0										0	0
19-Apr-23	Fanny Bay	Pink	33	0.2								0										0	0

		Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Co	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
19-Apr-23	Fanny Bay	Chum	42	0.7								0										0	0
19-Apr-23	Fanny Bay	Chum	40	0.7								0										0	0
19-Apr-23	Fanny Bay	Chum	38	0.4								0										0	0
19-Apr-23	Fanny Bay	Chum	37	0.5								0										0	0
19-Apr-23	Fanny Bay	Chinook	45	0.7								0										0	0
19-Apr-23	Fanny Bay	Chinook	40	0.6								0										0	0
6-Jun-23	Fanny Bay	Chum	64	2.55								0										0	0
6-Jun-23	Fanny Bay	Chum	54	1.52								0										0	0
6-Jun-23	Fanny Bay	Chinook	53	1.68								0										0	0
6-Jun-23	Fanny Bay	Chinook	53	2.05								0										0	0
6-Jun-23	Fanny Bay	Pink	30	0.19								0										0	0
6-Jun-23	Fanny Bay	Pink	61	1.67								0										0	0
6-Jun-23	Fanny Bay	Pink	52	1.16								0										0	0
21-Apr-23	Francisco Point	Chum	33	0.5								0										0	0
21-Apr-23	Francisco Point	Chum	35	0.4								0										0	0
21-Apr-23	Francisco Point	Chum	34	0.3								0										0	0
21-Apr-23	Francisco Point	Chum	34	0.4								0										0	0
21-Apr-23	Francisco Point	Chum	38	0.5								0										0	0
21-Apr-23	Francisco Point	Chum	35	0.4								0										0	0
21-Apr-23	Francisco Point	Chum	36	0.4								0										0	0
21-Apr-23	Francisco Point	Chum	33	0.36								0										0	0
21-Apr-23	Francisco Point	Chum	34	0.37								0										0	0
21-Apr-23	Francisco Point	Chum	44	0.6								0										0	0
21-Apr-23	Francisco Point	Pink	29	0.2								0										0	0
21-Apr-23	Francisco Point	Pink	36	0.6								0										0	0
21-Apr-23	Francisco Point	Pink	30	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	31	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	34	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	30	0.2								0										0	0
21-Apr-23	Francisco Point	Pink	32	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	34	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	35	0.4								0										0	0
21-Apr-23	Francisco Point	Pink	32	0.26								0										0	0
21-Apr-23	Francisco Point	Pink	28	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	27	0.2								0										0	0
21-Apr-23	Francisco Point	Pink	29	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	32	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	30	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	31	0.2								0										0	0

Date	Site Name	Fish Species	Length (mm)	Weight	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CAL PAF	CAL AM	CAL AF	CAL Total	Total Sea
		•	` ′	(g)	CO	Ci	CZ	PAIVI	PAF	Alvi	AF		CO	Ci	C2	C3	C4	PAIVI	FAF	Alvi	АГ		Lice
21-Apr-23	Francisco Point	Pink	29	0.26								0										0	0
21-Apr-23	Francisco Point	Pink	30	0.4								0										0	0
21-Apr-23	Francisco Point	Pink	29	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	31	0.2								0										0	0
21-Apr-23	Francisco Point	Pink	30	0.26								0										0	0
21-Apr-23	Francisco Point	Pink	29	0.26								0										0	0
21-Apr-23	Francisco Point	Pink	32	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	31	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	30	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	32	0.27								0										0	0
21-Apr-23	Francisco Point	Pink	32	0.3								0										0	0
21-Apr-23	Francisco Point	Pink	32	0.2								0										0	0
21-Apr-23	Francisco Point	Pink	31	0.2								0										0	0
21-Apr-23	Francisco Point	Pink	29	0.3								0										0	0
19-May-23	Francisco Point	Pink	43	0.76								0										0	0
19-May-23	Francisco Point	Pink	51	1.22								0										0	0
19-May-23	Francisco Point	Pink	47	1.34								0										0	0
19-May-23	Francisco Point	Pink	45	1.03								0										0	0
19-May-23	Francisco Point	Pink	43	0.85								0										0	0
19-May-23	Francisco Point	Pink	43	0.9								0										0	0
19-May-23	Francisco Point	Chum	52	1.44								0										0	0
19-May-23	Francisco Point	Chum	41	0.72								0										0	0
19-May-23	Francisco Point	Chum	59	2.31								0		1								1	1
19-May-23	Francisco Point	Chum	76	4.05								0										0	0
19-May-23	Francisco Point	Chum	45	0.95								0										0	0
19-May-23	Francisco Point	Chum	49	1.19								0										0	0
19-May-23	Francisco Point	Coho	85	7.92								0										0	0
19-May-23	Francisco Point	Coho	86	8.52								0										0	0
19-May-23	Francisco Point	Coho	92	11.19								0										0	0
19-Apr-23	Knox Bay	Pink	29	0.21								0										0	0
19-Apr-23	Knox Bay	Pink	29	0.21								0										0	0
19-Apr-23	Knox Bay	Pink	31	0.26								0										0	0
19-Apr-23	Knox Bay	Pink	29	0.24								0										0	0
19-Apr-23	Knox Bay	Pink	29	0.18								0										0	0
19-Apr-23	Knox Bay	Pink	28	0.22								0										0	0
21-Apr-23	Marina Island	Chum	44	0.8								0										0	0
21-Apr-23	Marina Island	Pink	32	0.26								0										0	0
19-May-23	Marina Island	Pink	35	0.44								0										0	0
19-Apr-23	Nodales	Chum	36	0.4								0										0	0

5 .	0:- 11	Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
19-Apr-23	Nodales	Chum	34	0.4								0										0	0
19-Apr-23	Nodales	Chum	38	0.5								0										0	0
19-Apr-23	Nodales	Chum	38	0.5								0										0	0
19-Apr-23	Nodales	Chum	37	0.5								0										0	0
19-Apr-23	Nodales	Chum	35	0.4								0										0	0
19-Apr-23	Nodales	Chum	37	0.4								0										0	0
19-Apr-23	Nodales	Chum	35	0.5								0										0	0
19-Apr-23	Nodales	Chum	34	0.4								0										0	0
19-Apr-23	Nodales	Chum	34	0.3								0										0	0
19-Apr-23	Nodales	Chum	40	0.5								0										0	0
19-Apr-23	Nodales	Chum	36	0.4								0										0	0
19-Apr-23	Nodales	Pink	28	0.3								0										0	0
19-Apr-23	Nodales	Pink	29	0.2								0										0	0
19-Apr-23	Nodales	Pink	34	0.3								0										0	0
19-Apr-23	Nodales	Pink	30	0.3								0										0	0
19-Apr-23	Nodales	Pink	31	0.2								0										0	0
19-Apr-23	Nodales	Pink	30	0.3								0										0	0
19-Apr-23	Nodales	Pink	31	0.3								0										0	0
19-Apr-23	Nodales	Pink	29	0.3								0										0	0
19-Apr-23	Nodales	Pink	30	0.3								0										0	0
19-Apr-23	Nodales	Pink	32	0.3								0										0	0
19-Apr-23	Nodales	Pink	31	0.3								0										0	0
19-Apr-23	Nodales	Pink	30	0.3								0										0	0
19-Apr-23	Nodales	Pink	29	0.3								0										0	0
19-Apr-23	Nodales	Pink	29	0.2								0										0	0
19-Apr-23	Nodales	Pink	30	0.3								0										0	0
19-Apr-23	Nodales	Pink	33	0.3								0										0	0
19-Apr-23	Nodales	Pink	31	0.3								0										0	0
16-May-23	Nodales	Pink	29	0.26								0										0	0
16-May-23	Nodales	Pink	27	0.24								0										0	0
16-May-23	Nodales	Pink	30	0.32								0										0	0
16-May-23	Nodales	Pink	34	0.33								0										0	0
16-May-23	Nodales	Pink	30	0.32								0										0	0
16-May-23	Nodales	Pink	32	0.28								0										0	0
16-May-23	Nodales	Pink	30	0.26								0										0	0
16-May-23	Nodales	Pink	31	0.22								0										0	0
16-May-23	Nodales	Pink	29	0.25								0										0	0
16-May-23	Nodales	Pink	31	0.28								0										0	0
16-May-23	Nodales	Pink	31	0.28								0				•						0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
16-May-23	Nodales	Pink	29	0.26								0										0	0
16-May-23	Nodales	Pink	32	0.32								0										0	0
16-May-23	Nodales	Pink	31	0.33								0										0	0
16-May-23	Nodales	Pink	29	0.23								0										0	0
16-May-23	Nodales	Pink	31	0.28								0										0	0
16-May-23	Nodales	Pink	31	0.34								0										0	0
16-May-23	Nodales	Pink	29	0.24								0										0	0
16-May-23	Nodales	Pink	32	0.35								0										0	0
16-May-23	Nodales	Pink	32	0.28								0										0	0
16-May-23	Nodales	Pink	31	0.26								0										0	0
16-May-23	Nodales	Pink	28	0.26								0										0	0
16-May-23	Nodales	Pink	30	0.27								0										0	0
16-May-23	Nodales	Pink	34	0.32								0										0	0
16-May-23	Nodales	Pink	33	0.32								0										0	0
16-May-23	Nodales	Pink	34	0.31								0										0	0
16-May-23	Nodales	Pink	34	0.31								0										0	0
16-May-23	Nodales	Pink	30	0.29								0										0	0
16-May-23	Nodales	Pink	34	0.39								0										0	0
16-May-23	Nodales	Pink	35	0.31								0										0	0
16-May-23	Nodales	Chum	32	0.25								0										0	0
16-May-23	Nodales	Chum	55	1.53								0										0	0
16-May-23	Nodales	Chum	36	0.47								0										0	0
17-May-23	Nodales	Chum	35	0.36								0										0	0
17-May-23	Nodales	Chum	55	1.89								0										0	0
17-May-23	Nodales	Chum	39	0.65								0										0	0
17-May-23	Nodales	Chum	37	0.47								0										0	0
17-May-23	Nodales	Pink	35	0.41								0										0	0
17-May-23	Nodales	Pink	38	0.51								0										0	0
17-May-23	Nodales	Pink	32	0.24								0										0	0
17-May-23	Nodales	Pink	30	0.23								0										0	0
17-May-23	Nodales	Pink	33	0.33								0										0	0
17-May-23	Nodales	Pink	32	0.27								0										0	0
17-May-23	Nodales	Pink	31	0.24								0										0	0
17-May-23	Nodales	Pink	32	0.24								0										0	0
17-May-23	Nodales	Pink	32	0.26								0										0	0
17-May-23	Nodales	Pink	30	0.23								0										0	0
6-Jun-23	Nodales	Pink	41	0.66								0										0	0
6-Jun-23	Nodales	Pink	43	0.84								0										0	0
6-Jun-23	Nodales	Pink	40	0.7								0								_		0	0

Date	Site Name	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CAL PAF	CAL	CAL AF	CAL Total	Total Sea
0.100	NI, Ialaa	·	, ,		00	01	O2	I AW	I AI	AW	Ai		00	01	OZ.	03	04	I AW	1 71	AW	Ai		Lice
6-Jun-23	Nodales	Pink	46	1								0		4								0	0
6-Jun-23	Nodales	Pink	44	0.8								0		1								1	1
6-Jun-23	Nodales	Pink	62	2.31								0		_								0	0
6-Jun-23	Nodales	Pink	61	2.5								0		1								1	1
6-Jun-23	Nodales	Pink	44	1.02								0										0	0
6-Jun-23	Nodales	Pink	48	1.34								0										0	0
6-Jun-23	Nodales	Pink	46	0.91								0		1		1						2	2
6-Jun-23	Nodales	Pink	40	0.78								0										0	0
6-Jun-23	Nodales	Pink	35	0.52								0										0	0
6-Jun-23	Nodales	Pink	55	1.6								0										0	0
6-Jun-23	Nodales	Pink	44	0.83								0										0	0
6-Jun-23	Nodales	Pink	40	0.66								0										0	0
6-Jun-23	Nodales	Pink	44	0.97								0										0	0
6-Jun-23	Nodales	Pink	41	0.81								0	1									1	1
6-Jun-23	Nodales	Pink	35	0.43								0	1	1								2	2
6-Jun-23	Nodales	Pink	41	0.71								0										0	0
6-Jun-23	Nodales	Pink	54	1.46								0										0	0
6-Jun-23	Nodales	Pink	54	1.68								0		1								1	1
6-Jun-23	Nodales	Pink	43	0.82								0										0	0
6-Jun-23	Nodales	Pink	47	1.07								0										0	0
6-Jun-23	Nodales	Pink	37	0.53								0		1								1	1
6-Jun-23	Nodales	Pink	36	0.51								0										0	0
6-Jun-23	Nodales	Pink	47	1.03								0										0	0
6-Jun-23	Nodales	Pink	39	0.6								0		1	2							3	3
6-Jun-23	Nodales	Pink	54	1.53								0										0	0
6-Jun-23	Nodales	Pink	42	0.68								0		1								1	1
6-Jun-23	Nodales	Pink	45	0.91								0										0	0
6-Jun-23	Nodales	Chum	50	1.25								0										0	0
6-Jun-23	Nodales	Chum	55	1.72								0										0	0
19-Apr-23	Okisollo	Chum	39	0.8								0										0	0
19-Apr-23	Okisollo	Chum	46	1.3								0										0	0
19-Apr-23	Okisollo	Chum	37	1.3								0										0	0
19-Apr-23	Okisollo	Chum	49	0.6								0										0	0
19-Apr-23	Okisollo	Chum	38	0.5								0										0	0
19-Apr-23	Okisollo	Chum	42	0.8								0										0	0
19-Apr-23	Okisollo	Chum	46	1.2		1						1										0	1
19-Apr-23	Okisollo	Chum	46	1.2								0										0	0
19-Apr-23	Okisollo	Chum	43	0.7								0										0	0
19-Apr-23	Okisollo	Chum	49	1.4								0										0	0

Date	Site Name	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL Total	Total Sea
19-Apr-23	Okisollo	Chum	52	1.4								0			1							1	Lice 1
19-Apr-23	Okisollo	Chum	42	0.7								0			•							0	0
19-Apr-23	Okisollo	Chum	42	0.7								0										0	0
19-Apr-23	Okisollo	Chum	38	0.6								0										0	0
19-Apr-23	Okisollo	Chum	47	1								0										0	0
19-Apr-23	Okisollo	Chum	46	0.5								0										0	0
19-Apr-23	Okisollo	Chum	49	1.2								0										0	0
19-Apr-23	Okisollo	Chum	39	0.6								0										0	0
19-Apr-23	Okisollo	Chum	37	0.5								0										0	0
19-Apr-23	Okisollo	Chum	45	0.9								0										0	0
19-Apr-23	Okisollo	Chum	40	0.8								0										0	0
19-Apr-23	Okisollo	Chum	45	1.2								0										0	0
19-Apr-23	Okisollo	Chum	37	0.5								0										0	0
19-Apr-23	Okisollo	Chum	48	1.3								0										0	0
19-Apr-23	Okisollo	Chum	51	1.3								0										0	0
19-Apr-23	Okisollo	Chum	42	0.8								0										0	0
19-Apr-23	Okisollo	Chum	37	0.5								0										0	0
19-Apr-23	Okisollo	Chum	38	0.6								0										0	0
19-Apr-23	Okisollo	Chum	34	0.4								0										0	0
19-Apr-23	Okisollo	Chum	39	0.7								0										0	0
19-Apr-23	Okisollo	Pink	31	0.3								0										0	0
19-Apr-23	Okisollo	Pink	29	0.2								0										0	0
19-Apr-23	Okisollo	Pink	42	0.7								0										0	0
19-Apr-23	Okisollo	Pink	32	0.4								0										0	0
19-Apr-23	Okisollo	Pink	34	0.4								0										0	0
19-Apr-23	Okisollo	Pink	44	0.7								0										0	0
19-Apr-23	Okisollo	Pink	35	0.4								0										0	0
19-Apr-23	Okisollo	Pink	30	0.3								0										0	0
17-May-23	Okisollo	Chum	57	2.05								0										0	0
17-May-23	Okisollo	Chum	52	2.05								0										0	0
17-May-23	Okisollo	Chum	63	2.57								0										0	0
17-May-23	Okisollo	Chum	53	2.05								0				1						1	1
17-May-23	Okisollo	Chum	39	0.58	1							1										0	1
17-May-23	Okisollo	Chum	44	0.89								0										0	0
17-May-23	Okisollo	Chum	50	1.2	1	1						2										0	2
17-May-23	Okisollo	Chum	53	1.53								0		1								1	1
17-May-23	Okisollo	Chum	47	1.02								0										0	0
17-May-23	Okisollo	Chum	62	2.18								0										0	0
17-May-23	Okisollo	Chum	62	2.68								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	One Hame	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
17-May-23	Okisollo	Chum	44	0.86								0										0	0
17-May-23	Okisollo	Chum	49	1.39								0										0	0
17-May-23	Okisollo	Chum	57	1.87								0										0	0
17-May-23	Okisollo	Chum	70	3.71								0										0	0
17-May-23	Okisollo	Chum	56	1.69								0										0	0
17-May-23	Okisollo	Chum	53	1.61								0										0	0
17-May-23	Okisollo	Chum	69	3.87								0										0	0
17-May-23	Okisollo	Chum	64	2.81								0										0	0
17-May-23	Okisollo	Chum	63	2.92								0										0	0
17-May-23	Okisollo	Chum	52	1.57	1							1			1							1	2
17-May-23	Okisollo	Chum	57	2.17								0										0	0
17-May-23	Okisollo	Chum	59	2.47								0										0	0
17-May-23	Okisollo	Chum	53	1.63								0										0	0
17-May-23	Okisollo	Chum	32	0.28								0										0	0
17-May-23	Okisollo	Chum	49	1.16								0										0	0
17-May-23	Okisollo	Pink	44	0.88								0										0	0
17-May-23	Okisollo	Pink	52	1.39								0										0	0
17-May-23	Okisollo	Pink	40	0.61								0										0	0
6-Jun-23	Okisollo	Pink	81	5.61								0	1									1	1
6-Jun-23	Okisollo	Pink	80	5.02								0										0	0
6-Jun-23	Okisollo	Chum	75	4.9								0										0	0
6-Jun-23	Okisollo	Chum	71	3.7								0										0	0
6-Jun-23	Okisollo	Chum	58	2.48								0										0	0
6-Jun-23	Okisollo	Chinook	90	10.84								0										0	0
6-Jun-23	Okisollo	Chinook	91	9.04								0										0	0
17-May-23	Owen Bay	Coho	90	7.34								0										0	0
17-May-23	Owen Bay	Coho	80	5.92								0										0	0
17-May-23	Owen Bay	Coho	85	6.90								0										0	0
6-Jun-23	Owen Bay	Sockeye	89	7.17								0										0	0
6-Jun-23	Owen Bay	Chinook	88	9.58								0										0	0
6-Jun-23	Owen Bay	Coho	70	4.72								0										0	0
6-Jun-23	Owen Bay	Coho	96	11.83								0										0	0
6-Jun-23	Owen Bay	Coho	50	1.67								0										0	0
20-Apr-23	Primary 1	Chum	40	0.7								0										0	0
18-May-23	Primary 1	Pink	32	0.33								0	1									1	1
18-May-23	Primary 1	Pink	28	0.21								0										0	0
18-May-23	Primary 1	Pink	27	0.2								0										0	0
18-May-23	Primary 1	Pink	31	0.28								0										0	0
18-May-23	Primary 1	Pink	59	2.07								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
18-May-23	Primary 1	Pink	60	2.23								0										0	0
7-Jun-23	Primary 3	Pink	45	0.71								0										0	0
20-Apr-23	Race Passage	Pink	26	0.2								0										0	0
20-Apr-23	Race Passage	Pink	28	0.2								0										0	0
18-May-23	Race Passage	Pink	30	0.25								0										0	0
18-May-23	Race Passage	Pink	31	0.21								0										0	0
18-May-23	Race Passage	Pink	33	0.29								0										0	0
18-May-23	Race Passage	Pink	32	0.34								0										0	0
18-May-23	Race Passage	Pink	30	0.27								0										0	0
18-May-23	Race Passage	Pink	32	0.25								0										0	0
18-May-23	Race Passage	Pink	29	0.26								0										0	0
18-May-23	Race Passage	Pink	33	0.28								0										0	0
18-May-23	Race Passage	Pink	33	0.23								0										0	0
18-May-23	Race Passage	Pink	30	0.18								0										0	0
18-May-23	Race Passage	Pink	35	0.35								0										0	0
18-May-23	Race Passage	Pink	30	0.27								0										0	0
18-May-23	Race Passage	Pink	31	0.24								0										0	0
18-May-23	Race Passage	Pink	29	0.23								0										0	0
18-May-23	Race Passage	Pink	31	0.3								0										0	0
18-May-23	Race Passage	Pink	33	0.3								0										0	0
18-May-23	Race Passage	Pink	30	0.29								0										0	0
18-May-23	Race Passage	Pink	31	0.27								0										0	0
18-May-23	Race Passage	Pink	30	0.22								0										0	0
18-May-23	Race Passage	Pink	32	0.3								0										0	0
18-May-23	Race Passage	Pink	30	0.21								0										0	0
18-May-23	Race Passage	Pink	31	0.26								0										0	0
18-May-23	Race Passage	Pink	34	0.27								0										0	0
18-May-23	Race Passage	Pink	31	0.26								0										0	0
18-May-23	Race Passage	Pink	36	0.39								0										0	0
18-May-23	Race Passage	Pink	31	0.31								0										0	0
18-May-23	Race Passage	Pink	31	0.32								0										0	0
18-May-23	Race Passage	Pink	30	0.22								0										0	0
18-May-23	Race Passage	Pink	34	0.34								0										0	0
18-May-23	Race Passage	Pink	32	0.28								0										0	0
18-May-23	Race Passage	Chinook	43	1.00								0	1									1	1
7-Jun-23	Race Passage	Chinook	54	1.7								0										0	0
7-Jun-23	Race Passage	Chum	40	0.67								0										0	0
7-Jun-23	Race Passage	Chum	60	2.09				1				1										0	1
7-Jun-23	Race Passage	Pink	47	1.13								0										0	0

		Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Co	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
7-Jun-23	Race Passage	Pink	46	0.87								0										0	0
7-Jun-23	Race Passage	Pink	40	0.6								0										0	0
7-Jun-23	Race Passage	Pink	45	1.18								0										0	0
7-Jun-23	Race Passage	Pink	44	0.98								0										0	0
7-Jun-23	Race Passage	Pink	45	1.06								0										0	0
7-Jun-23	Race Passage	Pink	48	1.06								0										0	0
7-Jun-23	Race Passage	Pink	32	0.37								0										0	0
7-Jun-23	Race Passage	Pink	44	0.84								0										0	0
7-Jun-23	Race Passage	Pink	45	1.09								0										0	0
7-Jun-23	Race Passage	Pink	46	0.99								0										0	0
7-Jun-23	Race Passage	Pink	49	1.05								0										0	0
7-Jun-23	Race Passage	Pink	38	0.57								0										0	0
7-Jun-23	Race Passage	Pink	45	0.82								0										0	0
7-Jun-23	Race Passage	Pink	44	0.85								0										0	0
7-Jun-23	Race Passage	Pink	38	0.5								0										0	0
7-Jun-23	Race Passage	Pink	37	0.5								0			1							1	1
7-Jun-23	Race Passage	Pink	41	0.57								0										0	0
7-Jun-23	Race Passage	Pink	36	0.36								0										0	0
7-Jun-23	Race Passage	Pink	43	0.74								0										0	0
7-Jun-23	Race Passage	Pink	40	0.58								0										0	0
7-Jun-23	Race Passage	Pink	33	0.35								0										0	0
7-Jun-23	Race Passage	Pink	34	0.39								0										0	0
7-Jun-23	Race Passage	Pink	46	0.85								0										0	0
7-Jun-23	Race Passage	Pink	44	0.83								0										0	0
7-Jun-23	Race Passage	Pink	42	0.6								0										0	0
7-Jun-23	Race Passage	Pink	43	0.82								0										0	0
7-Jun-23	Race Passage	Pink	33	0.33								0										0	0
7-Jun-23	Race Passage	Pink	44	0.75								0										0	0
7-Jun-23	Race Passage	Pink	44	0.93								0										0	0
19-May-23	Raza	Chum	45	1.05								0										0	0
19-May-23	Raza	Chum	46	0.91								0										0	0
19-May-23	Raza	Chum	39	0.48								0										0	0
19-May-23	Raza	Chum	39	0.52								0										0	0
19-May-23	Raza	Chum	40	0.47								0										0	0
19-May-23	Raza	Chum	42	0.65								0										0	0
19-May-23	Raza	Chum	42	0.69								0										0	0
19-May-23	Raza	Chum	42	0.66								0										0	0
19-May-23	Raza	Chum	41	0.62								0										0	0
19-May-23	Raza	Chum	44	0.68								0										0	0

Data	O'te News	Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
19-May-23	Raza	Chum	49	1.25								0										0	0
19-May-23	Raza	Chum	40	0.51								0										0	0
8-Jun-23	Raza	Chum	46	0.94								0										0	0
8-Jun-23	Raza	Chum	56	1.69								0										0	0
8-Jun-23	Raza	Chum	47	1.12								0										0	0
8-Jun-23	Raza	Chum	54	1.49								0										0	0
8-Jun-23	Raza	Chum	45	0.81								0										0	0
8-Jun-23	Raza	Chum	51	1.35								0										0	0
8-Jun-23	Raza	Chum	45	0.88								0			1							1	1
8-Jun-23	Raza	Chum	56	1.84								0										0	0
8-Jun-23	Raza	Chum	57	2.05								0										0	0
8-Jun-23	Raza	Chum	51	1.49								0										0	0
8-Jun-23	Raza	Chum	62	2.61								0										0	0
8-Jun-23	Raza	Chum	51	1.21								0										0	0
8-Jun-23	Raza	Chum	50	1.16								0										0	0
8-Jun-23	Raza	Chum	48	1.21								0										0	0
21-Apr-23	Raza North	Chum	37	0.45								0										0	0
21-Apr-23	Raza North	Chum	38	0.52								0										0	0
21-Apr-23	Raza North	Chum	40	0.8								0										0	0
21-Apr-23	Raza North	Chum	39	0.66								0										0	0
21-Apr-23	Raza North	Chum	38	0.56								0										0	0
21-Apr-23	Raza North	Chum	36	0.48								0										0	0
21-Apr-23	Raza North	Chum	37	0.51								0										0	0
21-Apr-23	Raza North	Chum	35	0.37								0										0	0
21-Apr-23	Raza North	Chum	41	0.66								0										0	0
21-Apr-23	Raza North	Chum	37	0.49								0										0	0
21-Apr-23	Raza North	Chum	35	0.5								0										0	0
21-Apr-23	Raza North	Chum	37	0.43								0										0	0
21-Apr-23	Raza North	Pink	30	0.27								0										0	0
19-May-23	Raza North	Chum	49	1.12								0										0	0
19-May-23	Raza North	Chum	45	0.89								0										0	0
19-May-23	Raza North	Chum	46	1.02								0										0	0
19-May-23	Raza North	Chum	49	1.05								0										0	0
19-May-23	Raza North	Chum	48	0.95								0										0	0
19-May-23	Raza North	Chum	56	1.66								0										0	0
19-May-23	Raza North	Chum	44	0.98								0										0	0
19-May-23	Raza North	Chum	49	1.1								0										0	0
19-May-23	Raza North	Chum	39	0.64								0										0	0
19-May-23	Raza North	Chum	54	1.4								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Bate	One Hame	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
19-May-23	Raza North	Chum	53	1.4								0										0	0
19-May-23	Raza North	Chum	49	1.16								0										0	0
19-May-23	Raza North	Chum	46	0.97								0										0	0
19-May-23	Raza North	Chum	56	1.71								0										0	0
19-May-23	Raza North	Chum	47	1								0										0	0
19-May-23	Raza North	Chum	46	0.9								0										0	0
19-May-23	Raza North	Chum	46	1.06								0										0	0
19-May-23	Raza North	Chum	49	1.07								0										0	0
19-May-23	Raza North	Chum	35	0.38								0										0	0
19-May-23	Raza North	Chum	58	1.9								0										0	0
19-May-23	Raza North	Chum	37	0.4								0										0	0
19-May-23	Raza North	Chum	53	1.5								0										0	0
19-May-23	Raza North	Chum	54	1.57								0										0	0
19-May-23	Raza North	Chum	35	0.35								0										0	0
19-May-23	Raza North	Chum	53	1.4								0										0	0
19-May-23	Raza North	Chum	50	1.3								0										0	0
19-May-23	Raza North	Chum	35	0.36								0										0	0
19-May-23	Raza North	Chum	46	0.98								0										0	0
19-May-23	Raza North	Chum	45	0.92								0										0	0
19-May-23	Raza North	Chum	40	0.66								0										0	0
19-May-23	Raza North	Pink	49	1.28								0										0	0
8-Jun-23	Raza North	Pink	54	1.68								0										0	0
8-Jun-23	Raza North	Pink	66	3.08								0										0	0
21-Apr-23	Rebecca Spit	Chum	33	0.26								0										0	0
21-Apr-23	Rebecca Spit	Chum	39	0.5								0										0	0
21-Apr-23	Rebecca Spit	Chum	34	0.36								0										0	0
19-May-23	Rebecca Spit	Chum	34	0.4								0										0	0
8-Jun-23	Rebecca Spit	Pink	75	5.01								0										0	0
8-Jun-23	Rebecca Spit	Pink	66	3.3								0										0	0
8-Jun-23	Rebecca Spit	Pink	67	3.59								0										0	0
8-Jun-23	Rebecca Spit	Pink	62	2.63								0										0	0
8-Jun-23	Rebecca Spit	Pink	80	6.23								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.33								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.22								0										0	0
19-Apr-23	Rock Bay	Pink	30	0.24								0										0	0
19-Apr-23	Rock Bay	Pink	29	0.3								0										0	0
19-Apr-23	Rock Bay	Pink	33	0.35								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.38								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.34								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	One Hame	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
19-Apr-23	Rock Bay	Pink	31	0.31								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.3								0										0	0
19-Apr-23	Rock Bay	Pink	30	0.22								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.3								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.27								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.31								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.33								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.33								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.29								0										0	0
19-Apr-23	Rock Bay	Pink	35	0.4								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.35								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.35								0										0	0
19-Apr-23	Rock Bay	Pink	35	0.34								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.35								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.33								0										0	0
19-Apr-23	Rock Bay	Pink	35	0.46								0										0	0
19-Apr-23	Rock Bay	Pink	34	0.44								0										0	0
19-Apr-23	Rock Bay	Pink	29	0.29								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.33								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.3								0										0	0
19-Apr-23	Rock Bay	Pink	32	0.27								0										0	0
19-Apr-23	Rock Bay	Pink	31	0.31								0										0	0
19-Apr-23	Rock Bay	Pink	35	0.46								0										0	0
19-Apr-23	Rock Bay	Chum	35	0.54								0										0	0
19-Apr-23	Rock Bay	Chum	38	0.59								0										0	0
19-Apr-23	Rock Bay	Chum	42	0.83								0										0	0
19-Apr-23	Rock Bay	Chum	65	2.73								0	1									1	1
19-Apr-23	Rock Bay	Chum	36	0.51								0										0	0
19-Apr-23	Rock Bay	Chum	38	0.57								0										0	0
19-Apr-23	Rock Bay	Chum	43	0.83								0										0	0
19-Apr-23	Rock Bay	Chum	44	0.7								0										0	0
19-Apr-23	Rock Bay	Chum	38	0.73								0										0	0
19-Apr-23	Rock Bay	Chum	41	0.7	1							1										0	1
19-Apr-23	Rock Bay	Chum	56	2.03								0										0	0
19-Apr-23	Rock Bay	Chum	38	0.63								0										0	0
19-Apr-23	Rock Bay	Chum	36	0.37								0										0	0
19-Apr-23	Rock Bay	Chum	45	1.07								0										0	0
19-Apr-23	Rock Bay	Chum	43	0.86								0										0	0
19-Apr-23	Rock Bay	Chum	42	0.78								0										0	0

_		Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
19-Apr-23	Rock Bay	Chum	37	0.52								0										0	0
19-Apr-23	Rock Bay	Chum	40	0.64								0										0	0
19-Apr-23	Rock Bay	Chum	43	0.76								0										0	0
19-Apr-23	Rock Bay	Chum	37	0.48								0										0	0
19-Apr-23	Rock Bay	Chum	40	0.73								0										0	0
19-Apr-23	Rock Bay	Chum	35	0.42								0										0	0
19-Apr-23	Rock Bay	Chum	40	0.79								0										0	0
19-Apr-23	Rock Bay	Chum	40	0.65								0										0	0
19-Apr-23	Rock Bay	Chum	55	2.25								0										0	0
19-Apr-23	Rock Bay	Chum	34	0.52								0										0	0
19-Apr-23	Rock Bay	Chum	55	1.9								0										0	0
19-Apr-23	Rock Bay	Chum	36	0.5								0										0	0
19-Apr-23	Rock Bay	Chum	43	0.98								0										0	0
19-Apr-23	Rock Bay	Chum	44	0.9								0										0	0
17-May-23	Rock Bay	Pink	48	1.4								0										0	0
17-May-23	Rock Bay	Pink	60	2.41								0										0	0
17-May-23	Rock Bay	Pink	28	0.22								0										0	0
6-Jun-23	Rock Bay	Pink	35	0.47								0										0	0
8-Jun-23	SE Hill Island	Pink	67	3.34								0										0	0
8-Jun-23	SE Hill Island	Chum	58	2.54								0										0	0
8-Jun-23	SE Hill Island	Chum	80	5.02								0										0	0
8-Jun-23	SE Hill Island	Chum	52	1.41	1							1										0	1
8-Jun-23	SE Hill Island	Chum	78	5.1								0										0	0
19-Apr-23	Shoal Bay	Chum	39	0.54								0										0	0
19-Apr-23	Shoal Bay	Chum	33	0.4								0										0	0
19-Apr-23	Shoal Bay	Chum	35	0.45								0										0	0
19-Apr-23	Shoal Bay	Chum	37	0.49								0										0	0
19-Apr-23	Shoal Bay	Chum	35	0.4								0										0	0
19-Apr-23	Shoal Bay	Chum	35	0.4								0										0	0
19-Apr-23	Shoal Bay	Chum	36	0.43								0										0	0
19-Apr-23	Shoal Bay	Chum	33	0.32								0										0	0
19-Apr-23	Shoal Bay	Chum	34	0.39								0										0	0
19-Apr-23	Shoal Bay	Chum	34	0.38								0										0	0
19-Apr-23	Shoal Bay	Chum	33	0.37								0										0	0
19-Apr-23	Shoal Bay	Chum	36	0.47								0										0	0
19-Apr-23	Shoal Bay	Chum	36	0.44								0										0	0
19-Apr-23	Shoal Bay	Chum	34	0.38								0										0	0
19-Apr-23	Shoal Bay	Chum	35	0.39								0										0	0
19-Apr-23	Shoal Bay	Chum	33	0.33								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	Sile Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Co	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
19-Apr-23	Shoal Bay	Chum	38	0.46								0										0	0
19-Apr-23	Shoal Bay	Chum	37	0.46								0										0	0
19-Apr-23	Shoal Bay	Chum	33	0.33								0										0	0
19-Apr-23	Shoal Bay	Chum	35	0.41								0										0	0
19-Apr-23	Shoal Bay	Chum	35	0.35								0										0	0
19-Apr-23	Shoal Bay	Chum	40	0.77								0										0	0
19-Apr-23	Shoal Bay	Chum	36	0.49								0										0	0
19-Apr-23	Shoal Bay	Chum	34	0.41								0										0	0
19-Apr-23	Shoal Bay	Chum	35	0.48								0										0	0
19-Apr-23	Shoal Bay	Chum	34	0.35								0										0	0
19-Apr-23	Shoal Bay	Chum	36	0.44								0										0	0
19-Apr-23	Shoal Bay	Chum	36	0.45								0										0	0
19-Apr-23	Shoal Bay	Chum	37	0.51								0										0	0
19-Apr-23	Shoal Bay	Chum	36	0.54								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.25								0										0	0
19-Apr-23	Shoal Bay	Pink	28	0.21								0										0	0
19-Apr-23	Shoal Bay	Pink	29	0.27								0										0	0
19-Apr-23	Shoal Bay	Pink	23	0.21								0										0	0
19-Apr-23	Shoal Bay	Pink	32	0.31								0										0	0
19-Apr-23	Shoal Bay	Pink	32	0.29								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.29								0										0	0
19-Apr-23	Shoal Bay	Pink	32	0.25								0										0	0
19-Apr-23	Shoal Bay	Pink	32	0.3								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.28								0										0	0
19-Apr-23	Shoal Bay	Pink	30	0.28								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.32								0										0	0
19-Apr-23	Shoal Bay	Pink	34	0.3								0										0	0
19-Apr-23	Shoal Bay	Pink	34	0.3								0										0	0
19-Apr-23	Shoal Bay	Pink	27	0.2								0										0	0
19-Apr-23	Shoal Bay	Pink	27	0.2								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.24								0										0	0
19-Apr-23	Shoal Bay	Pink	32	0.33								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.27								0										0	0
19-Apr-23	Shoal Bay	Pink	29	0.2								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.23								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.25								0										0	0
19-Apr-23	Shoal Bay	Pink	30	0.22								0										0	0
19-Apr-23	Shoal Bay	Pink	30	0.25								0										0	0
19-Apr-23	Shoal Bay	Pink	31	0.22								0										0	0

Date	Site Name	Fish	Length	Weight	LEP	Cal	Total Sea																
Date	Sile Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Lice
19-Apr-23	Shoal Bay	Pink	32	0.32								0										0	0
19-Apr-23	Shoal Bay	Pink	27	0.24								0										0	0
19-Apr-23	Shoal Bay	Pink	32	0.3								0										0	0
19-Apr-23	Shoal Bay	Pink	32	0.37								0										0	0
19-Apr-23	Shoal Bay	Pink	32	0.27								0										0	0
16-May-23	Shoal Bay	Pink	30	0.29								0										0	0
16-May-23	Shoal Bay	Pink	29	0.24								0										0	0
16-May-23	Shoal Bay	Pink	30	0.23								0										0	0
16-May-23	Shoal Bay	Pink	27	0.22								0										0	0
16-May-23	Shoal Bay	Pink	32	0.26								0										0	0
16-May-23	Shoal Bay	Pink	31	0.27								0										0	0
16-May-23	Shoal Bay	Pink	39	0.32								0										0	0
16-May-23	Shoal Bay	Pink	32	0.3								0										0	0
16-May-23	Shoal Bay	Pink	28	0.21								0										0	0
16-May-23	Shoal Bay	Pink	30	0.24								0										0	0
16-May-23	Shoal Bay	Pink	33	0.33								0										0	0
16-May-23	Shoal Bay	Pink	30	0.22								0										0	0
16-May-23	Shoal Bay	Pink	43	0.66								0										0	0
16-May-23	Shoal Bay	Pink	33	0.29								0										0	0
16-May-23	Shoal Bay	Pink	30	0.26								0										0	0
16-May-23	Shoal Bay	Pink	32	0.26								0										0	0
16-May-23	Shoal Bay	Pink	31	0.24								0										0	0
16-May-23	Shoal Bay	Pink	31	0.24								0										0	0
16-May-23	Shoal Bay	Pink	33	0.24								0										0	0
16-May-23	Shoal Bay	Pink	30	0.24								0										0	0
16-May-23	Shoal Bay	Pink	31	0.28								0										0	0
16-May-23	Shoal Bay	Pink	29	0.25								0										0	0
16-May-23	Shoal Bay	Pink	29	0.25								0										0	0
16-May-23	Shoal Bay	Pink	29	0.24								0										0	0
16-May-23	Shoal Bay	Pink	32	0.25								0										0	0
16-May-23	Shoal Bay	Pink	31	0.29								0										0	0
16-May-23	Shoal Bay	Pink	31	0.25								0										0	0
16-May-23	Shoal Bay	Pink	32	0.31								0										0	0
16-May-23	Shoal Bay	Pink	31	0.25								0										0	0
16-May-23	Shoal Bay	Pink	30	0.27								0										0	0
16-May-23	Shoal Bay	Chum	37	0.41								0										0	0
16-May-23	Shoal Bay	Chum	55	1.78								0										0	0
16-May-23	Shoal Bay	Chum	44	0.75								0										0	0
16-May-23	Shoal Bay	Chum	38	0.57								0										0	0

Data	Cita Nama	Fish	Length	Weight	LEP	Cal	Total																
Date	Site Name	Species	(mm)	(g)	Со	C1	C2	PAM	PAF	AM	AF	Total	Со	C1	C2	C3	C4	PAM	PAF	AM	AF	Total	Sea Lice
6-Jun-23	Shoal Bay	Pink	34	0.36								0										0	0
6-Jun-23	Shoal Bay	Pink	37	0.47								0			1							1	1
6-Jun-23	Shoal Bay	Pink	39	0.6								0										0	0
6-Jun-23	Shoal Bay	Pink	39	0.58								0										0	0
6-Jun-23	Shoal Bay	Pink	35	0.46								0										0	0
6-Jun-23	Shoal Bay	Pink	38	0.54								0										0	0
6-Jun-23	Shoal Bay	Pink	36	0.5								0										0	0
6-Jun-23	Shoal Bay	Pink	38	0.49								0		1								1	1
6-Jun-23	Shoal Bay	Pink	38	0.54								0										0	0
6-Jun-23	Shoal Bay	Pink	37	0.49								0										0	0
6-Jun-23	Shoal Bay	Pink	37	0.62								0										0	0
6-Jun-23	Shoal Bay	Pink	38	0.5								0										0	0
6-Jun-23	Shoal Bay	Chum	43	0.77								0										0	0
6-Jun-23	Shoal Bay	Pink	36	0.47								0										0	0
6-Jun-23	Shoal Bay	Pink	34	0.43								0										0	0
6-Jun-23	Shoal Bay	Pink	36	0.47								0										0	0
6-Jun-23	Shoal Bay	Pink	36	0.42								0										0	0
6-Jun-23	Shoal Bay	Pink	37	0.44								0										0	0
6-Jun-23	Shoal Bay	Pink	38	0.51								0										0	0
6-Jun-23	Shoal Bay	Pink	37	0.45								0										0	0
6-Jun-23	Shoal Bay	Pink	37	0.53								0										0	0
6-Jun-23	Shoal Bay	Pink	37	0.4								0										0	0
6-Jun-23	Shoal Bay	Pink	35	0.53								0										0	0
6-Jun-23	Shoal Bay	Pink	37	0.49								0										0	0
6-Jun-23	Shoal Bay	Pink	34	0.46								0			1							1	1
6-Jun-23	Shoal Bay	Pink	35	0.44								0										0	0
6-Jun-23	Shoal Bay	Pink	38	0.51								0										0	0
6-Jun-23	Shoal Bay	Pink	40	0.58								0										0	0
6-Jun-23	Shoal Bay	Pink	36	0.56								0										0	0
6-Jun-23	Shoal Bay	Pink	44	0.79								0										0	0
6-Jun-23	Shoal Bay	Pink	36	0.48								0										0	0
6-Jun-23	Shoal Bay	Chum	57	1.8								0										0	0
6-Jun-23	Shoal Bay	Chum	42	0.82								0										0	0
6-Jun-23	Shoal Bay	Chum	57	1.84			1					1										0	1
6-Jun-23	Shoal Bay	Chum	40	0.88								0										0	0
6-Jun-23	Shoal Bay	Chum	53	1.52								0										0	0
6-Jun-23	Shoal Bay	Chum	45	0.99								0										0	0
18-May-23	Sunderland	Coho	86	8.14								0										0	0
18-May-23	Sunderland	Chinook	62	3.41								0										0	0

Date	Site Name	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL	CAL PAF	CAL	CAL AF	CAL Total	Total Sea
7-Jun-23	Sunderland	Coho	100	10.53				1 7 1111		7 1111	7		1		1		•		- 7	7 1111	7		Lice
7-Jun-23	Sunderland	Coho	112	15.28		2						0	I	1	ı							2	4
	Sunderland		81	6.43		1						1	1	'								2	4
7-Jun-23		Coho Pink				1						0	1	2								3	
7-Jun-23	Sunderland		48	1.05		1	4					0										0	0
7-Jun-23	Sunderland	Pink Pink	36	0.38		1	1					2			1							0	2
7-Jun-23	Sunderland Wallbara Channel	Pink	43	0.77		1						0			1							1	
18-May-23	Wellbore Channel Wellbore Channel	Pink	35 37	0.56 0.62	- 1	ı						0										0	0
18-May-23		_																				0	
18-May-23	Wellbore Channel	Chum	34	0.4								0										0	0
18-May-23	Wellbore Channel	Chum	35	0.53								0										0	0
18-May-23	Wellbore Channel	Chum	38	0.63								0										0	0
7-Jun-23	Wellbore Channel	Pink	58	2.08								0										0	0
7-Jun-23	Wellbore Channel	Pink	59	2.12								0										0	0
7-Jun-23	Wellbore Channel	Pink	61	2.21								0										0	0
7-Jun-23	Wellbore Channel	Pink	58	1.83								0										0	0
7-Jun-23	Wellbore Channel	Pink	63	2.1								0										0	0
7-Jun-23	Wellbore Channel	Pink	41	0.69								0										0	0
7-Jun-23	Wellbore Channel	Pink	65	2.75								0										0	0
7-Jun-23	Wellbore Channel	Pink	55	1.61								0										0	0
7-Jun-23	Wellbore Channel	Pink	52	1.25								0										0	0
7-Jun-23	Wellbore Channel	Pink	50	1.2								0										0	0
7-Jun-23	Wellbore Channel	Pink	66	2.87								0										0	0
7-Jun-23	Wellbore Channel	Pink	65	2.26								0										0	0
7-Jun-23	Wellbore Channel	Pink	60	1.97								0										0	0
7-Jun-23	Wellbore Channel	Pink	70	3.18								0										0	0
7-Jun-23	Wellbore Channel	Chum	62	2.32								0										0	0
7-Jun-23	Wellbore Channel	Pink	56	1.81								0										0	0
7-Jun-23	Wellbore Channel	Pink	56	1.74								0										0	0
7-Jun-23	Wellbore Channel	Pink	64	2.28								0										0	0
7-Jun-23	Wellbore Channel	Pink	57	1.75								0										0	0
7-Jun-23	Wellbore Channel	Pink	65	2.82								0										0	0
7-Jun-23	Wellbore Channel	Pink	56	1.89								0										0	0
7-Jun-23	Wellbore Channel	Pink	64	2.49								0										0	0
7-Jun-23	Wellbore Channel	Pink	58	2.02								0										0	0
7-Jun-23	Wellbore Channel	Pink	54	1.49								0										0	0
7-Jun-23	Wellbore Channel	Pink	58	1.99								0										0	0
7-Jun-23	Wellbore Channel	Pink	61	2.19								0										0	0
7-Jun-23	Wellbore Channel	Pink	63	2.25								0										0	0
7-Jun-23	Wellbore Channel	Pink	62	2.52								0										0	0

Date	Site Name	Fish Species	Length (mm)	Weight (g)	LEP Co	LEP C1	LEP C2	LEP PAM	LEP PAF	LEP AM	LEP AF	LEP Total	Cal Co	Cal C1	Cal C2	Cal C3	Cal C4	CAL PAM	CAL PAF	CAL AM	CAL AF	CAL Total	Total Sea Lice
7-Jun-23	Wellbore Channel	Pink	55	1.7								0										0	0
7-Jun-23	Wellbore Channel	Pink	62	2.7								0										0	0
7-Jun-23	Wellbore Channel	Pink	61	2.34								0										0	0
7-Jun-23	Wellbore Channel	Chum	67	3.3								0										0	0
7-Jun-23	Wellbore Channel	Chum	68	3.36								0										0	0
7-Jun-23	Wellbore Channel	Chum	55	1.56								0										0	0
7-Jun-23	Wellbore Channel	Chum	69	3.51								0										0	0
7-Jun-23	Wellbore Channel	Chum	68	3.31								0										0	0
7-Jun-23	Wellbore Channel	Chum	60	2.02								0										0	0
7-Jun-23	Wellbore Channel	Chum	55	1.6								0										0	0
7-Jun-23	Wellbore Channel	Chum	58	2.02								0										0	0
7-Jun-23	Wellbore Channel	Chum	66	2.64								0										0	0
7-Jun-23	Wellbore Channel	Chum	70	3.25								0										0	0
7-Jun-23	Wellbore Channel	Chum	60	2.14								0										0	0
7-Jun-23	Wellbore Channel	Chum	56	1.77								0										0	0
7-Jun-23	Wellbore Channel	Chum	51	1.45								0										0	0
7-Jun-23	Wellbore Channel	Chum	60	1.97								0										0	0
7-Jun-23	Wellbore Channel	Chum	53	1.48						1		1										0	1
7-Jun-23	Wellbore Channel	Chum	60	2.14								0										0	0
7-Jun-23	Wellbore Channel	Chum	51	1.22								0										0	0
7-Jun-23	Wellbore Channel	Chum	60	2.37								0										0	0
7-Jun-23	Wellbore Channel	Chum	59	2.18								0										0	0
7-Jun-23	Wellbore Channel	Chum	67	2.84								0										0	0
7-Jun-23	Wellbore Channel	Chum	72	3.8								0										0	0