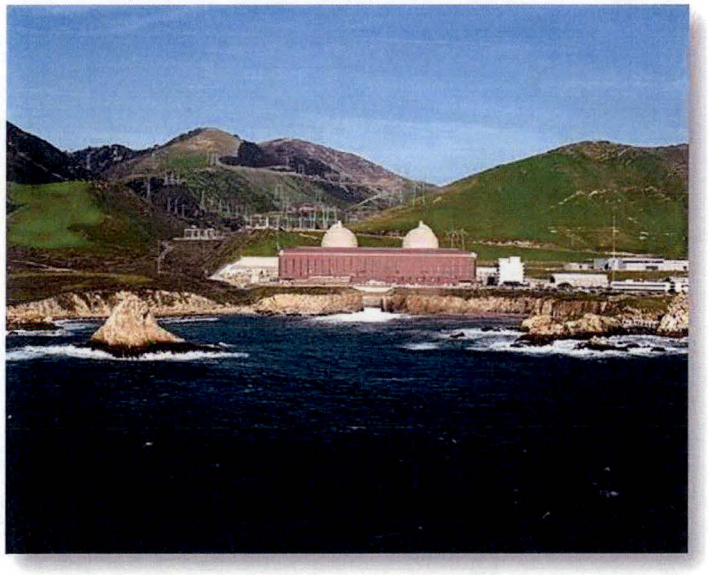
Pacific Gas and Electric Company
Diablo Canyon Power Plant

NPDES RECEIVING WATER MONITORING PROGRAM: 2020 ANNUAL REPORT



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1.0 Introduction

The Diablo Canyon Power Plant (DCPP) is a nuclear power plant located on the central coast of California between Avila Beach and Morro Bay (**Figure 1**). The facility uses seawater from the Pacific Ocean for cooling. The seawater enters the plant through a shoreline intake structure in the Intake Cove and is discharged via a shoreline outfall in Diablo Cove. Monitoring of the marine environment near the Diablo Canyon Power Plant (DCPP) is required by WDR Order No. 90-09 (National Pollutant Discharge Elimination System (NPDES) Permit No. CA0003751), as revised in a letter from the Central Coast Regional Water Quality Control Board in December 1998. The monitoring is completed by the Receiving Water Monitoring Program (RWMP) in accordance with the NPDES Permit.

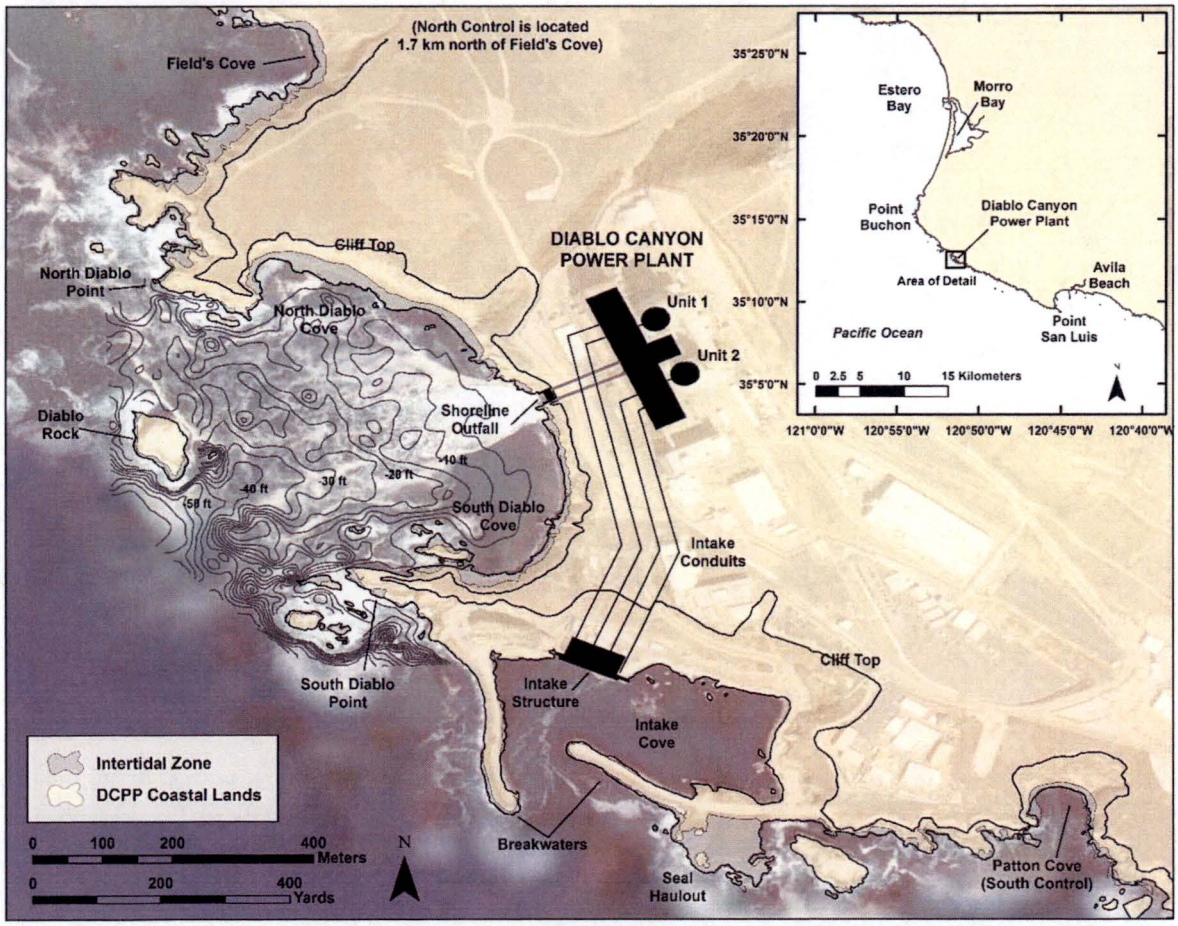

Figure 1. Location of the Diablo Canyon Power Plant.

This report presents the seawater temperature and biological data collected for the 2020 reporting period from the RWMP intertidal and subtidal monitoring tasks (**Table 1**). The sampling methods for each task are described in the report, and summary statistics from the 2020 sampling are presented in the report appendices.

Table 1. Tasks, stations, and frequency of surveys for the DCPP RWMP, 2020. (See text for sampling method descriptions and station locations).

Task and Sampling Frequency	Stations
Temperature Monitoring	
Intertidal (recorded every 20 min)	NC 2, FC 1, FC 2, FC 3, NDC 1, NDC 2, NDC 3, SDC 1, SDC 2, SDC 3, SDP 1, SDP 2, SC 1, and SC 1-V
Subtidal (recorded every 20 min)	NC 1 -3m, FC 1 -3m, NDC 2 -3m, NDC 3 -3m, NDC 4 -4m, SDC 1 -3m, SDC 4 -4m, SC 1 -3m, and SC 2 -6m
Intertidal Horizontal Band Transects (algae, seagrasses, invertebrates, substrate)	
4 surveys per year	NC 1, NC 2, FC 1, FC 2, FC 3, NDC 1, NDC 2, NDC 3, SDC 1, SDC 2, SDC 3, SDP 1, SDP 2, and SC 1
Intertidal Vertical Band Transects (fishes)	
4 surveys per year	NC 1V, FC 1V, NDC 1V, SDC 2V, and SC 1V
Subtidal Benthic Stations (algae, invertebrates, substrate)	
4 surveys per year	FC 1 -3m, NDC 2 -3m, NDC 3 -3m, NDC 4 -4m, SDC 2 -3m, SDC 3 -4m, SC 1 -3m, and SC 2 -6m
Subtidal Fish Observations (fishes)	
4 surveys per year	FC FO-1, FC FO-2, FC FO-3, NDC FO-1, NDC FO-2, NDC FO-3, SDC FO-1, SDC FO-2, SDC FO-3; SC FO-1, SC FO-2, and SC FO-3
Habitat-Forming Kelp Survey (bull kelp, giant kelp)	
1 survey per year	Diablo Cove

Intertidal and subtidal stations included in the RWMP are located in six areas; South Diablo Cove (SDC), North Diablo Cove (NDC), South Diablo Point (SDP), Fields Cove (FC), South Control (SC), and North Control (NC). Two sites (SC and NC) are sufficiently far from the plant that they do not experience increased seawater temperatures due to the discharge.

The timing of sampling was completed during 2020 in accordance with the NPDES permit. Habitat-forming kelp surveys were conducted once in 2020. Sampling for the remaining five tasks in **Table 1** occurred during four discrete time-periods (surveys) in 2020. The specific date a station was sampled within each survey was influenced by logistics, staffing resources, weather, sea state, and tide conditions. The survey date of each task listed in the appendix tables represents the mean date for the time period within which the task was completed.

All monitoring tasks and surveys were completed in the 2020 reporting period. This report does not include analysis or discussion of the results of the biological and temperature monitoring. Comprehensive analyses of changes in the marine environment resulting from the DCPP discharge have been presented in Tenera (1988, 1997, 1999a, 1999b, and 2002).

2.0 Temperature Monitoring

Intertidal and subtidal seawater temperatures were recorded at permanent stations located along the Diablo Canyon coastline. Temperature units at the intertidal stations shown in **Figure 2** were located along the rocky shore at the +0.6 m (+2.0 ft) mean lower low water (MLLW) elevation. The temperature recorders at the subtidal locations shown in **Figure 3** were located at depths of -3 m, -4 m, or -6 m (-10 ft, -13 ft, or -20 ft) MLLW. The naming designation for each station reflects the area location and station number. The station depth is indicated for the subtidal stations e.g., NDC 1 -3 m is North Diablo Cove subtidal Station 1 at a depth of -3 m (-10 ft) MLLW (see **Table 1**).

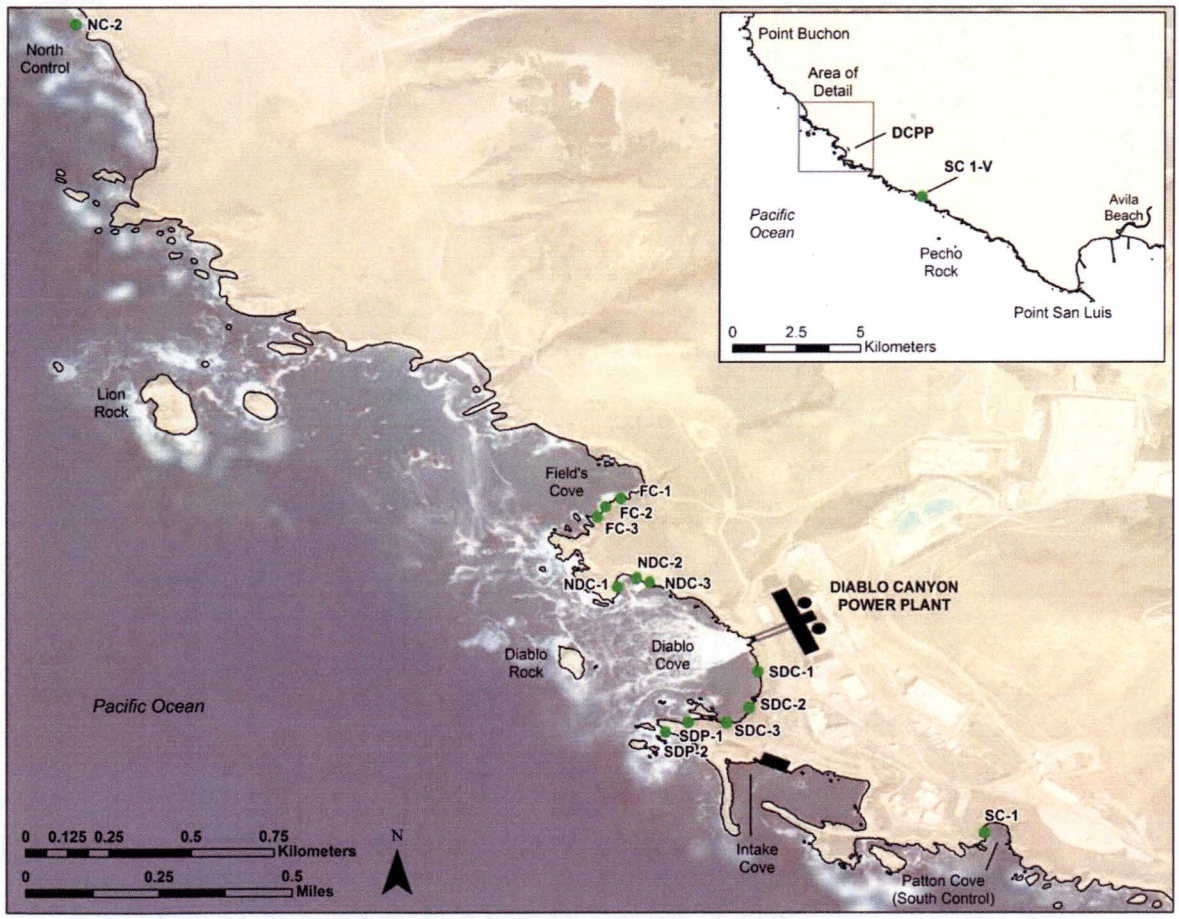

Figure 2. Locations of intertidal temperature monitoring stations.

There were 13 stations in Diablo Cove regularly contacted by the discharge plume:

Intertidal: NDC 1, NDC 2, NDC 3, SDC 1, SDC 2, SDC 3, SDP 1, and SDP 2.

Subtidal: NDC 2 -3m, NDC 3 -3m, NDC 4 -4m, SDC 1 -3m, and SDC 4 -4m.

There were four stations in Field's Cove, approximately one kilometer upcoast from Diablo Cove, contacted intermittently by the discharge plume:

Intertidal: FC 1, FC 2, and FC 3.

Subtidal: FC 1 -3m.

There were six control stations outside the influence of the discharge, which measured ambient ocean temperatures:

Intertidal: NC 2, SC 1, and SC 1V

Subtidal: NC 1 -3m, SC 1 -3m, and SC 2 -6m

The intertidal stations in South Control (SC 1) and Stillwater Cove (SC 1V) use the same acronym but are located in different locations as shown in **Figure 2**.

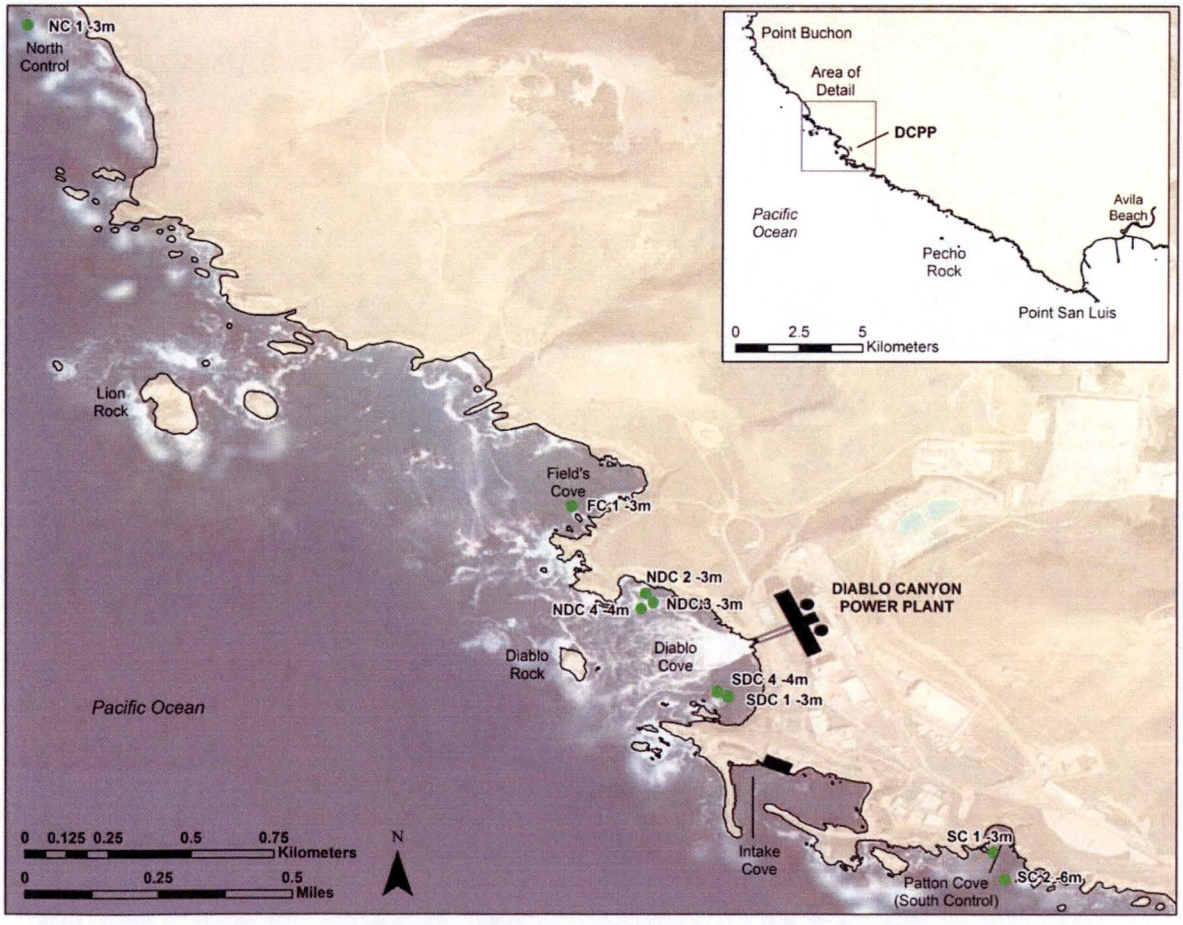

Figure 3. Locations of subtidal temperature monitoring stations.

Each temperature instrument synchronously logged temperatures every 20 minutes throughout its deployment period. Instrument precision was 0.025°C with an accuracy of ± 0.05°C. Temperature units were deployed at a station for approximately 60-90 days and then exchanged with a serviced, calibrated unit. Data from the intertidal temperature units were deleted prior to analysis when tide levels were less than the height of the sensors (+0.6 m [+2.0 ft] MLLW). Tide levels were determined using data from NOAA tide gauges at Morro Bay and Port San Luis.

Monthly statistics on the seawater temperatures recorded at the intertidal and subtidal temperature monitoring stations in 2020 are presented in **Appendix A** and **Appendix B**, respectively. Below is a summary of seawater temperatures recorded in 2020, based on data from temperature recording stations in the control areas, North Diablo Cove, South Diablo Cove, and Field's Cove.

Based on mean monthly temperature data, seawater temperatures throughout the study area are generally coolest from February through May and warmest from August through November. Measured seawater temperatures are coolest in the control areas, and warmest in Diablo Cove.

Intertidal monthly mean, maximum, and minimum temperatures recorded in 2020 in North Control (NC 2), South Diablo Cove (SDC 2), North Diablo Cove (NDC 2), and Field's Cove (FC 2) are shown in **Figure 4a**. Monthly mean ambient seawater temperatures at the North Control station ranged from a low of 12.1°C (53.8°F) in December to a high of 15.0°C (59.0°F) in October. Compared to the control station, intertidal seawater temperatures averaged 2.7°C (4.9°F) warmer in South Diablo Cove and 3.7°C (6.7°F) warmer in North Diablo Cove. Intertidal seawater temperatures at the Field's Cove station were 1.1°C (2.0°F) warmer than the control station, on average.

Subtidal monthly mean, maximum, and minimum temperatures recorded in 2020 at -3 m MLLW in South Diablo Cove (SDC 1 -3m), North Diablo Cove (NDC 2 -3m), and Field's Cove (FC 1 -3m) are shown in **Figure 4b**. The subtidal control temperature data normally used for comparison with temperatures from areas affected by the discharge are based on data from the South Control (SC 1 -3m) station. However, a temperature unit deployed at that station malfunctioned during a deployment and data were not recoverable from June 3 at 11:00AM PST through August 25 at 10:20AM PST. The subtidal control station temperatures presented in this figure were calculated by averaging available values recorded at the South Control (SC 1 -3m) station with those from the North Control (NC 1 -3m) station. A summary of these computed values is included in **Table B6**. Monthly mean ambient seawater temperatures using data from the two control stations ranged from a low of 11.9°C (53.4°F) in April to a high of 14.9°C (58.8°F) in October. Subtidal temperatures are usually warmest at the Diablo Cove stations in summer to early fall. Compared to the data from the control stations, subtidal temperatures averaged 2.1°C (3.8°F) warmer in South Diablo Cove and 3.8°C (6.8°F) warmer in North Diablo Cove. Subtidal temperatures at the Field's Cove station were 1.2°C (2.1°F) warmer on average than the data from the control stations.

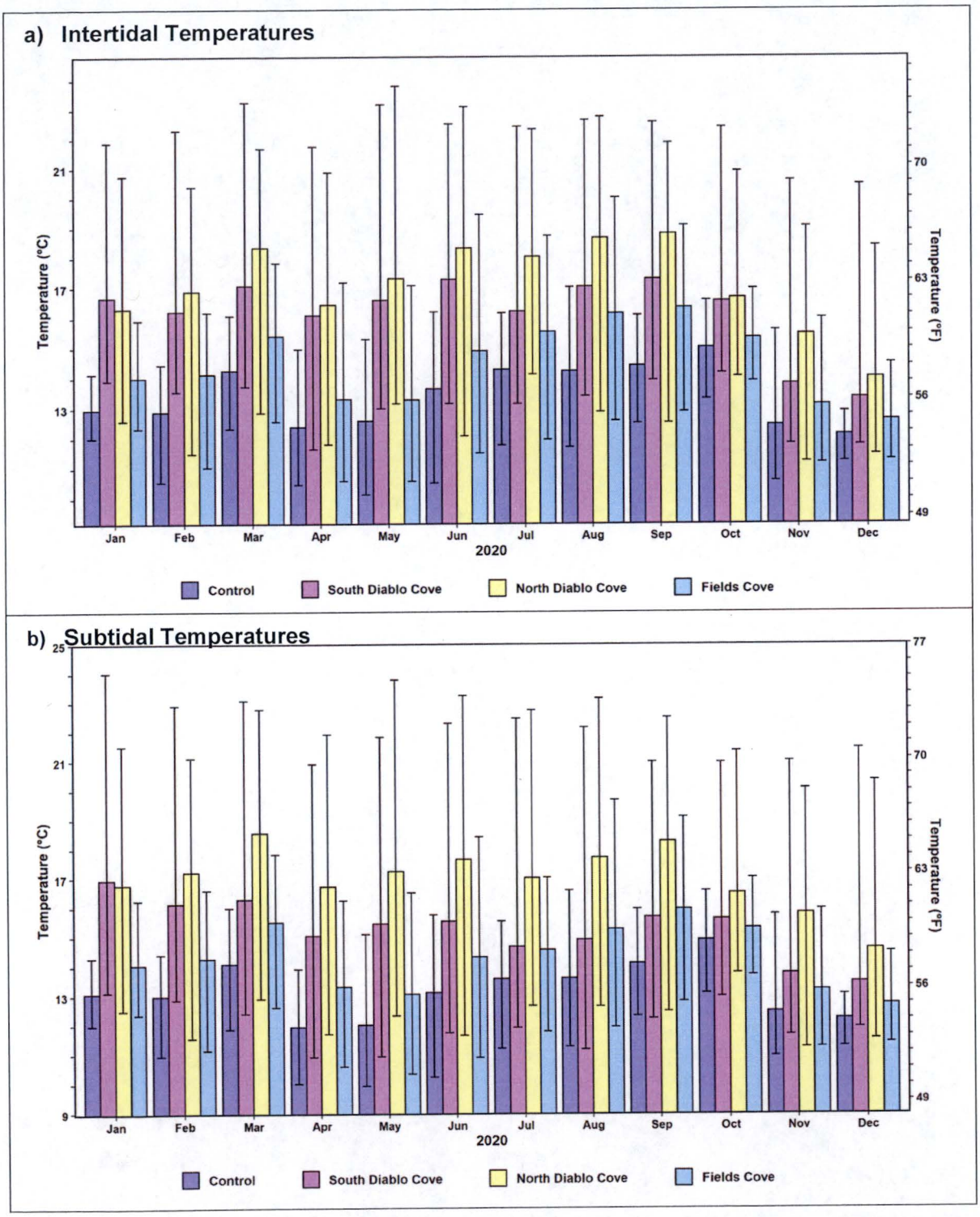

Figure 4. Seawater temperatures in 2020 recorded in control areas, South Diablo Cove, North Diablo Cove, and Field's Cove for: a) intertidal; and b) subtidal. Mean, maximum, and minimum temperatures are shown by month for each area (see text for temperature recording stations used in this figure).

DCPP typically operates at full capacity, however there were multiple periods in 2020 when one, two, and up to three of the four main circulating water pumps (CWPs) were not in service due to scheduled or emergent unit outages and curtailments. This resulted in lower daily discharge volumes. The effects of six outages or curtailments during 2020 on daily discharge volumes can be seen in Figure 5. A brief description of each CWP outage or curtailment period is listed below.

- February 13 – 16, 2020: Emergent Unit 2 forced outage. One Unit 2 CWP removed from service.
- May 07 – 11, 2020: Scheduled Unit 1 mid-cycle curtailment to clean biofouling growth from circulating water tunnels. One Unit 1 CWP removed from service.
- July 17 – August 02, 2020: Emergent Unit 2 forced outage. One Unit 2 CWP removed from service.
- October 03 – November 04, 2020: Scheduled Unit 1 refueling outage (1R22). Two Unit 1 CWPs removed from service.
- October 16 – November 11, 2020: Emergent Unit 2 forced outage. One Unit 2 CWP removed from service.
- December 02 – 04 & December 07 – 09, 2020: Scheduled Unit 2 cleaning of biofouling growth from circulating water tunnels. One Unit 2 CWP removed from service.

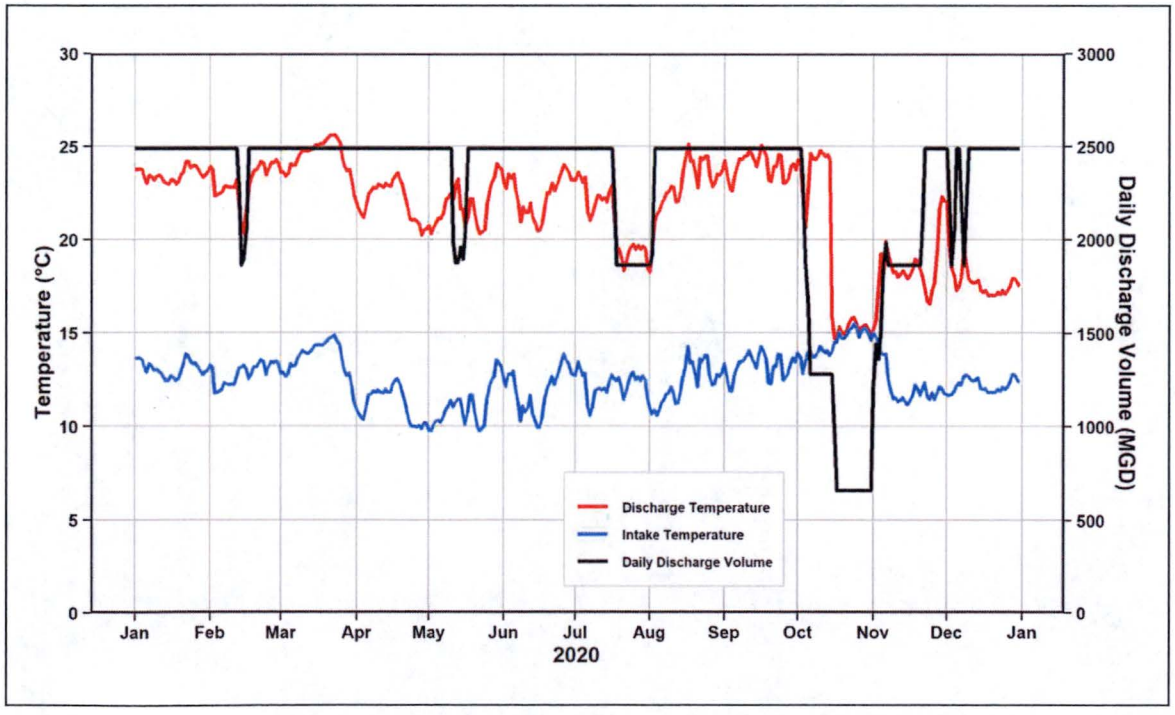

Figure 5. DCPP 2020 average daily intake and discharge seawater temperatures (°C), and daily cooling water discharge volume (MGD).

3.0 Intertidal Algae and Invertebrates

Intertidal algae, seagrasses, and invertebrates were sampled using the horizontal band transect (HBT) sampling method at the locations shown in **Figure 6**. Most HBT stations consisted of two 30 m long transects oriented parallel to the waterline, one at the +0.9 m (+3 ft) MLLW tide level and the other at the +0.3 m (+1 ft) MLLW tide level. Stations SDP 1 and SDP 2 each consisted of one transect at the +0.9 m (+3 ft) tide level. The substrate at the +0.9 m (+3 ft) MLLW level at station SDC 1 was mainly uncolonized cobble. Therefore, the upper transect at that station was located at a lower elevation at the +0.6 m (+2 ft) MLLW tide level on bedrock where intertidal species were more abundant. The sampling area of each transect consisted of ten 1.0 m^2 (10.8 ft^2) permanent quadrats. The quadrats were mainly located on bedrock and boulders, but various amounts of cobble and sand that occurred seasonally were also sampled. Data from temperature sensors indicate that three control stations were located outside the influence of the DCPP thermal discharge, while the remaining 11 stations in Field's Cove, Diablo Cove, and on South Diablo Point (south headland of Diablo Cove) had varying levels of contact with the warm water from the discharge.

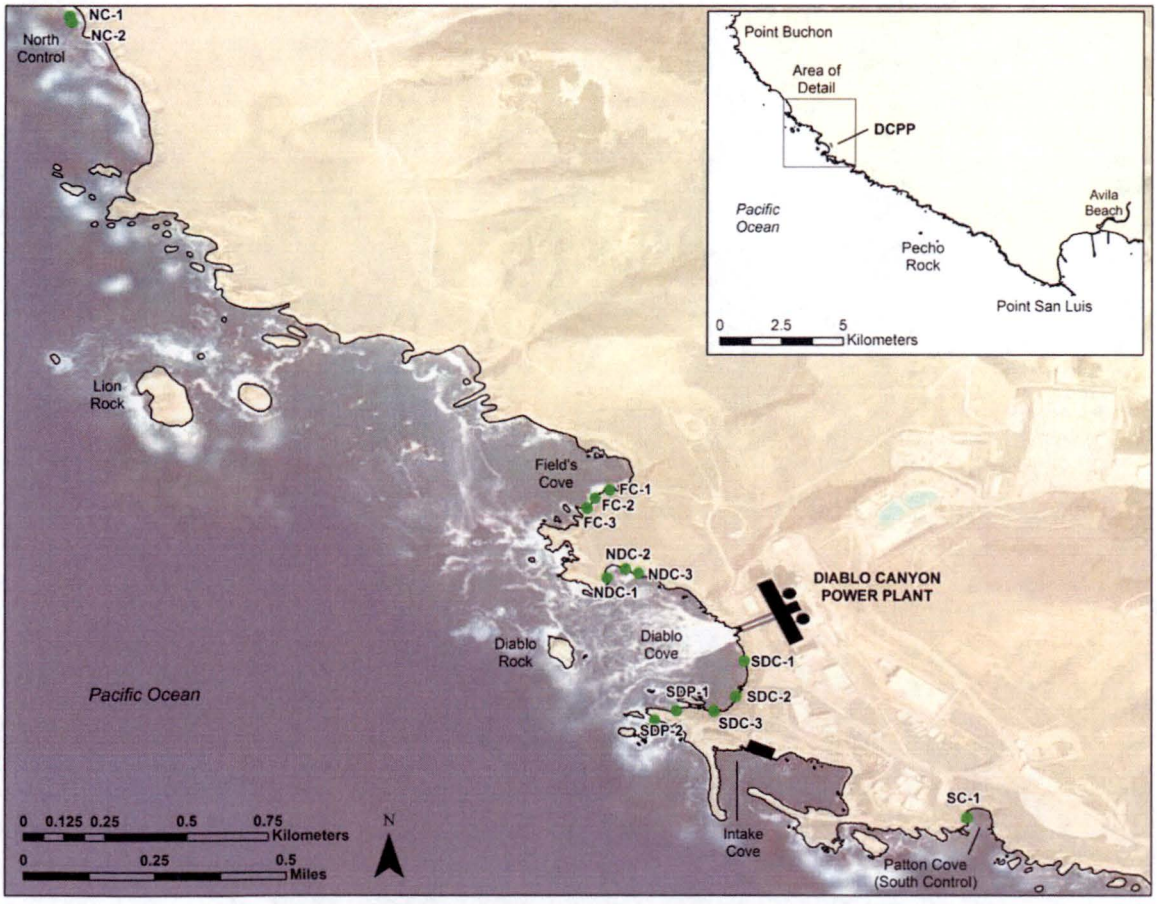

Figure 6. Locations of horizontal band transect stations.

Percent cover for each algal and seagrass species was estimated visually. Coverage of overstory species were estimated first, and then the overstory branches and blades were moved aside to allow estimation of coverage for each understory species. Coverage of bare substrate was also recorded at this stage. Species that occupied less than 0.7% of the area of the quadrat were recorded as "present". Due to the overlapping layers of taxa, the total percent cover typically exceeded 100% in a quadrat.

The number of large mobile invertebrates (greater than 2.5 cm [1 in], largest dimension) were counted in each of the ten quadrats for each transect. In five of the ten station quadrats ("count" quadrats), select species of invertebrates were counted regardless of size. Species smaller than 2.5 cm (1 in.) not part of the select group were recorded as "present". The percent cover of sessile invertebrates, such as sponges and tunicates, was estimated using the same methods used for the intertidal algae. All black abalone, regardless of size, were counted in the ten permanent quadrats on each transect. In addition, black abalone in five additional quadrats on each transect that were previously sampled as part of the monitoring program were also counted.

The survey mean abundance or percentage cover, and the annual mean and standard deviation for each taxon at each transect level are presented in **Appendix C**. Survey means for algae and substrates were calculated from all ten quadrats along the transect, while the means for invertebrates were calculated from the five count quadrats. Before calculating the summary statistics in the appendices, taxa that were recorded as "present" in a quadrat were assigned a value of 0.01 if recorded as percent cover and a value of 1 if recorded as a count.

4.0 Intertidal Fishes

Intertidal fishes were sampled using the Vertical Band Transect (VBT) sampling method. At each of five stations (**Figure 7**), either two or three transects were positioned perpendicular to the shoreline at fixed locations. Each transect originated in the high intertidal zone (approximately +1.5 m [4.9 ft] MLLW) and terminated in the low intertidal zone (approximately -0.2 m [0.6 ft] MLLW). Transects at each station were separated by approximately 3 m (9.8 ft). Each transect was used as a reference line to position twelve 1.0 m^2 (10.8 ft^2) permanent sampling quadrats, for a total of thirty-six quadrats per station. Two control stations were located beyond the influence of the DCPP thermal discharge, while the remaining three stations in Field's Cove and Diablo Cove had varying levels of contact with the warm water from the discharge.

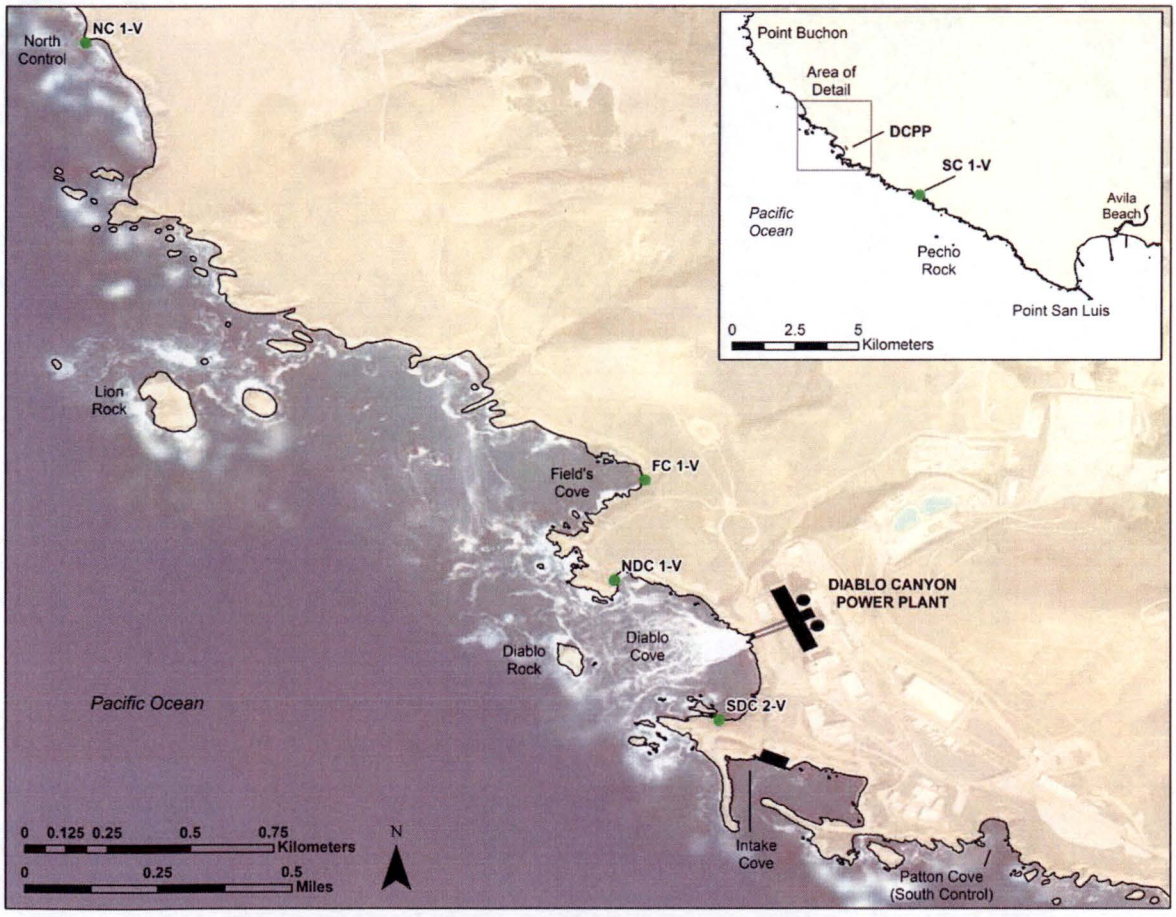

Figure 7. Locations of vertical band transect stations for sampling intertidal fishes.

Intertidal fishes were sampled within quadrats by lifting any moveable rocks and searching foliose algae. Fishes were captured in small hand nets, identified to the lowest practical taxonomic level, measured, and returned to the quadrat following sampling. Newly settled juvenile fishes were not identified to the species level but were grouped into composite taxa. The survey total, annual mean, and standard deviation for each taxon encountered at each station are presented in **Appendix D.**

5.0 Subtidal Algae and Invertebrates

Eight permanent subtidal benthic sampling stations are located in depths of -3 m, -4 m, or -6 m (-10 ft, -13 ft, or -20 ft) MLLW (**Figure 8**). Two control stations are located in Patton Cove, beyond the influence of the DCPP thermal discharge, while the remaining six stations had varying levels of contact with the warm water from the discharge. Stations were circular with a radius of 3.15 m (10.33 ft), and a sampling area of 28.0 m^2 (301.4 ft^2). The center 3.1 m^2 (33.4 ft^2) of each station nearest to a mooring anchor (railcar wheel) was not sampled in order to avoid any unnatural algal and invertebrate growth associated with the mooring. Each station was divided into four equal sections, or "arc quadrants", 7.0 m^2 (75.3 ft^2) in area. All stations were established primarily on substrates of mixed bedrock and boulders with varying amounts of cobble and sand.

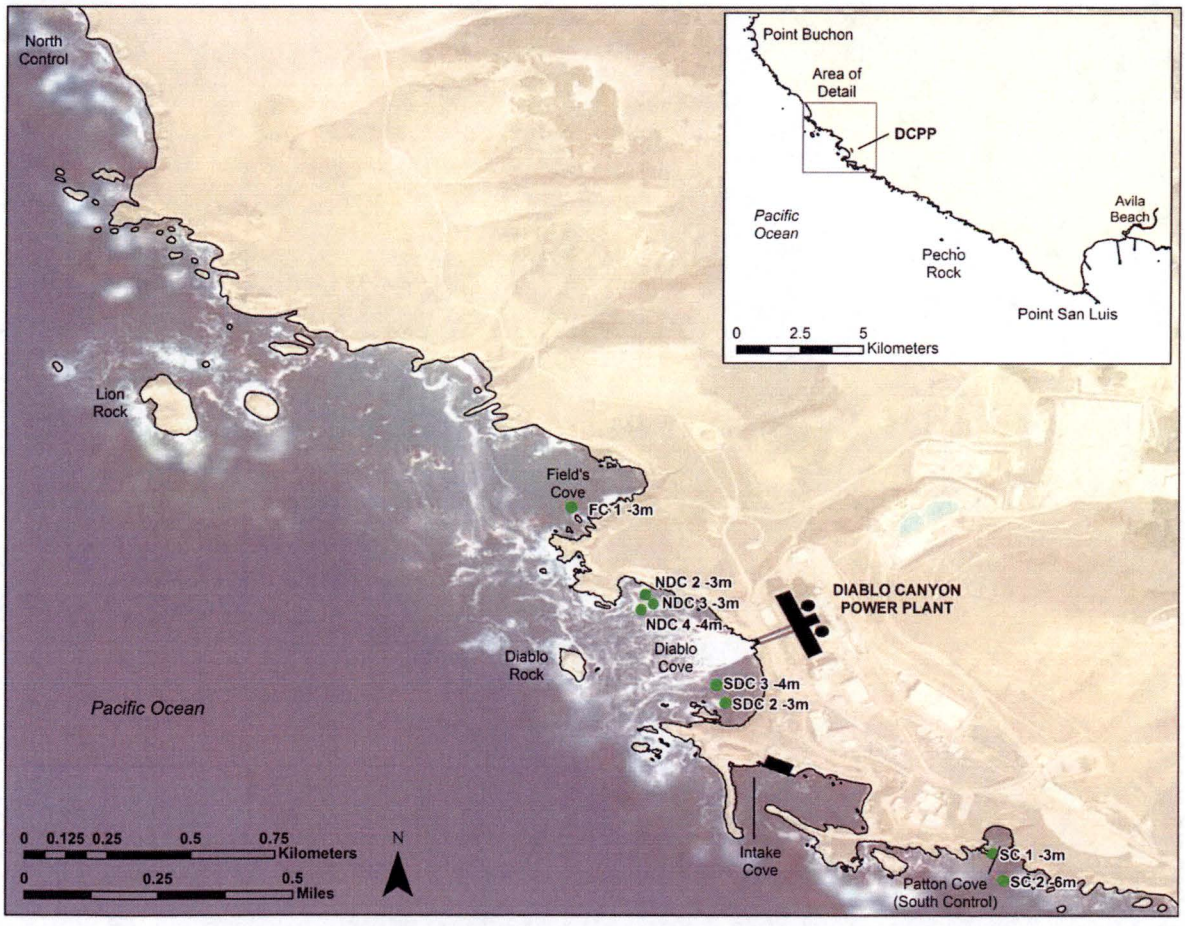

Figure 8. Locations of subtidal benthic stations.

Divers used three sampling methods at each station to sample the benthic algae and invertebrates. The first sampling method, the subtidal arc quadrant (SAQ) method, involved counting both kelp and macroinvertebrates. Kelp plants and select invertebrate taxa were counted regardless of the size. Individuals of other non-encrusting invertebrates were counted if they were larger than 2.5 cm (1.0 in) (length or width). Juvenile kelp plants that could not be identified to the species level were counted and recorded as "Laminariales". Five common species that generally occurred in numbers too high to accurately count in a large area were sampled in the same one-third area (2.33 m^2 [25.1 ft^2]) of each quadrant. The count for each of these species was multiplied by three to provide an abundance estimate for the entire quadrant.

The second sampling method, the subtidal line contact (SLC) method, involved identification of understory algal species, habitat-forming sessile invertebrates, and substrates at randomized points within each arc quadrant. Fifty randomly selected contact points from the possible 100 points were sampled within each quadrant (a total of 200 points per station) using a marked reference line. The same set of sampling points was used at all stations during a survey, and a new set of randomized points was selected at the start of each survey. The occurrence of all algal species, sessile invertebrates, kelp holdfasts, and substrates observed directly under or over the sampling points was recorded. In each quadrant, algal species which were present but not contacted by any of the sample points were also recorded as "present". The percent cover of each taxon and substrate type at a station was calculated using the number of points contacted for each taxon and the total number of points sampled at that station.

The third sampling method, the subtidal fixed quadrat (SFO) method, recorded the abundance of invertebrates in four permanent circular 0.25 m^2 (2.7 ft^2) quadrats. A quadrat was located within each of the four SAQ quadrants, generally on bedrock or boulder substrate. Depending upon the degree of topographical relief available at each station, two of the quadrats were located on horizontal-aspect surfaces and two quadrats were located on vertical-aspect surfaces. All non-encrusting taxa were identified and counted. The coverage of encrusting taxa (e.g., colonial/ social tunicates) was quantified in square inch units if the total equaled or exceeded 6.5 cm^2 (1 square inch). Otherwise, the encrusting taxon was recorded as "present". The coverage estimates were converted to percentage cover for analysis.

The survey mean for each taxon at each station from the four surveys completed during the year are presented in **Appendices E** (SAQ), **F** (SLC), and **G** (SFQ). The survey means were calculated from the four quadrats or quadrants at each station. The annual mean and standard deviation for each taxon at each station was also calculated from the surveys sampled during the year. Algal taxa in the SLC study were given a value of 0.01 if recorded as present. Additionally, encrusting taxa in the SFQ study, and invertebrates in the SAQ study recorded as present (no numeric value) were given a value of 0.1 if recorded as cover, or a value of 1 if recorded as a count for calculating abundance statistics.

6.0 Surface Canopy Kelps

The locations and extent of the surface kelp canopies of *Nereocystis luetkeana* (bull kelp) and *Macrocystis pyrifera* (giant kelp) in Diablo Cove - (**Figure 8**) were surveyed and mapped from direct observations. This task has been completed annually since the 1970s to document long-term changes in the annual maximum extent of the surface kelp canopies in Diablo Cove. Near the end of the annual growth cycle in October, nearly all bull kelp plants have reached the surface and can be counted. Surface canopies of giant kelp also tend to be abundant during this period. Two observers at the headland of North Diablo Cove and two observers at the headland of South Diablo Cove (South Diablo Point) counted and mapped the distribution of individual bull kelp plants and mapped the spatial extent of giant kelp canopies (**Figure 9**). Bull kelp plants with bare bulbs only and no attached fronds, indicating senescence in the plants, were noted when observed.

The 2020 annual habit-forming kelp survey was conducted on October 28, 2020. Scattered beds of giant kelp were observed in both North and South Diablo Cove. The majority of bull kelp was observed in North Diablo Cove, but two individual plants were noted southeast of Diablo Rock (**Figure 9**). There are no appendix figures or data tables associated with this survey.

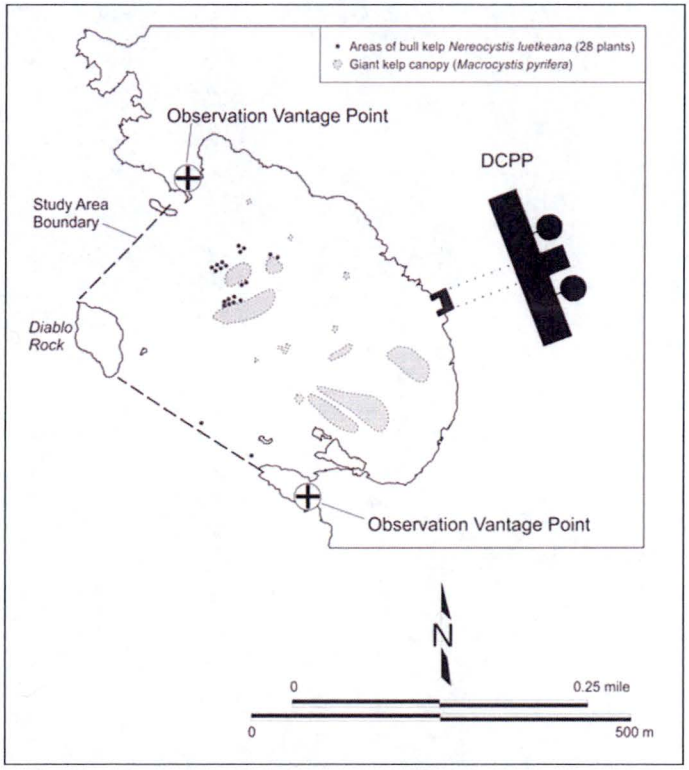

Figure 9. Map of surface kelp in Diablo Cove based on visual inspection from the shore on October 28, 2020.

7.0 Subtidal Fishes

Visual counts of fishes were conducted by divers at 12 permanent subtidal stations (three stations in each of four areas) located within and outside of Diablo Cove (**Figure 10**). Temperature sensor data indicated that three stations located in Patton Cove were beyond the influence of the DCPP thermal discharge. The temperature data indicated that the remaining nine stations in Field's Cove, North Diablo Cove, and South Diablo Cove had varying levels of contact with the warm water from the discharge

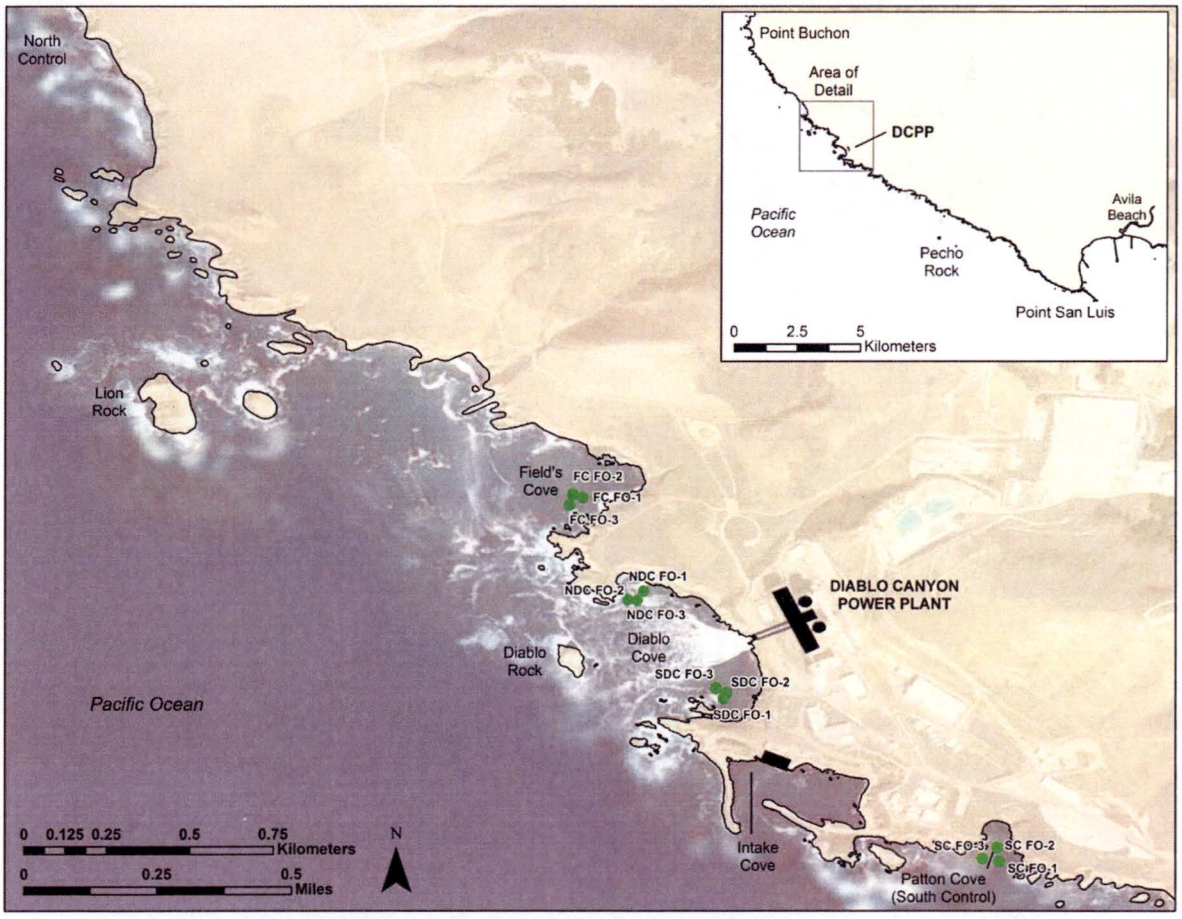

Figure 10. Locations of subtidal fish observation transects.

Each station consisted of a benthic and a midwater transect. Each transect was 50 m (164 ft) long by 4 m (13 ft) wide. The benthic transect was located 1 m (3 ft) above the bottom, and the midwater transect was located above and parallel to the benthic transect approximately midway between the surface and the bottom. A station was sampled by first deploying a fiberglass measuring tape along a pre-determined compass course. The tape delineated the centerline of the benthic and midwater transects for that station.

The transects on the three stations in each area crossed one another, resulting in a small overlap among the sampling areas for the transects. The small overlap did not affect the data summaries because the numbers of fish counted were averaged by area, and the mobility of most fish added to the independence of transects.

A survey team consisted of two divers. Each diver counted fish at the benthic and the midwater transect, alternating the direction of sampling along the transect lines. This sampling technique allowed a more thorough inspection of potential fish habitats from all angles of view than would have been possible by a single diver progressing along a transect in only one direction. The data recorded for each transect was the average of the counts from both divers. Fish were identified to species if possible, but juveniles of some species with similar appearances were combined into broader categories if necessary. During each survey, the stations (midwater and benthic transects) were usually sampled twice.

The mean abundance for each taxon by survey and area for benthic and midwater transects are presented in **Appendix H** for each of the four sampling areas. The tables also list the annual mean and standard deviation for each taxon. The survey dates shown for each area in the tables represent the average date of the combined stations sampled.

8.0 Project Personnel

Project Personnel 2020

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Diablo Canyon Power Plant

Appendix A

Intertidal Temperatures

Table A1. Monthly statistical summary of intertidal temperatures (°C), January–December 2020, North Control Station NC 2 +0.6m (2+2).

Month	Max	Min	**Mean**	Std. Dev	N
Station: NC 2 +0.6m					
Jan	14.15	12.01	**12.96**	0.47	1196
Feb	14.45	10.55	**12.88**	0.88	1070
Mar	16.08	12.33	**14.26**	0.79	1125
Apr	14.97	10.47	**12.39**	0.93	1102
May	15.30	10.14	**12.59**	1.17	1151
Jun	16.20	10.52	**13.65**	1.19	1164
Jul	16.16	11.77	**14.29**	0.94	1250
Aug	17.01	11.71	**14.24**	1.12	1316
Sep	16.09	12.50	**14.41**	0.75	1264
Oct	16.57	13.30	**15.02**	0.66	1270
Nov	15.60	10.58	**12.44**	1.14	1217
Dec	12.88	11.23	**12.12**	0.42	1272

Table A2. Monthly statistical summary of intertidal temperatures (°C), January–December 2020, Field's Cove Stations FC 1 +0.6m (4+2), FC 2 +0.6m (5+2) and FC 3 +0.6m (6+2).

Month	Max	Min	**Mean**	Std. Dev	N
Station: FC 1 +0.6m					
Jan	15.88	12.33	**13.94**	0.67	1510
Feb	16.21	11.01	**14.10**	1.08	1307
Mar	17.97	12.43	**15.44**	1.09	1357
Apr	17.28	10.60	**13.42**	1.27	1278
May	17.60	10.56	**13.40**	1.35	1342
Jun	19.60	11.45	**15.02**	1.70	1361
Jul	18.82	11.88	**15.72**	1.24	1521
Aug	20.12	12.51	**16.24**	1.43	1546
Sep	18.98	12.86	**16.37**	1.34	1434
Oct	17.05	13.85	**15.34**	0.64	1432
Nov	16.05	10.97	**13.09**	1.06	1389
Dec	14.44	11.24	**12.57**	0.50	1468
Station: FC 2 +0.6m					
Jan	15.91	12.33	**14.00**	0.66	1196
Feb	16.18	11.04	**14.14**	1.04	1070
Mar	17.83	12.57	**15.40**	1.06	1125
Apr	17.18	10.59	**13.31**	1.25	1102
May	17.08	10.58	**13.28**	1.30	1151
Jun	19.45	11.52	**14.91**	1.67	1164
Jul	18.73	11.96	**15.55**	1.21	1250
Aug	20.01	12.59	**16.15**	1.41	1316
Sep	19.08	12.88	**16.35**	1.33	1264
Oct	16.96	13.90	**15.34**	0.63	1270
Nov	16.00	11.18	**13.12**	1.05	1217
Dec	14.50	11.28	**12.61**	0.50	1272
Station: FC 3 +0.6m					
Jan	15.92	12.31	**13.98**	0.66	1196
Feb	16.20	11.04	**14.11**	1.03	1070
Mar	17.59	12.51	**15.35**	1.04	1125
Apr	16.79	10.54	**13.22**	1.22	1102
May	16.84	10.54	**13.17**	1.28	1151
Jun	19.19	11.41	**14.76**	1.64	1164
Jul	18.29	11.87	**15.39**	1.19	1250
Aug	19.96	12.52	**16.02**	1.40	1316
Sep	19.09	12.86	**16.25**	1.30	1264
Oct	16.94	13.81	**15.30**	0.62	1270
Nov	15.77	11.17	**13.09**	1.05	1217
Dec	14.47	11.22	**12.58**	0.50	1272

Table A3. Monthly statistical summary of intertidal temperatures (°C), January–December 2020, North Diablo Cove Stations NDC 1 +0.6m (7+2), NDC 2 +0.6m (8+2) and NDC 3 +0.6m (9+2).

Month	Max	Min	**Mean**	Std. Dev	N
Station: NDC 1 +0.6m					
Jan	20.88	12.49	**16.19**	1.59	1510
Feb	20.48	11.56	**16.66**	1.57	1307
Mar	22.09	12.69	**18.16**	1.51	1357
Apr	20.97	11.52	**16.15**	1.77	1278
May	23.95	12.45	**16.77**	2.08	1342
Jun	22.58	11.95	**17.98**	2.04	1361
Jul	22.16	13.48	**17.91**	1.55	1521
Aug	23.05	13.08	**18.62**	1.74	1546
Sep	22.09	12.40	**18.70**	1.73	1434
Oct	21.36	14.03	**16.54**	1.67	1432
Nov	19.60	11.17	**15.30**	1.48	1389
Dec	18.68	11.45	**13.98**	1.50	1468
Station: NDC 2 +0.6m					
Jan	20.74	12.59	**16.31**	1.58	1152
Feb	20.39	11.50	**16.88**	1.57	1025
Mar	21.68	12.85	**18.34**	1.57	1078
Apr	20.87	11.80	**16.44**	1.80	1067
May	23.80	13.16	**17.31**	2.12	1114
Jun	23.09	12.08	**18.32**	2.12	1126
Jul	22.33	14.13	**18.03**	1.56	1211
Aug	22.75	12.87	**18.66**	1.74	1273
Sep	21.86	12.51	**18.80**	1.70	1234
Oct	20.90	14.05	**16.66**	1.75	1246
Nov	19.04	11.22	**15.46**	1.50	1189
Dec	18.38	11.47	**14.02**	1.51	1236
Station: NDC 3 +0.6m					
Jan	21.11	12.49	**16.48**	1.72	1521
Feb	20.57	11.55	**17.00**	1.70	1322
Mar	22.38	12.92	**18.37**	1.54	1366
Apr	21.56	11.79	**16.57**	1.78	1288
May	23.76	13.14	**17.40**	2.15	1353
Jun	23.04	12.21	**18.34**	2.05	1371
Jul	22.45	14.31	**18.04**	1.53	1535
Aug	22.77	12.79	**18.61**	1.72	1569
Sep	21.90	12.61	**18.80**	1.66	1448
Oct	21.18	14.18	**16.64**	1.75	1448
Nov	19.66	11.25	**15.66**	1.52	1407
Dec	19.65	11.49	**14.27**	1.64	1478

Table A4. Monthly statistical summary of intertidal temperatures (°C), January–December 2020, South Diablo Cove Stations SDC 1 +0.6m (10+2), SDC 2 +0.6m (11+2) and SDC 3 +0.6m (12+2).

Month	Max	Min	**Mean**	Std. Dev	N
Station: SDC 1 +0.6m					
Jan	23.84	13.92	**18.03**	2.54	1533
Feb	23.57	13.78	**16.63**	2.09	1340
Mar	23.76	13.77	**17.23**	1.76	1384
Apr	22.42	11.50	**16.21**	2.35	1297
May	23.86	12.81	**16.64**	2.31	1364
Jun	23.20	12.96	**17.06**	2.21	1384
Jul	22.80	12.92	**16.02**	1.94	1545
Aug	22.87	13.35	**16.79**	1.64	1581
Sep	23.40	13.76	**17.20**	1.54	1463
Oct	23.29	14.18	**16.59**	1.79	1459
Nov	21.69	11.77	**13.90**	1.27	1418
Dec	21.60	11.64	**13.43**	0.99	1487
Station: SDC 2 +0.6m					
Jan	21.87	13.92	**16.68**	1.24	1196
Feb	22.30	13.55	**16.22**	1.59	1070
Mar	23.24	13.73	**17.08**	1.60	1125
Apr	21.74	11.65	**16.10**	2.16	1102
May	23.17	13.00	**16.59**	2.05	1151
Jun	22.51	13.16	**17.28**	2.06	1164
Jul	22.42	13.15	**16.22**	1.89	1250
Aug	22.64	13.41	**17.03**	1.58	1316
Sep	22.56	13.93	**17.29**	1.38	1264
Oct	22.39	14.17	**16.55**	1.72	1270
Nov	20.59	11.82	**13.82**	1.15	1217
Dec	20.45	11.77	**13.35**	0.82	1272
Station: SDC 3 +0.6m					
Jan	18.99	13.63	**16.23**	0.96	1350
Feb	19.65	13.74	**15.67**	0.98	1207
Mar	20.54	13.49	**16.40**	1.06	1264
Apr	19.63	11.31	**14.86**	1.44	1204
May	21.55	12.64	**15.55**	1.53	1260
Jun	21.60	13.02	**16.56**	1.71	1274
Jul	20.91	12.88	**15.90**	1.61	1421
Aug	20.96	13.07	**16.56**	1.40	1437
Sep	20.54	13.81	**16.74**	1.16	1352
Oct	20.88	13.97	**16.16**	1.41	1363
Nov	17.11	11.67	**13.66**	1.06	1315
Dec	16.78	11.74	**13.42**	0.67	1389

Table A5. Monthly statistical summary of intertidal temperatures (°C), January–December 2020, South Diablo Point Stations SDP 1 +0.6m (22+2) and SDP 2 +0.6m (14+2).

Month	Max	Min	**Mean**	Std. Dev	N
Station: SDP 1 +0.6m					
Jan	19.25	13.63	**16.23**	0.97	1577
Feb	20.23	13.78	**15.73**	1.00	1384
Mar	20.64	13.51	**16.41**	1.01	1420
Apr	19.19	11.26	**14.84**	1.38	1343
May	21.33	12.42	**15.47**	1.52	1405
Jun	21.70	13.03	**16.44**	1.67	1423
Jul	20.99	12.80	**15.63**	1.58	1578
Aug	21.39	12.83	**16.37**	1.46	1620
Sep	20.56	13.60	**16.68**	1.16	1488
Oct	21.04	13.90	**16.19**	1.46	1493
Nov	17.20	11.69	**13.69**	1.06	1447
Dec	17.19	11.88	**13.46**	0.66	1522
Station: SDP 2 +0.6m					
Jan	17.62	12.84	**15.15**	0.83	1510
Feb	18.20	12.78	**15.01**	0.92	1307
Mar	18.54	13.10	**15.49**	0.83	1357
Apr	17.10	11.19	**13.87**	1.14	1278
May	17.51	10.76	**13.92**	1.11	1342
Jun	19.30	11.29	**15.17**	1.42	1361
Jul	18.76	11.87	**14.89**	1.15	1521
Aug	21.26	12.33	**15.83**	1.38	1546
Sep	19.22	12.73	**15.97**	1.12	1434
Oct	18.31	13.63	**15.35**	0.81	1432
Nov	16.60	11.67	**13.58**	1.05	1389
Dec	16.15	11.64	**13.20**	0.58	1468

Table A6. Monthly statistical summary of intertidal temperatures (°C), January–December 2020, South Control Stations SC 1 +0.6m (19+2) and SC 1V +0.6m.

Month	Max	Min	**Mean**	Std. Dev	N
Station: SC 1 +0.6m					
Jan	13.96	11.93	**13.04**	0.47	1329
Feb	14.17	10.92	**12.84**	0.75	1190
Mar	15.43	11.55	**13.85**	0.78	1247
Apr	13.39	9.89	**11.67**	0.86	1186
May	15.41	9.93	**12.04**	1.33	1248
Jun	15.75	10.28	**13.17**	1.30	1258
Jul	15.33	10.91	**13.53**	0.87	1397
Aug	17.20	11.24	**13.66**	1.19	1426
Sep	16.07	11.95	**14.11**	0.78	1340
Oct	16.83	12.89	**14.85**	0.69	1349
Nov	15.62	10.98	**12.46**	1.18	1307
Dec	12.96	11.29	**12.16**	0.38	1375
Station: SC 1V					
Jan	14.59	11.31	**12.95**	0.66	1655
Feb	15.73	10.32	**13.09**	1.06	1489
Mar	17.00	12.33	**14.28**	0.91	1512
Apr	17.06	10.26	**12.92**	1.28	1416
May	18.05	10.06	**13.36**	1.65	1487
Jun	19.00	10.93	**14.88**	1.58	1503
Jul	18.65	12.15	**15.47**	1.23	1659
Aug	19.07	12.74	**15.49**	1.34	1692
Sep	18.05	12.98	**15.33**	0.91	1585
Oct	17.64	13.61	**15.53**	0.77	1565
Nov	16.96	10.57	**12.69**	1.40	1533
Dec	13.51	11.22	**12.19**	0.46	1599

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Appendix B

Subtidal Temperatures

Table B1. Monthly statistical summary of subtidal temperatures (°C), January–December 2020, North Control Station NC 1 -3m (1-10).

Month	Max	Min	**Mean**	Std. Dev	N
Station: NC 1 -3m					
Jan	14.30	12.08	**13.06**	0.45	2232
Feb	14.42	10.87	**12.98**	0.77	2088
Mar	16.42	12.03	**14.26**	0.84	2232
Apr	14.44	10.16	**12.13**	0.96	2160
May	15.15	9.99	**12.17**	1.23	2232
Jun	15.76	10.23	**13.11**	1.23	2160
Jul	15.54	11.20	**13.57**	0.84	2231
Aug	16.58	11.26	**13.64**	1.11	2232
Sep	15.98	12.19	**14.18**	0.77	2159
Oct	16.48	13.18	**14.94**	0.68	2232
Nov	15.68	10.90	**12.46**	1.11	2160
Dec	13.07	11.26	**12.22**	0.39	2232

Table B2. Monthly statistical summary of subtidal temperatures (°C), January–December 2020, Field's Cove Station FC 1 -3m (22-10).

Month	Max	Min	**Mean**	Std. Dev	N
Station: FC 1 -3m					
Jan	16.23	12.35	**14.04**	0.67	2232
Feb	16.59	11.14	**14.26**	1.00	2088
Mar	17.82	12.60	**15.51**	1.07	2232
Apr	16.24	10.59	**13.31**	1.19	2160
May	16.51	10.34	**13.06**	1.29	2232
Jun	18.41	10.90	**14.31**	1.46	2160
Jul	17.03	11.78	**14.56**	0.90	2231
Aug	19.66	11.93	**15.26**	1.36	2232
Sep	19.09	12.80	**15.95**	1.16	2160
Oct	17.01	13.70	**15.31**	0.59	2231
Nov	15.95	11.25	**13.21**	1.09	2160
Dec	14.49	11.40	**12.72**	0.50	2232

Table B3. Monthly statistical summary of subtidal temperatures (°C), January–December 2020, North Diablo Cove Stations NDC 2 -3m (8-10), NDC 3 -3m (9-10), and NDC 4 -4m (9-15).

Month	Max	Min	**Mean**	Std. Dev	N
Station: NDC 2 -3m					
Jan	21.51	12.49	**16.76**	1.83	2232
Feb	21.11	11.55	**17.20**	1.72	2087
Mar	22.78	12.90	**18.55**	1.64	2232
Apr	21.92	11.70	**16.72**	1.86	2160
May	23.79	12.32	**17.24**	2.31	2231
Jun	23.24	11.64	**17.64**	2.12	2160
Jul	22.74	12.66	**17.00**	1.95	2232
Aug	23.15	12.64	**17.70**	1.93	2232
Sep	22.49	12.47	**18.26**	1.81	2159
Oct	21.35	13.78	**16.50**	1.75	2232
Nov	20.06	11.23	**15.81**	1.69	2160
Dec	20.33	11.53	**14.60**	1.81	2232
Station: NDC 3 -3m					
Jan	22.07	12.47	**17.15**	1.96	2232
Feb	21.69	11.63	**17.29**	1.78	2087
Mar	23.43	13.26	**18.57**	1.71	2232
Apr	22.11	11.72	**16.81**	1.97	2159
May	23.98	11.87	**17.27**	2.41	2232
Jun	23.59	11.65	**17.42**	2.27	2160
Jul	23.10	12.37	**16.53**	2.09	2232
Aug	23.22	12.64	**17.31**	2.06	2231
Sep	22.38	12.68	**17.95**	1.91	2160
Oct	21.67	13.71	**16.39**	1.81	2232
Nov	20.86	11.27	**15.87**	1.81	2160
Dec	20.87	11.50	**14.96**	1.94	2232
Station: NDC 4 -4m					
Jan	21.34	12.45	**16.66**	1.75	2232
Feb	20.85	11.61	**16.90**	1.70	2087
Mar	22.95	12.37	**17.86**	1.79	2232
Apr	21.59	11.07	**16.09**	1.94	2159
May	23.37	11.08	**16.36**	2.23	2232
Jun	22.85	11.48	**16.04**	2.20	2160
Jul	22.60	11.36	**15.00**	2.02	2232
Aug	21.92	11.87	**15.68**	2.04	2231
Sep	21.50	11.99	**16.38**	2.02	2160
Oct	21.23	13.66	**15.94**	1.47	2232
Nov	19.64	11.17	**15.19**	1.74	2160
Dec	19.86	11.48	**14.44**	1.70	2232

Table B4. Monthly statistical summary of subtidal temperatures (°C), January–December 2020, South Diablo Cove Stations SDC 1 -3m (11-10) and SDC 4 -4m (11-15).

Month	Max	Min	**Mean**	Std. Dev	N
Station: SDC 1 -3m					
Jan	24.02	13.12	**16.94**	1.90	2232
Feb	22.90	12.86	**16.13**	1.95	2087
Mar	23.08	12.39	**16.29**	1.64	2232
Apr	20.91	10.92	**15.04**	2.05	2159
May	21.83	10.94	**15.45**	2.07	2232
Jun	22.29	11.74	**15.54**	2.10	2160
Jul	22.46	11.91	**14.67**	1.91	2232
Aug	22.15	11.17	**14.90**	1.79	2233
Sep	20.97	12.23	**15.68**	1.64	2160
Oct	20.95	12.97	**15.61**	1.28	2232
Nov	21.00	11.67	**13.77**	1.27	2160
Dec	21.44	11.92	**13.47**	0.88	2232
Station: SDC 4 -4m					
Jan	22.47	12.53	**16.05**	1.97	2232
Feb	21.64	12.05	**14.85**	1.73	2087
Mar	19.16	10.85	**14.81**	1.38	2232
Apr	19.66	10.35	**13.14**	1.62	2159
May	19.44	9.92	**13.69**	2.00	2232
Jun	20.06	10.09	**13.50**	1.85	2160
Jul	20.03	10.51	**13.32**	1.54	2232
Aug	18.69	10.69	**13.07**	1.33	2233
Sep	20.78	11.68	**14.07**	1.45	2160
Oct	19.60	12.42	**14.99**	0.93	2232
Nov	18.54	11.36	**13.59**	1.12	2160
Dec	19.24	12.00	**13.44**	0.73	2232

Table B5. Monthly statistical summary of subtidal temperatures (°C), January–December 2020, South Control Stations SC 1 -3m (19-10) and SC 2 -6m (20-20).

Month	Max	Min	**Mean**	Std. Dev	N
Station: SC 1 -3m					
Jan	14.25	11.88	**13.10**	0.48	2232
Feb	14.39	10.96	**12.98**	0.72	2088
Mar	15.62	11.58	**13.92**	0.80	2232
Apr	13.53	9.81	**11.75**	0.88	2160
May	15.33	9.87	**11.85**	1.28	2232
Jun	14.79	12.20	**13.44**	0.72	176
Jul	-	-	-	-	-
Aug	15.30	12.44	**13.69**	0.62	472
Sep	15.91	12.03	**14.02**	0.75	2160
Oct	16.84	12.84	**14.85**	0.69	2232
Nov	15.88	10.88	**12.47**	1.19	2160
Dec	13.04	11.28	**12.23**	0.38	2232
Station: SC 2 -6m					
Jan	14.00	11.99	**13.11**	0.45	2232
Feb	14.07	10.96	**12.94**	0.66	2088
Mar	15.33	10.72	**13.82**	0.87	2232
Apr	13.12	9.73	**11.47**	0.88	2160
May	14.90	9.63	**11.48**	1.26	2232
Jun	15.35	9.79	**12.38**	1.29	2159
Jul	14.96	10.39	**12.47**	0.82	2232
Aug	16.86	10.25	**12.70**	1.23	2231
Sep	15.58	11.55	**13.66**	0.76	2160
Oct	16.67	12.27	**14.58**	0.71	2232
Nov	15.74	10.90	**12.38**	1.15	2160
Dec	13.04	11.30	**12.23**	0.37	2232

Table B6. Monthly statistical summary of subtidal temperatures (°C), January–December 2020. Monthly means were calculated by combining and averaging values collected at South Control Station SC 1 -3m (19-10) and North Control Station NC 1 -3m (1-10).

Month	Max	Min	**Mean**	Std. Dev	N
Jan	14.28	11.98	**13.08**	0.46	2232
Feb	14.40	10.95	**12.98**	0.74	2088
Mar	15.99	11.86	**14.09**	0.81	2229
Apr	13.91	10.01	**11.94**	0.91	2160
May	15.10	9.94	**12.01**	1.24	2232
Jun	15.76	10.23	**13.11**	1.24	2160
Jul	15.54	11.20	**13.57**	0.84	2232
Aug	16.58	11.26	**13.60**	1.09	2232
Sep	15.95	12.31	**14.10**	0.74	2160
Oct	16.57	13.09	**14.89**	0.66	2232
Nov	15.77	10.95	**12.46**	1.14	2160
Dec	13.05	11.27	**12.23**	0.37	2232

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Appendix C

Intertidal Algae, Invertebrates and Substrates

Table C1. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 1+0.3m (1+1).

Survey / Survey Date / Taxon	200 19-Feb-20 Mean	201 12-May-20 Mean	202 08-Jul-20 Mean	203 16-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
Phyllospadix spp.	31.9	24.6	21.9	26.2	**26.18**	4.23
non-coralline crust	25.5	24.3	20.1	28.1	**24.50**	3.36
Mazzaella flaccida	13.3	32.8	34.1	10.7	**22.73**	12.43
Mazzaella affinis	9.4	15.1	13.3	8.0	**11.48**	3.33
Gastroclonium subarticulatum	10.3	4.5	7.2	11.0	**8.26**	2.99
coralline crust	7.4	7.5	6.3	7.4	**7.15**	0.60
Mastocarpus papillatus	1.7	3.8	5.8	3.7	**3.75**	1.70
Gelidium coulteri	3.5	4.3	3.8	3.1	**3.66**	0.52
Chondracanthus canaliculatus	2.5	4.4	3.3	3.4	**3.39**	0.77
Codium setchellii	1.5	2.0	4.0	3.9	**2.85**	1.26
Cryptopleura violacea	2.7	1.7	1.3	0.5	**1.53**	0.93
Prionitis spp.	3.3	0.8	1.0	0.8	**1.46**	1.21
filamentous red algae complex	0.6	2.9	1.7	-	**1.29**	1.29
juv. articulated coralline algae	1.1	1.0	0.6	1.6	**1.08**	0.40
Mazzaella leptorhynchos	0.5	1.8	1.9	<0.1	**1.04**	0.94
Endocladia muricata	0.9	1.2	1.0	1.0	**1.04**	0.11
Mastocarpus jardinii	0.7	0.9	1.0	1.2	**0.94**	0.20
Corallina vancouveriensis	1.4	0.2	0.4	0.5	**0.61**	0.53
Mazzaella oregona	<0.1	0.8	0.2	<0.1	**0.26**	0.39
Smithora naiadum	<0.1	-	0.8	<0.1	**0.19**	0.38
Calliarthron/Bossiella spp.-complex	<0.1	<0.1	0.4	<0.1	**0.16**	0.17
Gelidium pusillum	<0.1	<0.1	0.2	0.1	**0.11**	0.09
Egregia menziesii	-	-	-	0.4	**0.10**	0.21
Porphyra spp.	-	<0.1	0.3	-	**0.09**	0.13
Pterosiphonia dendroidea	<0.1	0.1	<0.1	<0.1	**0.07**	0.06
Ulva spp.	-	<0.1	0.3	<0.1	**0.07**	0.14
Sarcodiotheca gaudichaudii	<0.1	<0.1	0.1	<0.1	**0.05**	0.06
Chondracanthus corymbiferus	<0.1	0.2	-	<0.1	**0.05**	0.10
Callithamnion pikeanum	-	<0.1	0.1	-	**0.05**	0.07
Osmundea spp.	<0.1	<0.1	<0.1	<0.1	**0.04**	0.04
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**0.03**	0.03
Grateloupia californica	<0.1	<0.1	-	-	**0.02**	0.03
Mazzaella splendens	-	-	<0.1	<0.1	**0.02**	0.03
Callophyllis spp.	-	-	<0.1	-	**0.02**	0.03
Chlorophyta (filamentous)	-	-	<0.1	-	**0.02**	0.03
Halymenia/Schizymenia spp.-complex	-	<0.1	-	-	**0.02**	0.03
Melobesia mediocris	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Microcladia coulteri	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Callithamnion spp./*Pleonosporium* spp.	<0.1	-	-	-	**<0.01**	<0.01
Colpomenia spp.	-	-	<0.1	-	**<0.01**	<0.01
Cryptosiphonia woodii	-	<0.1	-	-	**<0.01**	<0.01
Rhodymenia spp.	-	<0.1	-	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	78.6	69.2	79.6	63.0	**72.60**	7.93
Pagurus spp.	19.0	4.6	4.6	4.8	**8.25**	7.17

(table continued)

Table C1 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 1+0.3m (1+1).

Survey / Survey Date / Taxon	200 19-Feb-20 Mean	201 12-May-20 Mean	202 08-Jul-20 Mean	203 16-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Crepidula spp.	1.0	0.6	0.8	0.8	**0.80**	0.16
Lottiidae	1.2	0.8	0.8	0.2	**0.75**	0.41
Leptasterias spp.	-	0.6	1.2	0.8	**0.65**	0.50
Serpulidae	0.4	0.6	0.2	0.8	**0.50**	0.26
Nemertea	0.4	0.2	0.2	0.4	**0.30**	0.12
Epiactis prolifera	0.2	0.2	0.2	0.4	**0.25**	0.10
Fissurella volcano	-	-	0.2	0.8	**0.25**	0.38
Lirobittium spp.	-	0.2	-	0.8	**0.25**	0.38
Pachygrapsus crassipes	0.2	0.6	-	0.2	**0.25**	0.25
Acmaea mitra	0.4	0.2	0.2	-	**0.20**	0.16
Anthopleura elegantissima	0.4	-	-	0.4	**0.20**	0.23
Mitra idae	0.2	-	0.2	0.4	**0.20**	0.16
Lacuna spp.	0.2	0.2	-	0.2	**0.15**	0.10
Ocinebrina spp.	0.2	-	-	0.4	**0.15**	0.19
Pugettia spp.	0.2	0.2	-	0.2	**0.15**	0.10
Lottia limatula	-	0.6	-	-	**0.15**	0.30
Diodora spp.	0.4	-	-	-	**0.10**	0.20
Lottia pelta	-	-	0.4	-	**0.10**	0.20
Lottia scutum	-	-	0.4	-	**0.10**	0.20
Ocinebrina subangulata	0.2	-	-	0.2	**0.10**	0.12
Aeolidia papillosa	0.2	-	-	-	**0.05**	0.10
Alia spp.	-	-	-	0.2	**0.05**	0.10
Lottia instabilis	0.2	-	-	-	**0.05**	0.10
Lottia scabra	0.2	-	-	-	**0.05**	0.10
Nereididae	-	-	-	0.2	**0.05**	0.10
Tetraclita rubescens	-	0.2	-	-	**0.05**	0.10
Invertebrate Coverage						
Pista spp.	11.2	5.7	13.9	14.8	**11.39**	4.09
tunicates, compound/social	<0.1	0.2	0.2	<0.1	**0.13**	0.10
Phragmatopoma californica	<0.1	<0.1	<0.1	<0.1	**0.02**	0.03
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryozoa (encrusting)	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	-	<0.1	<0.1	-	**<0.01**	<0.01
Chthamalus fissus	<0.1	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	3.0	5.0	3.3	5.5	**4.20**	1.23
sand (shell gravel)	3.0	4.7	2.5	4.9	**3.77**	1.20
cobble	1.6	0.6	1.1	0.9	**1.04**	0.44

Table C2. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 1+0.9m (1+3).

Survey / Survey Date / Taxon	200 19-Feb-20 Mean	201 12-May-20 Mean	202 08-Jul-20 Mean	203 16-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	35.2	25.3	24.0	31.1	**28.91**	5.22
Endocladia muricata	19.7	22.9	23.6	17.9	**21.04**	2.68
coralline crust	11.8	11.4	8.3	18.3	**12.43**	4.20
Mastocarpus papillatus	8.8	7.8	17.4	10.1	**11.06**	4.35
Mazzaella flaccida	5.9	9.7	13.4	10.7	**9.91**	3.11
Codium setchellii	3.7	1.6	3.1	2.6	**2.74**	0.88
Mazzaella affinis	2.2	0.4	2.4	1.4	**1.58**	0.88
Corallina vancouveriensis	2.4	1.7	0.5	1.7	**1.56**	0.80
juv. articulated coralline algae	0.9	1.3	1.4	1.6	**1.29**	0.29
Gelidium coulteri	1.0	0.9	1.1	2.1	**1.27**	0.55
Silvetia compressa	0.8	0.9	1.5	0.6	**0.94**	0.37
Mastocarpus jardinii	0.5	0.7	0.9	0.6	**0.68**	0.17
Phyllospadix spp.	1.0	0.3	0.6	0.5	**0.59**	0.27
Prionitis spp.	0.6	0.3	0.3	0.4	**0.43**	0.13
Gelidium pusillum	0.4	0.3	0.1	0.1	**0.25**	0.13
Porphyra spp.	<0.1	<0.1	0.8	<0.1	**0.21**	0.42
Analipus japonicus	0.2	-	0.1	0.3	**0.16**	0.12
Chondracanthus canaliculatus	0.1	<0.1	0.2	0.2	**0.14**	0.10
Gastroclonium subarticulatum	0.3	<0.1	-	-	**0.09**	0.17
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**0.06**	0.04
Calliarthron/Bossiella spp.-complex	<0.1	<0.1	<0.1	<0.1	**0.02**	0.03
Cryptopleura violacea	<0.1	-	-	<0.1	**0.02**	0.03
Scytosiphon spp.	-	<0.1	-	-	**0.02**	0.03
Mazzaella leptorhynchos	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Ulva spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Chlorophyta (filamentous)	-	-	<0.1	-	**<0.01**	<0.01
filamentous red algae complex	-	-	-	<0.1	**<0.01**	<0.01
Codium fragile subsp. *californicum*	-	-	-	<0.1	**<0.01**	<0.01
Mazzaella oregona	-	-	<0.1	-	**<0.01**	<0.01
Nemalion helminthoides	-	<0.1	-	-	**<0.01**	<0.01
Rhodymenia spp.	-	-	<0.1	-	**<0.01**	<0.01
Sarcodiotheca gaudichaudii	<0.1	-	-	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	125.2	155.4	77.4	92.0	**112.50**	34.90
Pagurus spp.	6.4	5.0	18.8	5.4	**8.90**	6.63
Mytilus spp.	3.8	2.0	2.4	3.0	**2.80**	0.78
Lottia scabra	3.0	1.0	1.8	1.4	**1.80**	0.86
Nuttallina californica	2.0	1.0	1.2	2.2	**1.60**	0.59
Pachygrapsus crassipes	0.4	1.6	1.4	2.0	**1.35**	0.68
Pollicipes polymerus	1.8	2.0	-	1.2	**1.25**	0.90
Mopalia spp.	0.8	1.8	1.4	0.8	**1.20**	0.49
Lottiidae	0.2	1.8	1.6	0.8	**1.10**	0.74
Lottia limatula	0.4	2.2	1.4	0.2	**1.05**	0.93
Lottia pelta	-	1.8	1.4	0.2	**0.85**	0.89
Anthopleura elegantissima	0.8	0.6	0.4	0.4	**0.55**	0.19

(table continued)

Table C2 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 1+0.9m (1+3).

Survey / Survey Date / Taxon	200 19-Feb-20 Mean	201 12-May-20 Mean	202 08-Jul-20 Mean	203 16-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Fissurella volcano	0.4	0.8	0.2	0.4	**0.45**	0.25
Lottia scutum	-	1.0	0.2	0.6	**0.45**	0.44
Leptasterias spp.	0.2	-	1.4	0.2	**0.45**	0.64
Crepidula spp.	0.2	0.4	0.4	0.2	**0.30**	0.12
Grapsidae	-	0.4	0.6	-	**0.25**	0.30
Nemertea	-	-	0.2	0.6	**0.20**	0.28
Ocinebrina spp.	-	0.6	-	0.2	**0.20**	0.28
Tetraclita rubescens	0.4	0.4	-	-	**0.20**	0.23
Sipuncula	-	-	0.4	0.2	**0.15**	0.19
Cyanoplax spp.	-	-	0.4	-	**0.10**	0.20
Lottia gigantea	-	-	0.2	0.2	**0.10**	0.12
Serpulidae	0.2	0.2	-	-	**0.10**	0.12
Balanus spp.	0.2	-	-	-	**0.05**	0.10
Cucumaria spp.	-	-	-	0.2	**0.05**	0.10
Epiactis prolifera	0.2	-	-	-	**0.05**	0.10
Eulithidium spp.	-	0.2	-	-	**0.05**	0.10
Hemigrapsus nudus	0.2	-	-	-	**0.05**	0.10
Heptacarpus spp.	-	-	-	0.2	**0.05**	0.10
Ischnochitonidae	-	-	-	0.2	**0.05**	0.10
Lirobittium spp.	0.2	-	-	-	**0.05**	0.10
Littorina spp.	0.2	-	-	-	**0.05**	0.10
Lottia ochracea	-	0.2	-	-	**0.05**	0.10
Pseudomelatoma torosa	0.2	-	-	-	**0.05**	0.10
Pugettia spp.	-	-	0.2	-	**0.05**	0.10
Invertebrate Cover						
Phragmatopoma californica	0.4	0.8	0.4	0.4	**0.49**	0.19
Chthamalus fissus	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryozoa (encrusting)	<0.1	-	<0.1	-	**<0.01**	<0.01
Pista spp.	-	-	<0.1	<0.1	**<0.01**	<0.01
tunicates, compound/social	<0.1	-	<0.1	-	**<0.01**	<0.01
Haliclona spp.	-	-	<0.1	-	**<0.01**	<0.01
Porifera (encrusting)	<0.1	-	-	-	**<0.01**	<0.01
Salmacina tribranchiata	<0.1	-	-	-	**<0.01**	<0.01
Substrate Cover						
rock	13.5	24.7	15.9	19.7	**18.44**	4.90
cobble	2.6	4.0	3.3	1.5	**2.83**	1.04
sand (shell gravel)	0.2	1.0	0.4	1.9	**0.90**	0.78

Table C3. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 2+0.3m (2+1).

Taxon / Survey / Survey Date	200 05-Feb-20 Mean	201 13-Apr-20 Mean	202 20-Jul-20 Mean	203 02-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	30.5	25.6	14.3	30.3	**25.17**	7.58
Phyllospadix spp.	26.0	21.2	23.0	21.4	**22.88**	2.21
Mazzaella flaccida	8.2	22.9	39.2	14.8	**21.27**	13.37
Mazzaella affinis	3.8	8.1	14.5	9.0	**8.84**	4.42
Gastroclonium subarticulatum	9.9	6.9	7.8	9.3	**8.47**	1.40
Mastocarpus papillatus	4.5	9.7	13.1	2.4	**7.40**	4.86
coralline crust	2.8	3.8	3.8	9.6	**5.00**	3.09
Chondracanthus canaliculatus	1.8	4.5	5.3	1.9	**3.39**	1.82
Codium setchellii	3.3	2.4	3.3	4.2	**3.30**	0.77
Mastocarpus jardinii	1.3	1.4	3.0	5.7	**2.83**	2.07
Gelidium coulteri	1.1	4.1	3.7	2.1	**2.74**	1.39
Mazzaella oregona	0.5	6.0	0.8	-	**1.82**	2.83
juv. articulated coralline algae	2.2	1.7	1.7	1.5	**1.76**	0.27
Corallina vancouveriensis	1.8	0.7	1.3	3.1	**1.72**	1.04
Smithora naiadum	<0.1	-	6.0	<0.1	**1.51**	3.02
Prionitis spp.	2.2	1.0	1.0	1.4	**1.41**	0.57
Cryptopleura violacea	0.6	0.8	2.2	<0.1	**0.90**	0.94
Mazzaella leptorhynchos	0.3	1.5	1.0	0.1	**0.73**	0.63
filamentous red algae complex	0.6	0.6	1.4	-	**0.66**	0.57
Porphyra spp.	-	-	1.9	-	**0.49**	0.97
Ulva spp.	<0.1	<0.1	1.5	<0.1	**0.37**	0.73
Neorhodomela larix	0.6	0.3	<0.1	<0.1	**0.24**	0.28
Endocladia muricata	0.4	0.1	<0.1	-	**0.14**	0.15
Grateloupia californica	<0.1	<0.1	0.4	<0.1	**0.12**	0.20
Gelidium pusillum	<0.1	<0.1	<0.1	0.3	**0.09**	0.13
Osmundea spp.	<0.1	<0.1	<0.1	0.1	**0.09**	0.03
Pterosiphonia dendroidea	<0.1	<0.1	<0.1	0.3	**0.09**	0.13
Calliarthron/Bossiella spp.-complex	0.2	<0.1	<0.1	<0.1	**0.07**	0.10
Microcladia coulteri	<0.1	<0.1	0.1	0.1	**0.07**	0.08
Cryptopleura ruprechtiana	-	0.2	<0.1	-	**0.05**	0.10
Chondracanthus corymbiferus	-	<0.1	<0.1	<0.1	**0.05**	0.03
Halymenia/Schizymenia spp.-complex	<0.1	-	0.1	-	**0.04**	0.07
Mazzaella splendens	-	0.1	-	-	**0.03**	0.07
Sarcodiotheca gaudichaudii	<0.1	<0.1	<0.1	<0.1	**0.02**	0.03
Callophyllis spp.	-	<0.1	-	-	**0.02**	0.03
Melobesia mediocris	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Chlorophyta (filamentous)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Callithamnion pikeanum	<0.1	<0.1	-	-	**<0.01**	<0.01
Colpomenia spp.	-	-	<0.1	-	**<0.01**	<0.01
Bryopsis spp.	-	-	-	<0.1	**<0.01**	<0.01
Chondria decipiens	-	<0.1	-	-	**<0.01**	<0.01
Corallina chilensis	-	<0.1	-	-	**<0.01**	<0.01
Gelidium robustum	-	<0.1	-	-	**<0.01**	<0.01

(table continued)

Table C3 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 2+0.3m (2+1).

Survey / Survey Date / Taxon	200 05-Feb-20 Mean	201 13-Apr-20 Mean	202 20-Jul-20 Mean	203 02-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts						
Chlorostoma funebralis	30.6	36.8	6.2	25.4	**24.75**	13.22
Pagurus spp.	5.8	10.0	9.4	6.4	**7.90**	2.11
Lottia scabra	6.8	5.2	5.6	3.0	**5.15**	1.59
Tetraclita rubescens	5.6	1.2	1.0	2.4	**2.55**	2.13
Chlorostoma brunnea	0.6	-	5.0	3.2	**2.20**	2.33
Anthopleura elegantissima	2.4	1.0	0.8	1.2	**1.35**	0.72
Lottia limatula	0.2	3.8	1.2	-	**1.30**	1.75
Lottia pelta	0.4	-	3.2	1.2	**1.20**	1.42
Epiactis prolifera	0.4	0.6	2.6	0.6	**1.05**	1.04
Lottiidae	1.8	0.6	1.0	0.6	**1.00**	0.57
Ocinebrina spp.	1.4	1.2	0.6	0.8	**1.00**	0.37
Fissurella volcano	1.0	0.4	0.2	1.6	**0.80**	0.63
Lacuna spp.	0.8	0.2	1.0	0.6	**0.65**	0.34
Crepidula spp.	0.4	0.6	0.2	0.8	**0.50**	0.26
Lottia scutum	0.6	0.2	0.4	0.2	**0.35**	0.19
Nemertea	0.2	-	0.6	0.6	**0.35**	0.30
Pugettia spp.	-	0.2	0.2	1.0	**0.35**	0.44
Ischnochitonidae	0.2	-	0.4	0.4	**0.25**	0.19
Leptasterias spp.	-	-	0.2	0.8	**0.25**	0.38
Grapsidae	-	0.4	0.2	-	**0.15**	0.19
Nereididae	-	0.2	0.2	0.2	**0.15**	0.10
Serpulidae	-	0.4	-	0.2	**0.15**	0.19
Pachygrapsus crassipes	-	-	-	0.6	**0.15**	0.30
Acmaea mitra	0.2	-	0.2	-	**0.10**	0.12
Cyanoplax spp.	-	-	0.4	-	**0.10**	0.20
Lepidozona spp.	-	-	-	0.4	**0.10**	0.20
Lirobittium spp.	-	0.2	-	0.2	**0.10**	0.12
Ophiactis simplex	-	-	0.2	0.2	**0.10**	0.12
Pycnogonida	-	0.2	-	0.2	**0.10**	0.12
Romaleon antennarius	-	-	0.4	-	**0.10**	0.20
Sipuncula	0.2	-	0.2	-	**0.10**	0.12
Amphiodia occidentalis	0.2	-	-	-	**0.05**	0.10
Barleeia spp.	-	0.2	-	-	**0.05**	0.10
Calliostoma ligatum	-	-	0.2	-	**0.05**	0.10
Diodora spp.	-	-	-	0.2	**0.05**	0.10
Epitonium/Opalia spp.	-	-	-	0.2	**0.05**	0.10
Heptacarpus spp.	-	-	-	0.2	**0.05**	0.10
Hermissenda crassicornis	-	-	0.2	-	**0.05**	0.10
Homolopoma luridum/Lirularia succincta	-	-	0.2	-	**0.05**	0.10
Isopoda	-	-	-	0.2	**0.05**	0.10
Mitra idae	-	-	-	0.2	**0.05**	0.10
Mopalia spp.	-	-	-	0.2	**0.05**	0.10
Patiria miniata	-	-	0.2	-	**0.05**	0.10
Pelecypoda boring	-	-	0.2	-	**0.05**	0.10
Pisaster/Henricia spp. (juv.)	-	0.2	-	-	**0.05**	0.10
Pseudomelatoma torosa	0.2	-	-	-	**0.05**	0.10

(table continued)

Table C3 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 2+0.3m (2+1).

Taxon / Survey / Survey Date	200 05-Feb-20 Mean	201 13-Apr-20 Mean	202 20-Jul-20 Mean	203 02-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Pista spp.	9.8	7.8	9.4	8.7	**8.92**	0.89
tunicates, compound/social	<0.1	0.2	0.1	<0.1	**0.11**	0.09
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.02**	0.03
Phragmatopoma californica	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Chthamalus fissus	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Substrate Cover						
rock	10.3	9.4	4.4	5.3	**7.33**	2.93
cobble	4.9	4.4	4.4	1.5	**3.82**	1.55
sand (shell gravel)	1.3	5.3	2.1	4.1	**3.22**	1.84

Table C4. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 2+0.9m (2+3).

Survey / Survey Date / Taxon	200 05-Feb-20 Mean	201 13-Apr-20 Mean	202 20-Jul-20 Mean	203 02-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	39.2	27.5	30.0	43.3	**35.00**	7.47
Endocladia muricata	28.5	34.4	32.9	31.0	**31.72**	2.57
Mastocarpus papillatus	2.6	4.0	13.9	7.6	**7.00**	5.06
coralline crust	6.5	4.5	4.0	3.1	**4.53**	1.41
Corallina vancouveriensis	1.6	0.7	2.6	1.2	**1.51**	0.80
Mazzaella flaccida	0.1	0.3	3.0	1.7	**1.29**	1.34
Mastocarpus jardinii	<0.1	0.3	1.0	2.6	**0.97**	1.15
juv. articulated coralline algae	0.8	0.8	0.8	0.1	**0.64**	0.34
Calliarthron/Bossiella spp.-complex	1.1	0.5	<0.1	0.5	**0.54**	0.43
Gelidium coulteri	<0.1	<0.1	0.2	0.6	**0.23**	0.28
Prionitis spp.	<0.1	<0.1	<0.1	0.2	**0.09**	0.09
Porphyra spp.	-	<0.1	0.3	<0.1	**0.07**	0.14
Mazzaella leptorhynchos	-	<0.1	<0.1	<0.1	**0.02**	0.03
Mazzaella affinis	-	<0.1	<0.1	-	**0.02**	0.03
Corallina chilensis	<0.1	-	-	-	**0.02**	0.03
Grateloupia californica	-	-	<0.1	-	**0.02**	0.03
Gelidium pusillum	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Chondracanthus canaliculatus	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Cumagloia andersonii	-	-	<0.1	-	**<0.01**	<0.01
Chlorophyta (filamentous)	-	<0.1	-	-	**<0.01**	<0.01
Mazzaella oregona	-	-	<0.1	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	117.0	79.2	97.4	52.4	**86.50**	27.48
Anthopleura elegantissima	8.2	12.2	6.0	7.6	**8.50**	2.64
Lottia scabra	2.6	9.0	6.8	6.4	**6.20**	2.66
Lottia limatula	1.6	2.0	3.0	1.8	**2.10**	0.62
Ocinebrina spp.	3.0	1.6	1.2	1.4	**1.80**	0.82
Pagurus spp.	1.2	1.8	2.4	1.4	**1.70**	0.53
Lottiidae	1.4	1.0	1.6	1.2	**1.30**	0.26
Mopalia spp.	1.4	1.0	0.2	0.6	**0.80**	0.52
Lottia scutum	0.4	0.4	1.0	1.2	**0.75**	0.41
Lottia pelta	1.4	0.2	1.2	-	**0.70**	0.70
Pachygrapsus crassipes	-	0.6	1.2	1.0	**0.70**	0.53
Serpulidae	0.4	0.4	-	0.4	**0.30**	0.20
Littorina scutulata	1.0	0.2	-	-	**0.30**	0.48
Nuttallina californica	0.2	1.0	-	-	**0.30**	0.48
Grapsidae	-	0.4	0.6	-	**0.25**	0.30
Leptasterias spp.	-	0.2	0.8	-	**0.25**	0.38
Cyanoplax spp.	0.2	0.2	0.4	-	**0.20**	0.16
Littorina spp.	-	0.4	-	0.4	**0.20**	0.23
Mytilus spp.	0.2	0.2	0.2	0.2	**0.20**	<0.01
Crepidula spp.	0.2	-	0.4	-	**0.15**	0.19
Hemigrapsus nudus	0.2	0.2	0.2	-	**0.15**	0.10
Tetraclita rubescens	-	0.6	-	-	**0.15**	0.30

(table continued)

Table C4 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Control Station NC 2+0.9m (2+3).

Survey Survey Date Taxon	200 05-Feb-20 Mean	201 13-Apr-20 Mean	202 20-Jul-20 Mean	203 02-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Lottia gigantea	-	0.2	0.2	-	**0.10**	0.12
Acanthinucella spp.	-	-	-	0.2	**0.05**	0.10
Calliostoma ligatum	-	0.2	-	-	**0.05**	0.10
Fissurellidea bimaculata	0.2	-	-	-	**0.05**	0.10
Nemertea	-	-	-	0.2	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	0.3	0.1	0.3	0.1	**0.22**	0.08
Phragmatopoma californica	<0.1	0.1	<0.1	0.3	**0.13**	0.12
Haliclona spp.	<0.1	<0.1	<0.1	0.2	**0.05**	0.10
Spirorbidae	0.1	<0.1	<0.1	<0.1	**0.04**	0.07
Salmacina tribranchiata	<0.1	-	<0.1	-	**<0.01**	<0.01
tunicates, compound/social	<0.1	<0.1	-	-	**<0.01**	<0.01
Pista spp.	<0.1	-	-	-	**<0.01**	<0.01
Substrate Cover						
rock	14.5	21.7	15.8	8.6	**15.16**	5.38
cobble	11.0	11.7	9.0	8.1	**9.93**	1.71
sand (shell gravel)	<0.1	0.5	0.1	0.2	**0.21**	0.20

Table C5. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 1+0.3m (4+1).

Survey / Survey Date / Taxon	200 07-Jan-20 Mean	201 02-Apr-20 Mean	202 19-Aug-20 Mean	203 19-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	30.8	24.0	17.7	29.7	**25.56**	6.04
Corallina vancouveriensis	20.5	24.9	13.8	18.0	**19.31**	4.65
Egregia menziesii	14.7	8.8	29.4	12.4	**16.30**	9.09
juv. articulated coralline algae	5.2	4.5	11.6	10.6	**7.99**	3.64
Phyllospadix spp.	5.8	4.8	10.5	9.4	**7.60**	2.75
coralline crust	7.7	7.2	6.0	9.0	**7.45**	1.24
Cryptopleura violacea	<0.1	0.6	5.5	4.9	**2.78**	2.82
Chondracanthus canaliculatus	1.6	0.7	4.4	1.2	**1.96**	1.65
Gelidium coulteri	0.3	0.5	5.8	0.6	**1.81**	2.69
Colpomenia spp.	<0.1	0.5	3.1	0.6	**1.04**	1.41
Prionitis spp.	1.1	1.5	1.0	0.1	**0.94**	0.56
Gastroclonium subarticulatum	0.3	0.2	2.4	0.8	**0.92**	1.04
Ulva spp.	-	<0.1	2.9	<0.1	**0.75**	1.45
Calliarthron/Bossiella spp.-complex	1.4	0.6	0.6	0.4	**0.73**	0.44
Endocladia muricata	0.4	0.6	0.7	<0.1	**0.43**	0.27
filamentous red algae complex	-	<0.1	1.1	<0.1	**0.31**	0.53
Osmundea spp.	<0.1	0.4	0.2	0.2	**0.21**	0.11
Cystoseira osmundacea	-	0.2	0.4	0.2	**0.21**	0.17
Codium fragile subsp. *californicum*	<0.1	0.2	<0.1	0.4	**0.16**	0.20
Smithora naiadum	<0.1	<0.1	0.5	-	**0.12**	0.24
Corallina chilensis	0.4	<0.1	-	<0.1	**0.11**	0.21
Macrocystis pyrifera	-	0.3	<0.1	-	**0.10**	0.17
Sarcodiotheca gaudichaudii	<0.1	0.2	<0.1	<0.1	**0.09**	0.09
Cladophora spp.	-	<0.1	0.3	<0.1	**0.07**	0.14
Chondracanthus corymbiferus	-	-	<0.1	0.2	**0.07**	0.10
Mastocarpus papillatus	<0.1	<0.1	0.1	<0.1	**0.06**	0.07
Chlorophyta (filamentous)	-	-	0.1	-	**0.04**	0.07
Gelidium pusillum	0.1	-	-	<0.1	**0.04**	0.07
Chrysophyta	-	<0.1	0.1	-	**0.04**	0.07
Callithamnion spp./*Pleonosporium* spp.	-	<0.1	0.1	-	**0.03**	0.07
Scytosiphon spp.	-	-	0.1	-	**0.03**	0.07
Mazzaella affinis	-	-	<0.1	<0.1	**0.02**	0.04
Laminariales	-	<0.1	<0.1	-	**0.02**	0.04
Endarachne/Petalonia spp.-complex	-	-	<0.1	-	**0.02**	0.04
Melobesia mediocris	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Mazzaella flaccida	<0.1	-	<0.1	-	**<0.01**	<0.01
Mazzaella leptorhynchos	-	-	<0.1	-	**<0.01**	<0.01
Bryopsis spp.	-	-	<0.1	<0.1	**<0.01**	<0.01
Porphyra spp.	-	-	<0.1	-	**<0.01**	<0.01
Rhodophyta (juv. blades)	-	<0.1	-	-	**<0.01**	<0.01
Callithamnion pikeanum	<0.1	-	-	-	**<0.01**	<0.01
Mastocarpus jardinii	<0.1	-	-	-	**<0.01**	<0.01
Mazzaella splendens	-	-	<0.1	-	**<0.01**	<0.01

(table continued)

Table C5 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 1+0.3m (4+1).

Survey / Survey Date / Taxon	200 07-Jan-20 Mean	201 02-Apr-20 Mean	202 19-Aug-20 Mean	203 19-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts						
Lottia scabra	60.4	85.0	44.6	39.0	**57.25**	20.60
Chlorostoma funebralis	37.8	50.8	14.8	32.8	**34.05**	14.91
Tetraclita rubescens	33.6	43.4	38.4	11.0	**31.60**	14.30
Strongylocentrotus purpuratus	12.8	22.2	24.2	17.8	**19.25**	5.06
Lottia limatula	6.4	14.0	15.2	21.0	**14.15**	6.00
Nuttallina californica	3.8	15.6	4.4	16.8	**10.15**	7.01
Serpulidae	1.2	5.4	9.0	4.6	**5.05**	3.20
Pagurus spp.	5.6	6.8	2.4	3.8	**4.65**	1.94
Anthopleura elegantissima	6.6	2.8	3.4	5.6	**4.60**	1.80
Lottia pelta	2.2	3.4	3.6	6.4	**3.90**	1.78
Lottia scutum	6.0	2.8	6.0	0.2	**3.75**	2.81
Mytilus spp.	5.4	3.6	2.6	2.6	**3.55**	1.32
Pachygrapsus crassipes	3.6	0.8	6.2	3.0	**3.40**	2.22
Chlorostoma brunnea	0.8	-	5.8	5.0	**2.90**	2.92
Fissurella volcano	2.8	1.4	0.8	2.2	**1.80**	0.88
Mopalia spp.	1.4	1.4	0.6	2.0	**1.35**	0.57
Epiactis prolifera	1.6	0.6	1.6	1.4	**1.30**	0.48
Lottiidae	1.4	1.4	1.2	1.2	**1.30**	0.12
Sipuncula	-	0.2	2.0	1.0	**0.80**	0.91
Acmaea mitra	0.8	0.6	0.6	1.0	**0.75**	0.19
Leptasterias spp.	0.8	-	1.4	0.6	**0.70**	0.58
Serpulorbis squamigerus	0.8	0.6	1.0	0.4	**0.70**	0.26
Ocinebrina spp.	1.2	0.4	0.6	0.4	**0.65**	0.38
Cyanoplax spp.	0.2	-	1.6	0.6	**0.60**	0.71
Lottia gigantea	1.0	0.6	0.6	0.2	**0.60**	0.33
Nemertea	0.2	-	1.8	0.2	**0.55**	0.84
Lacuna spp.	0.2	-	0.2	0.4	**0.20**	0.16
Lottia insessa	0.4	0.2	-	0.2	**0.20**	0.16
Grapsidae	0.2	0.2	0.2	-	**0.15**	0.10
Heptacarpus spp.	0.2	-	0.2	0.2	**0.15**	0.10
Ischnochitonidae	0.4	-	-	0.2	**0.15**	0.19
Pugettia spp.	0.2	-	0.2	0.2	**0.15**	0.10
Nereididae	-	0.2	0.2	-	**0.10**	0.12
Pelecypoda boring	0.2	-	-	0.2	**0.10**	0.12
Triopha spp.	-	-	0.4	-	**0.10**	0.20
Crepidula spp.	-	-	0.2	-	**0.05**	0.10
Epitonium/Opalia spp.	0.2	-	-	-	**0.05**	0.10
Idotea spp.	-	-	0.2	-	**0.05**	0.10
Lirobittium spp.	-	0.2	-	-	**0.05**	0.10
Lottia instabilis	-	-	0.2	-	**0.05**	0.10
Lottia ochracea	-	0.2	-	-	**0.05**	0.10
Octopus spp.	0.2	-	-	-	**0.05**	0.10
Phidiana hiltoni	0.2	-	-	-	**0.05**	0.10
Placiphorella velata	-	-	0.2	-	**0.05**	0.10
Pseudomelatoma torosa	-	-	0.2	-	**0.05**	0.10
Sabellidae	-	0.2	-	-	**0.05**	0.10
Tonicella lineata	0.2	-	-	-	**0.05**	0.10

(table continued)

Table C5 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 1+0.3m (4+1).

Survey / Survey Date / Taxon	200 07-Jan-20 Mean	201 02-Apr-20 Mean	202 19-Aug-20 Mean	203 19-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Phragmatopoma californica	7.7	2.6	5.6	7.3	**5.80**	2.33
Pista spp.	0.6	1.5	4.0	1.8	**1.98**	1.45
Bryozoa (encrusting)	<0.1	-	<0.1	0.1	**0.04**	0.07
Chthamalus fissus	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Spirorbidae	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
tunicates, compound/social	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Dodecaceria fewkesi	-	<0.1	-	-	**<0.01**	<0.01
Hydroidolina	<0.1	-	-	-	**<0.01**	<0.01
Substrate Cover						
rock	21.7	32.1	24.4	19.7	**24.46**	5.43
sand (shell gravel)	0.7	0.6	0.6	1.2	**0.78**	0.27
cobble	0.8	0.9	0.3	<0.1	**0.49**	0.42

Table C6. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 1+0.9m (4+3).

Survey / Survey Date / Taxon	200 07-Jan-20 Mean	201 02-Apr-20 Mean	202 19-Aug-20 Mean	203 19-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
Endocladia muricata	13.3	10.6	13.4	13.3	**12.64**	1.39
non-coralline crust	14.2	7.9	10.6	11.2	**10.97**	2.56
coralline crust	1.6	0.9	1.3	1.0	**1.18**	0.32
juv. articulated coralline algae	0.2	0.8	1.0	0.7	**0.66**	0.32
Calliarthron/Bossiella spp.-complex	0.6	0.6	0.4	0.9	**0.63**	0.20
Corallina vancouveriensis	0.3	0.8	0.1	0.4	**0.42**	0.26
Mastocarpus papillatus	0.1	0.1	0.5	0.4	**0.28**	0.17
Silvetia compressa	0.4	<0.1	-	0.2	**0.17**	0.18
Gelidium coulteri	-	<0.1	0.1	<0.1	**0.04**	0.07
Phyllospadix spp.	<0.1	-	<0.1	-	**0.02**	0.03
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Gelidium pusillum	-	<0.1	<0.1	<0.1	**0.01**	<0.01
Chondracanthus canaliculatus	-	-	<0.1	-	**<0.01**	<0.01
Mazzaella affinis	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Mazzaella leptorhynchos	-	-	<0.1	-	**<0.01**	<0.01
Mazzaella flaccida	-	-	<0.1	-	**<0.01**	<0.01
Chlorophyta (filamentous)	-	-	<0.1	-	**<0.01**	<0.01
Porphyra spp.	-	-	<0.1	-	**<0.01**	<0.01
Smithora naiadum	-	-	<0.1	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	110.2	86.0	231.2	244.8	**168.05**	81.56
Anthopleura elegantissima	209.0	149.4	109.8	164.8	**158.25**	41.00
Lottia scabra	79.4	77.8	54.0	71.6	**70.70**	11.63
Pagurus spp.	14.0	7.2	7.0	12.4	**10.15**	3.58
Lottia limatula	5.0	4.0	7.8	12.8	**7.40**	3.94
Lottia pelta	3.8	1.4	1.2	2.4	**2.20**	1.19
Lottiidae	6.0	0.4	0.6	1.0	**2.00**	2.68
Epiactis prolifera	-	6.2	-	-	**1.55**	3.10
Cyanoplax spp.	0.4	0.6	0.8	4.2	**1.50**	1.81
Acanthinucella spp.	1.4	1.2	1.0	2.2	**1.45**	0.53
Lottia scutum	4.8	0.4	-	-	**1.30**	2.34
Mopalia spp.	0.6	0.2	1.6	1.6	**1.00**	0.71
Ocinebrina spp.	0.6	-	0.4	2.0	**0.75**	0.87
Serpulidae	0.6	1.4	0.6	-	**0.65**	0.57
Pachygrapsus crassipes	0.4	0.8	-	1.0	**0.55**	0.44
Mytilus spp.	-	0.8	-	1.0	**0.45**	0.53
Nuttallina californica	0.6	0.2	0.4	0.2	**0.35**	0.19
Cirratulidae/Terebellidae	0.4	-	0.4	0.2	**0.25**	0.19
Epitonium/Opalia spp.	-	-	0.8	0.2	**0.25**	0.38
Littorina scutulata	0.4	0.4	-	-	**0.20**	0.23
Strongylocentrotus purpuratus	0.4	0.2	-	0.2	**0.20**	0.16
Sipuncula	-	-	-	0.6	**0.15**	0.30
Nemertea	-	-	-	0.4	**0.10**	0.20
Fissurella volcano	-	0.2	-	-	**0.05**	0.10

(table continued)

Table C6 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 1+0.9m (4+3).

Survey Survey Date Taxon	200 07-Jan-20 Mean	201 02-Apr-20 Mean	202 19-Aug-20 Mean	203 19-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Haliotis spp.	0.1	0.1	-	-	**0.05**	0.06
Lirobittium spp.	-	-	-	0.2	**0.05**	0.10
Littorina spp.	-	-	0.2	-	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	3.6	3.8	3.5	2.0	**3.22**	0.81
Phragmatopoma californica	4.4	2.4	1.8	2.8	**2.83**	1.10
Porifera (encrusting)	-	-	-	<0.1	**<0.01**	<0.01
Spirorbidae	-	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	47.4	62.2	64.5	53.6	**56.93**	7.92
sand (shell gravel)	8.1	2.2	0.1	4.2	**3.67**	3.41
cobble	3.9	5.8	1.5	2.9	**3.54**	1.81

Table C7. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 2+0.3m (5+1).

Survey / Survey Date / Taxon	200 14-Jan-20 Mean	201 06-Apr-20 Mean	202 04-Aug-20 Mean	203 01-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	16.7	17.0	12.6	20.8	**16.81**	3.35
Corallina vancouveriensis	16.7	19.9	4.3	22.6	**15.87**	8.07
juv. articulated coralline algae	7.7	6.1	14.8	5.3	**8.47**	4.33
Egregia menziesii	6.4	5.4	14.5	5.3	**7.90**	4.44
coralline crust	11.7	6.2	7.6	3.3	**7.21**	3.49
Phyllospadix spp.	5.8	4.9	4.9	5.2	**5.19**	0.41
Calliarthron/Bossiella spp.-complex	2.4	4.4	5.4	4.9	**4.27**	1.30
Gelidium coulteri	1.3	0.6	5.4	0.7	**2.02**	2.29
Prionitis spp.	0.9	0.8	1.8	1.7	**1.30**	0.55
Chrysophyta	-	<0.1	5.1	-	**1.30**	2.56
Cryptopleura violacea	<0.1	0.2	1.8	1.3	**0.84**	0.83
filamentous red algae complex	-	<0.1	2.8	-	**0.71**	1.38
Endocladia muricata	0.7	0.8	0.5	0.8	**0.69**	0.15
Codium fragile subsp. *californicum*	0.2	0.8	0.8	0.2	**0.50**	0.34
Chondracanthus canaliculatus	<0.1	<0.1	0.7	0.6	**0.35**	0.36
Cladophora spp.	<0.1	<0.1	1.2	<0.1	**0.30**	0.59
Ulva spp.	-	-	0.8	<0.1	**0.21**	0.42
Smithora naiadum	-	<0.1	0.8	-	**0.21**	0.42
Corallina chilensis	0.1	0.1	0.3	<0.1	**0.16**	0.09
Gastroclonium subarticulatum	-	<0.1	0.3	<0.1	**0.09**	0.13
Colpomenia spp.	-	<0.1	0.2	<0.1	**0.07**	0.10
Mastocarpus papillatus	<0.1	<0.1	0.2	<0.1	**0.06**	0.11
Mazzaella splendens	-	-	0.2	-	**0.05**	0.10
Sargassum muticum	-	0.2	-	-	**0.05**	0.10
Chlorophyta (filamentous)	-	<0.1	0.1	-	**0.04**	0.07
Mazzaella affinis	-	<0.1	0.1	-	**0.03**	0.07
Laminariales	<0.1	<0.1	-	-	**0.03**	0.04
Sarcodiotheca gaudichaudii	-	<0.1	<0.1	<0.1	**0.02**	0.03
Mazzaella flaccida	-	-	<0.1	-	**0.02**	0.04
Scytosiphon spp.	-	-	<0.1	-	**0.02**	0.04
Macrocystis pyrifera	-	-	<0.1	-	**0.02**	0.03
Gelidium pusillum	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Melobesia mediocris	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Chondracanthus corymbiferus	-	-	<0.1	<0.1	**<0.01**	<0.01
Callithamnion spp./*Pleonosporium* spp.	<0.1	-	-	<0.1	**<0.01**	<0.01
Endarachne/Petalonia spp.-complex	-	-	<0.1	-	**<0.01**	<0.01
Mazzaella leptorhynchos	-	<0.1	<0.1	-	**<0.01**	<0.01
Pterosiphonia dendroidea	-	<0.1	-	-	**<0.01**	<0.01
Callophyllis spp.	-	-	<0.1	-	**<0.01**	<0.01
Osmundea spp.	-	-	<0.1	-	**<0.01**	<0.01
Porphyra spp.	-	-	<0.1	-	**<0.01**	<0.01
Rhodophyta (juv. blades)	-	<0.1	-	-	**<0.01**	<0.01

(table continued)

Table C7 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 2+0.3m (5+1).

Taxon / Survey / Survey Date	200 14-Jan-20 Mean	201 06-Apr-20 Mean	202 04-Aug-20 Mean	203 01-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts						
Mytilus spp.	139.8	132.0	161.4	96.0	**132.30**	27.21
Chlorostoma funebralis	76.2	37.0	131.6	50.0	**73.70**	41.90
Strongylocentrotus purpuratus	48.4	41.0	40.8	21.4	**37.90**	11.55
Lottia scabra	27.4	52.8	32.6	32.2	**36.25**	11.28
Tetraclita rubescens	27.4	33.6	33.4	17.4	**27.95**	7.60
Anthopleura elegantissima	9.2	11.2	22.4	13.4	**14.05**	5.82
Lottia limatula	4.0	6.0	10.0	13.4	**8.35**	4.19
Nuttallina californica	7.8	3.2	9.2	8.2	**7.10**	2.67
Lottia pelta	4.6	5.2	6.4	0.8	**4.25**	2.42
Fissurella volcano	3.8	1.6	2.4	4.6	**3.10**	1.35
Balanus spp.	3.0	-	1.2	6.8	**2.75**	2.97
Serpulidae	1.0	1.6	4.4	0.8	**1.95**	1.67
Pachygrapsus crassipes	3.2	0.2	3.2	0.6	**1.80**	1.62
Lottiidae	2.2	1.0	1.4	0.8	**1.35**	0.62
Nemertea	0.8	0.2	4.4	-	**1.35**	2.06
Ocinebrina spp.	0.6	0.2	1.2	1.8	**0.95**	0.70
Lottia scutum	0.8	1.2	0.6	0.6	**0.80**	0.28
Pagurus spp.	0.8	0.2	2.0	-	**0.75**	0.90
Sipuncula	0.8	0.2	1.0	0.8	**0.70**	0.35
Nereididae	-	0.2	2.2	-	**0.60**	1.07
Acmaea mitra	0.6	1.0	0.4	0.4	**0.60**	0.28
Lottia gigantea	0.4	0.4	0.6	0.6	**0.50**	0.12
Leptasterias spp.	0.2	0.2	0.6	0.6	**0.40**	0.23
Mopalia spp.	0.4	0.2	0.4	-	**0.25**	0.19
Cyanoplax spp.	0.2	-	0.4	0.2	**0.20**	0.16
Epiactis prolifera	-	0.2	0.4	-	**0.15**	0.19
Serpulorbis squamigerus	0.2	0.2	0.2	-	**0.15**	0.10
Anthopleura artemisia	0.4	-	-	-	**0.10**	0.20
Chlorostoma brunnea	-	-	0.4	-	**0.10**	0.20
Crepidula spp.	0.2	-	0.2	-	**0.10**	0.12
Grapsidae	-	-	0.4	-	**0.10**	0.20
Lacuna spp.	0.2	-	-	0.2	**0.10**	0.12
Pelecypoda boring	-	0.2	-	0.2	**0.10**	0.12
Epitonium/Opalia spp.	-	-	0.2	-	**0.05**	0.10
Homolopoma luridum/Lirularia succincta	-	-	0.2	-	**0.05**	0.10
Ischnochitonidae	0.2	-	-	-	**0.05**	0.10
Lirobittium spp.	-	-	0.2	-	**0.05**	0.10
Littorina spp.	-	-	0.2	-	**0.05**	0.10
Lottia insessa	0.2	-	-	-	**0.05**	0.10
Lottia ochracea	0.2	-	-	-	**0.05**	0.10
Platyhelminthes	-	-	0.2	-	**0.05**	0.10

(table continued)

Table C7 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 2+0.3m (5+1).

Survey / Survey Date / Taxon	200 14-Jan-20 Mean	201 06-Apr-20 Mean	202 04-Aug-20 Mean	203 01-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Phragmatopoma californica	5.3	0.8	<0.1	3.6	**2.45**	2.46
Pista spp.	0.2	0.7	0.3	1.2	**0.59**	0.45
Chthamalus fissus	0.4	<0.1	0.2	0.3	**0.23**	0.12
Dodecaceria fewkesi	<0.1	<0.1	0.2	0.1	**0.09**	0.10
tunicates, compound/social	<0.1	<0.1	<0.1	<0.1	**0.02**	0.03
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Haliclona spp.	-	-	-	<0.1	**<0.01**	<0.01
Substrate Cover						
rock	30.2	29.7	23.5	25.1	**27.15**	3.32
sand (shell gravel)	1.1	1.9	1.7	2.1	**1.72**	0.43
cobble	1.0	1.4	0.6	0.4	**0.87**	0.43

Table C8. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 2+0.9m (5+3).

Taxon / Survey / Survey Date	200 14-Jan-20 Mean	201 06-Apr-20 Mean	202 04-Aug-20 Mean	203 01-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
Endocladia muricata	20.8	30.6	27.9	27.5	**26.70**	4.19
non-coralline crust	17.4	11.0	13.0	16.2	**14.38**	2.93
Mastocarpus papillatus	1.0	0.2	4.1	1.0	**1.58**	1.72
juv. articulated coralline algae	<0.1	<0.1	0.2	<0.1	**0.07**	0.10
Prionitis spp.	0.1	<0.1	<0.1	-	**0.05**	0.07
Silvetia compressa	-	-	0.2	-	**0.05**	0.10
coralline crust	<0.1	<0.1	<0.1	<0.1	**0.04**	0.04
Gelidium coulteri	<0.1	-	0.1	-	**0.04**	0.07
Mastocarpus jardinii	0.1	<0.1	-	-	**0.04**	0.07
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**0.02**	0.04
Corallina vancouveriensis	<0.1	<0.1	<0.1	-	**0.02**	0.03
Mazzaella leptorhynchos	-	-	<0.1	-	**0.02**	0.04
Gelidium pusillum	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Mazzaella affinis	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Mazzaella flaccida	-	-	<0.1	-	**<0.01**	<0.01
Porphyra spp.	-	-	<0.1	-	**<0.01**	<0.01
Gastroclonium subarticulatum	-	-	-	<0.1	**<0.01**	<0.01
Phyllospadix spp.	<0.1	-	-	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	126.6	36.2	127.8	62.0	**88.15**	46.31
Anthopleura elegantissima	31.0	41.8	26.2	24.6	**30.90**	7.76
Lottia scabra	18.8	23.4	31.2	24.2	**24.40**	5.12
Lottia limatula	3.4	2.6	8.4	7.8	**5.55**	2.97
Lottiidae	1.6	1.0	3.8	1.0	**1.85**	1.33
Lottia pelta	2.2	0.8	1.8	0.6	**1.35**	0.77
Pagurus spp.	1.2	1.4	0.6	0.4	**0.90**	0.48
Cyanoplax spp.	0.6	0.6	1.4	0.6	**0.80**	0.40
Lottia scutum	1.6	-	0.6	-	**0.55**	0.75
Acanthinucella spp.	0.8	-	0.2	1.0	**0.50**	0.48
Ocinebrina spp.	0.2	-	0.6	0.6	**0.35**	0.30
Littorina scutulata	0.6	0.4	-	-	**0.25**	0.30
Littorina spp.	-	-	0.6	0.4	**0.25**	0.30
Lottia gigantea	0.4	0.4	-	0.2	**0.25**	0.19
Mytilus spp.	-	0.4	0.4	0.2	**0.25**	0.19
Pachygrapsus crassipes	0.2	0.4	0.2	0.2	**0.25**	0.10
Pollicipes polymerus	0.2	0.2	0.2	0.4	**0.25**	0.10
Ischnochitonidae	0.2	0.2	0.2	-	**0.15**	0.10
Nemertea	0.4	-	-	0.2	**0.15**	0.19
Cirratulidae/Terebellidae	0.2	-	-	0.2	**0.10**	0.12
Epitonium/Opalia spp.	-	-	0.4	-	**0.10**	0.20
Mopalia spp.	-	-	0.4	-	**0.10**	0.20
Fissurella volcano	0.2	-	-	-	**0.05**	0.10
Grapsidae	-	0.2	-	-	**0.05**	0.10
Nuttallina californica	0.2	-	-	-	**0.05**	0.10
Ophiothrix spiculata	-	-	0.2	-	**0.05**	0.10

(table continued)

Table C8 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 2+0.9m (5+3).

Survey Survey Date Taxon	200 14-Jan-20 Mean	201 06-Apr-20 Mean	202 04-Aug-20 Mean	203 01-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Pelecypoda boring	-	0.2	-	-	**0.05**	0.10
Septifer bifurcatus	-	-	0.2	-	**0.05**	0.10
Tetraclita rubescens	-	-	-	0.2	**0.05**	0.10
Invertebrate Cover						
Phragmatopoma californica	1.1	0.4	0.7	0.5	**0.66**	0.33
Chthamalus fissus	0.1	0.1	0.4	1.3	**0.49**	0.56
Spirorbidae	<0.1	-	-	-	**<0.01**	<0.01
Substrate Cover						
rock	54.6	53.8	55.8	51.9	**54.03**	1.60
sand (shell gravel)	4.6	5.4	1.0	2.4	**3.35**	2.01
cobble	1.2	<0.1	0.8	0.7	**0.70**	0.46

Table C9. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 3+0.3m (6+1).

Survey Survey Date Taxon	200 11-Feb-20 Mean	201 03-Apr-20 Mean	202 24-Jul-20 Mean	203 30-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	32.3	29.9	25.0	29.8	**29.24**	3.05
Phyllospadix spp.	13.1	10.6	12.9	14.0	**12.64**	1.42
coralline crust	9.9	7.6	6.5	5.1	**7.27**	2.02
Corallina vancouveriensis	6.6	5.5	4.2	9.2	**6.37**	2.10
juv. articulated coralline algae	5.5	7.1	3.1	4.8	**5.12**	1.64
Gelidium coulteri	1.7	2.1	5.3	0.5	**2.38**	2.05
Egregia menziesii	1.3	1.2	4.5	0.8	**1.96**	1.71
Gastroclonium subarticulatum	0.8	1.9	2.0	1.3	**1.51**	0.54
Chrysophyta	0.5	-	4.2	-	**1.16**	2.02
filamentous red algae complex	-	-	3.7	-	**0.92**	1.84
Calliarthron/Bossiella spp.-complex	1.0	0.9	0.9	0.4	**0.82**	0.27
Mazzaella flaccida	-	-	2.8	-	**0.70**	1.39
Smithora naiadum	-	<0.1	2.7	<0.1	**0.68**	1.35
Gelidium pusillum	-	0.2	1.6	<0.1	**0.46**	0.77
Mastocarpus papillatus	0.7	<0.1	0.5	0.4	**0.39**	0.29
Ulva spp.	<0.1	<0.1	1.3	0.2	**0.37**	0.60
Chondracanthus canaliculatus	0.3	<0.1	0.6	0.5	**0.33**	0.25
Prionitis spp.	0.3	0.3	0.5	0.2	**0.32**	0.12
Endocladia muricata	0.2	0.3	0.3	0.4	**0.31**	0.09
Cryptopleura violacea	0.3	0.1	0.3	0.3	**0.26**	0.09
Cladophora spp.	<0.1	<0.1	0.5	<0.1	**0.15**	0.23
Codium fragile subsp. *californicum*	0.1	<0.1	0.3	<0.1	**0.14**	0.15
Colpomenia spp.	<0.1	<0.1	0.3	0.1	**0.11**	0.13
Chlorophyta (filamentous)	-	-	0.4	-	**0.10**	0.21
Macrocystis pyrifera	-	-	0.4	-	**0.10**	0.21
Sarcodiotheca gaudichaudii	<0.1	-	0.2	-	**0.05**	0.10
Mazzaella affinis	-	-	0.1	<0.1	**0.04**	0.07
Mazzaella leptorhynchos	<0.1	-	<0.1	-	**0.02**	0.04
Cystoseira osmundacea	<0.1	<0.1	-	-	**0.02**	0.03
Corallina chilensis	<0.1	-	-	-	**0.02**	0.03
Mazzaella oregona	-	-	<0.1	-	**0.02**	0.03
Melobesia mediocris	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Laminariales	<0.1	-	<0.1	-	**<0.01**	<0.01
Mastocarpus jardinii	-	-	<0.1	-	**<0.01**	<0.01
Callithamnion spp./*Pleonosporium* spp.	-	-	<0.1	-	**<0.01**	<0.01
Endarachne/Petalonia spp.-complex	<0.1	-	-	-	**<0.01**	<0.01
Grateloupia californica	-	-	<0.1	-	**<0.01**	<0.01
Halicystis ovalis (=Derbesia marina)	<0.1	-	-	-	**<0.01**	<0.01
Microcladia coulteri	-	-	<0.1	-	**<0.01**	<0.01
Osmundea spp.	-	-	<0.1	-	**<0.01**	<0.01
Rhodymenia spp.	<0.1	-	-	-	**<0.01**	<0.01
Scytosiphon spp.	-	-	<0.1	-	**<0.01**	<0.01

(table continued)

Table C9 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 3+0.3m (6+1).

Survey Survey Date Taxon	200 11-Feb-20 Mean	201 03-Apr-20 Mean	202 24-Jul-20 Mean	203 30-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts						
Mytilus spp.	78.4	36.6	60.8	40.4	**54.05**	19.40
Chlorostoma funebralis	19.6	45.6	73.2	38.6	**44.25**	22.21
Strongylocentrotus purpuratus	58.6	48.8	29.2	37.8	**43.60**	12.82
Tetraclita rubescens	25.8	39.8	31.2	45.6	**35.60**	8.81
Lottia scabra	7.6	12.8	30.4	13.4	**16.05**	9.91
Anthopleura elegantissima	11.6	9.6	7.6	12.8	**10.40**	2.29
Lottia limatula	9.4	9.2	8.0	6.2	**8.20**	1.47
Pagurus spp.	6.2	5.2	12.8	1.6	**6.45**	4.67
Fissurella volcano	3.8	5.8	6.0	3.8	**4.85**	1.22
Nuttallina californica	2.6	5.4	4.8	4.0	**4.20**	1.21
Lottia pelta	3.2	2.4	9.2	1.8	**4.15**	3.42
Serpulidae	2.0	4.6	3.0	5.2	**3.70**	1.47
Sipuncula	5.6	-	0.6	0.6	**1.70**	2.62
Ocinebrina spp.	1.6	1.6	2.0	0.8	**1.50**	0.50
Pachygrapsus crassipes	1.4	0.8	1.8	1.2	**1.30**	0.42
Lottiidae	1.2	0.6	1.6	1.0	**1.10**	0.42
Balanus spp.	1.0	-	2.4	0.8	**1.05**	1.00
Lottia scutum	0.4	-	1.2	2.2	**0.95**	0.97
Acmaea mitra	1.6	0.8	0.6	0.6	**0.90**	0.48
Nemertea	0.8	-	2.2	0.6	**0.90**	0.93
Chlorostoma brunnea	-	2.4	-	0.2	**0.65**	1.17
Mopalia spp.	0.4	0.8	0.6	0.8	**0.65**	0.19
Leptasterias spp.	-	0.2	1.2	0.6	**0.50**	0.53
Serpulorbis squamigerus	0.4	0.8	0.4	0.4	**0.50**	0.20
Tonicella lineata	0.4	0.2	0.4	-	**0.25**	0.19
Acanthinucella spp.	0.4	0.2	0.2	-	**0.20**	0.16
Haliotis spp.	0.1	0.1	0.3	0.2	**0.18**	0.10
Lacuna spp.	0.2	-	-	0.4	**0.15**	0.19
Lottia gigantea	-	0.2	0.2	0.2	**0.15**	0.10
Cirratulidae/Terebellidae	-	-	0.2	0.2	**0.10**	0.12
Cyanoplax spp.	-	-	0.2	0.2	**0.10**	0.12
Epitonium/Opalia spp.	-	-	0.4	-	**0.10**	0.20
Grapsidae	-	-	0.4	-	**0.10**	0.20
Pelecypoda boring	-	0.2	-	0.2	**0.10**	0.12
Pseudomelatoma torosa	-	0.2	0.2	-	**0.10**	0.12
Crepidula spp.	-	-	0.2	-	**0.05**	0.10
Homolopoma luridum/Lirularia succincta	-	0.2	-	-	**0.05**	0.10
Lissothuria nutriens	-	0.2	-	-	**0.05**	0.10
Littorina spp.	0.2	-	-	-	**0.05**	0.10
Nereididae	-	-	0.2	-	**0.05**	0.10
Pachycheles spp.	-	0.2	-	-	**0.05**	0.10
Pugettia spp.	-	-	0.2	-	**0.05**	0.10

(table continued)

Table C9 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 3+0.3m (6+1).

Taxon / Survey / Survey Date	200 11-Feb-20 Mean	201 03-Apr-20 Mean	202 24-Jul-20 Mean	203 30-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Phragmatopoma californica	13.3	11.3	8.8	10.1	**10.87**	1.94
Pista spp.	4.4	4.6	4.7	4.9	**4.64**	0.23
Chthamalus fissus	0.6	0.8	0.4	0.4	**0.56**	0.17
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Bryozoa (encrusting)	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
tunicates, compound/social	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Dodecaceria fewkesi	-	<0.1	<0.1	-	**<0.01**	<0.01
Salmacina tribranchiata	-	<0.1	-	<0.1	**<0.01**	<0.01
Hydroidolina	-	-	-	<0.1	**<0.01**	<0.01
Substrate Cover						
rock	19.2	22.6	18.8	19.0	**19.88**	1.85
sand (shell gravel)	2.6	0.1	<0.1	1.4	**1.03**	1.20
cobble	0.5	1.0	0.7	-	**0.56**	0.44

Table C10. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 3+0.9m (6+3).

Taxon / Survey / Survey Date	200 11-Feb-20 Mean	201 03-Apr-20 Mean	202 24-Jul-20 Mean	203 30-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
Endocladia muricata	16.3	14.9	23.3	18.5	**18.26**	3.65
non-coralline crust	19.8	12.8	15.1	21.9	**17.41**	4.20
Mastocarpus papillatus	0.9	<0.1	5.6	0.8	**1.83**	2.56
Gelidium coulteri	0.3	0.6	1.7	2.0	**1.15**	0.83
Mazzaella flaccida	-	-	4.1	-	**1.03**	2.05
coralline crust	1.7	0.8	0.4	0.8	**0.91**	0.55
Corallina vancouveriensis	0.8	0.7	0.1	<0.1	**0.42**	0.36
juv. articulated coralline algae	0.5	0.1	0.5	0.4	**0.37**	0.16
Cladophora spp.	<0.1	<0.1	0.6	<0.1	**0.16**	0.31
Calliarthron/Bossiella spp.-complex	0.2	<0.1	-	0.1	**0.10**	0.09
Chondracanthus canaliculatus	<0.1	<0.1	-	0.2	**0.05**	0.10
Mazzaella leptorhynchos	<0.1	-	0.1	-	**0.04**	0.07
Gelidium pusillum	<0.1	<0.1	<0.1	<0.1	**0.03**	0.04
Mazzaella affinis	<0.1	-	<0.1	<0.1	**0.02**	0.04
Prionitis spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Mastocarpus jardinii	<0.1	<0.1	-	-	**<0.01**	<0.01
Silvetia compressa	<0.1	-	-	<0.1	**<0.01**	<0.01
Egregia menziesii	<0.1	-	-	-	**<0.01**	<0.01
Gastroclonium subarticulatum	<0.1	-	-	-	**<0.01**	<0.01
Porphyra spp.	-	-	<0.1	-	**<0.01**	<0.01
Ulva spp.	-	-	-	<0.1	**<0.01**	<0.01
Invertebrate Counts						
Lottia scabra	168.4	57.2	57.0	53.4	**84.00**	56.29
Chlorostoma funebralis	105.8	41.6	120.4	53.0	**80.20**	38.73
Anthopleura elegantissima	7.6	6.0	8.2	4.8	**6.65**	1.54
Lottia limatula	1.6	2.6	11.6	4.6	**5.10**	4.51
Pagurus spp.	13.0	0.4	0.8	0.6	**3.70**	6.20
Nuttallina californica	2.4	1.6	1.8	0.2	**1.50**	0.93
Lottia pelta	2.4	0.4	1.6	1.2	**1.40**	0.83
Lottiidae	1.2	1.8	1.6	1.0	**1.40**	0.37
Ocinebrina spp.	1.4	0.6	1.2	2.0	**1.30**	0.58
Lottia scutum	0.2	1.8	-	0.6	**0.65**	0.81
Acanthinucella spp.	0.2	0.6	1.0	0.6	**0.60**	0.33
Cyanoplax spp.	0.6	-	1.6	0.2	**0.60**	0.71
Pachygrapsus crassipes	-	0.2	0.8	0.6	**0.40**	0.37
Mopalia spp.	0.4	-	0.2	0.8	**0.35**	0.34
Littorina spp.	0.6	-	0.4	0.2	**0.30**	0.26
Nemertea	0.6	-	-	0.2	**0.20**	0.28
Cirratulidae/Terebellidae	-	-	0.4	-	**0.10**	0.20
Fissurella volcano	0.2	-	0.2	-	**0.10**	0.12
Ischnochitonidae	-	-	0.2	0.2	**0.10**	0.12
Sipuncula	-	-	-	0.4	**0.10**	0.20
Epitonium/Opalia spp.	-	-	0.2	-	**0.05**	0.10
Leptasterias spp.	-	-	-	0.2	**0.05**	0.10
Littorina scutulata	-	0.2	-	-	**0.05**	0.10

(table continued)

Table C10 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for Field's Cove Station FC 3+0.9m (6+3).

Survey Survey Date Taxon	200 11-Feb-20 Mean	201 03-Apr-20 Mean	202 24-Jul-20 Mean	203 30-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Nereididae	0.2	-	-	-	**0.05**	0.10
Strongylocentrotus purpuratus	-	0.2	-	-	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	6.2	9.9	13.1	16.7	**11.46**	4.50
Phragmatopoma californica	4.0	6.4	1.3	2.5	**3.54**	2.18
Spirorbidae	-	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	49.5	55.8	44.0	39.3	**47.14**	7.11
sand (shell gravel)	2.2	1.8	-	1.8	**1.46**	0.99
cobble	0.1	-	-	<0.1	**0.05**	0.07

Table C11. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 1+0.3m (7+1).

Survey Survey Date Taxon	200 24-Jan-20 Mean	201 08-Apr-20 Mean	202 17-Aug-20 Mean	203 17-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	31.3	26.0	45.6	27.8	**32.66**	8.88
Codium fragile subsp. *californicum*	12.3	18.3	20.1	19.5	**17.57**	3.60
coralline crust	10.2	7.6	5.0	7.2	**7.50**	2.13
juv. articulated coralline algae	2.6	5.4	2.8	3.8	**3.68**	1.27
filamentous red algae complex	2.7	1.7	4.7	4.7	**3.45**	1.50
Corallina vancouveriensis	1.7	4.8	1.0	3.7	**2.80**	1.74
Acrosorium ciliolatum	<0.1	-	0.2	1.6	**0.45**	0.77
Farlowia/Pikea spp.-complex	<0.1	<0.1	0.3	0.7	**0.26**	0.31
Chrysophyta	-	0.6	-	-	**0.16**	0.31
Chlorophyta (filamentous)	0.1	0.3	<0.1	<0.1	**0.13**	0.12
Colpomenia spp.	<0.1	<0.1	0.2	<0.1	**0.07**	0.10
Ulva spp.	<0.1	-	0.2	<0.1	**0.05**	0.11
Prionitis spp.	<0.1	<0.1	<0.1	0.1	**0.04**	0.07
Pterosiphonia dendroidea	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryopsis spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Calliarthron/Bossiella spp.-complex	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Mastocarpus papillatus	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Cryptopleura violacea	<0.1	<0.1	-	-	**<0.01**	<0.01
Acrosiphonia spp.	<0.1	-	<0.1	-	**<0.01**	<0.01
Callophyllis spp.	-	-	<0.1	-	**<0.01**	<0.01
Chondracanthus canaliculatus	-	-	<0.1	-	**<0.01**	<0.01
Cladophora spp.	<0.1	-	-	-	**<0.01**	<0.01
Gelidium coulteri	-	-	<0.1	-	**<0.01**	<0.01
Mazzaella affinis	-	-	<0.1	-	**<0.01**	<0.01
Invertebrate Counts						
Lottia scabra	127.4	237.2	141.4	158.6	**166.15**	49.06
Tetraclita rubescens	69.2	61.0	64.2	50.4	**61.20**	7.95
Epiactis prolifera	34.0	52.4	78.8	45.0	**52.55**	19.06
Fissurella volcano	6.8	11.2	7.2	10.4	**8.90**	2.22
Lottia limatula	3.2	11.4	7.6	3.6	**6.45**	3.85
Lottia pelta	2.0	5.0	6.8	10.2	**6.00**	3.43
Anthopleura elegantissima	2.8	3.4	2.6	2.6	**2.85**	0.38
Pachygrapsus crassipes	1.4	2.8	3.6	1.0	**2.20**	1.21
Strongylocentrotus purpuratus	1.6	3.4	1.2	1.0	**1.80**	1.10
Serpulidae	2.4	0.6	1.4	2.4	**1.70**	0.87
Lottiidae	2.6	1.0	1.0	1.0	**1.40**	0.80
Cyanoplax spp.	0.6	0.6	1.0	0.6	**0.70**	0.20
Mytilus spp.	0.6	0.6	0.8	0.8	**0.70**	0.12
Lottia gigantea	0.6	1.0	0.4	-	**0.50**	0.42
Pagurus spp.	1.0	0.8	-	-	**0.45**	0.53
Ischnochitonidae	-	0.6	0.2	0.4	**0.30**	0.26
Lottia scutum	-	-	-	1.0	**0.25**	0.50
Nuttallina californica	0.4	0.6	-	-	**0.25**	0.30
Ocinebrina spp.	0.8	-	-	0.2	**0.25**	0.38

(table continued)

Table C11 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 1+0.3m (7+1).

Survey Survey Date Taxon	200 24-Jan-20 Mean	201 08-Apr-20 Mean	202 17-Aug-20 Mean	203 17-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Elysia hedgpethi	-	-	0.6	0.2	**0.20**	0.28
Mopalia spp.	0.2	0.2	-	0.2	**0.15**	0.10
Barleeia spp.	-	0.6	-	-	**0.15**	0.30
Doris spp.	-	-	-	0.4	**0.10**	0.20
Anthozoa	-	0.2	-	-	**0.05**	0.10
Calliostoma spp.	-	-	-	0.2	**0.05**	0.10
Chlorostoma funebralis	-	-	0.2	-	**0.05**	0.10
Diaulula sandiegensis	-	-	-	0.2	**0.05**	0.10
Grapsidae	-	0.2	-	-	**0.05**	0.10
Octopus spp.	-	0.2	-	-	**0.05**	0.10
Ophiothrix spiculata	-	0.2	-	-	**0.05**	0.10
Pugettia spp.	-	-	-	0.2	**0.05**	0.10
Romaleon antennarius	-	-	0.2	-	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	12.7	18.3	8.6	13.2	**13.19**	3.96
Phragmatopoma californica	2.2	4.4	2.4	1.3	**2.57**	1.29
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Substrate Cover						
rock	27.6	24.9	13.8	23.7	**22.50**	6.01
sand (shell gravel)	4.5	6.2	8.8	10.5	**7.48**	2.65
cobble	3.6	6.2	2.8	3.1	**3.94**	1.53

Table C12. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 1+0.9m (7+3).

Survey Survey Date Taxon	200 24-Jan-20 Mean	201 08-Apr-20 Mean	202 17-Aug-20 Mean	203 17-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	44.9	42.9	43.8	47.3	**44.72**	1.89
Gelidium pusillum	0.1	<0.1	2.2	2.0	**1.08**	1.16
coralline crust	1.5	0.8	0.4	0.8	**0.89**	0.48
Ulva spp.	-	-	1.8	<0.1	**0.45**	0.91
filamentous red algae complex	<0.1	-	<0.1	0.7	**0.19**	0.34
Mastocarpus papillatus	<0.1	<0.1	0.4	0.3	**0.18**	0.17
Corallina vancouveriensis	<0.1	0.1	<0.1	0.1	**0.09**	0.07
juv. articulated coralline algae	<0.1	<0.1	<0.1	<0.1	**0.07**	<0.01
Mazzaella affinis	-	-	-	0.1	**0.04**	0.07
Chlorophyta (filamentous)	-	-	<0.1	<0.1	**0.02**	0.04
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Gelidium coulteri	-	-	<0.1	-	**<0.01**	<0.01
Colpomenia spp.	-	-	<0.1	-	**<0.01**	<0.01
Calliarthron/Bossiella spp.-complex	-	-	-	<0.1	**<0.01**	<0.01
Chondracanthus canaliculatus	-	-	-	<0.1	**<0.01**	<0.01
Invertebrate Counts						
Lottia scabra	139.2	143.4	145.0	95.2	**130.70**	23.79
Chlorostoma funebralis	17.6	104.0	15.0	66.8	**50.85**	42.70
Epiactis prolifera	35.2	14.8	16.0	14.2	**20.05**	10.13
Anthopleura elegantissima	6.6	5.8	3.2	5.0	**5.15**	1.45
Lottia limatula	4.2	3.4	5.6	5.6	**4.70**	1.09
Pagurus spp.	15.2	1.8	0.2	1.4	**4.65**	7.07
Lottia pelta	1.8	1.8	2.2	4.2	**2.50**	1.15
Lottia scutum	0.6	0.2	1.8	3.0	**1.40**	1.26
Pachygrapsus crassipes	0.2	1.6	1.8	1.2	**1.20**	0.71
Lottiidae	1.2	1.0	1.0	1.0	**1.05**	0.10
Fissurella volcano	1.2	0.6	0.6	1.0	**0.85**	0.30
Cyanoplax spp.	0.2	0.2	0.6	0.8	**0.45**	0.30
Tetraclita rubescens	1.4	-	0.4	-	**0.45**	0.66
Littorina scutulata	0.8	0.6	-	-	**0.35**	0.41
Mytilus spp.	0.4	0.6	0.2	0.2	**0.35**	0.19
Anthopleura xanthogrammica	-	-	1.0	-	**0.25**	0.50
Ocinebrina spp.	0.2	0.4	0.2	0.2	**0.25**	0.10
Acanthinucella spp.	0.2	0.4	-	0.2	**0.20**	0.16
Grapsidae	0.2	0.2	-	-	**0.10**	0.12
Anthozoa	-	0.2	-	-	**0.05**	0.10
Barleeia spp.	-	-	-	0.2	**0.05**	0.10
Littorina spp.	0.2	-	-	-	**0.05**	0.10
Mopalia spp.	0.2	-	-	-	**0.05**	0.10
Septifer bifurcatus	0.2	-	-	-	**0.05**	0.10
Serpulidae	-	-	0.2	-	**0.05**	0.10

(table continued)

Table C12 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 1+0.9m (7+3).

Survey Survey Date Taxon	200 24-Jan-20 Mean	201 08-Apr-20 Mean	202 17-Aug-20 Mean	203 17-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Chthamalus fissus	4.7	7.1	6.9	9.0	**6.89**	1.76
Phragmatopoma californica	<0.1	<0.1	<0.1	0.1	**0.04**	0.07
Spirorbidae	-	<0.1	-	<0.1	**<0.01**	<0.01
Pista spp.	-	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	39.8	38.1	38.7	32.2	**37.19**	3.43
sand (shell gravel)	6.3	8.1	4.4	7.5	**6.58**	1.62
cobble	4.5	4.9	3.8	2.4	**3.92**	1.10

Table C13. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 2+0.3m (8+1).

Taxon / Survey / Survey Date	200 09-Jan-20 Mean	201 06-May-20 Mean	202 03-Aug-20 Mean	203 29-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
Phyllospadix spp.	36.0	30.8	44.3	32.6	**35.90**	6.00
non-coralline crust	21.6	21.7	16.6	21.9	**20.45**	2.57
Codium fragile subsp. *californicum*	8.5	16.1	20.6	7.4	**13.13**	6.30
coralline crust	11.5	12.8	7.1	12.0	**10.84**	2.56
filamentous red algae complex	8.1	14.1	9.9	7.0	**9.76**	3.12
Corallina vancouveriensis	8.7	1.5	1.0	4.4	**3.91**	3.53
juv. articulated coralline algae	4.1	4.4	0.9	2.8	**3.06**	1.60
Chlorophyta (filamentous)	1.3	0.2	10.1	<0.1	**2.92**	4.85
Acrosorium ciliolatum	1.0	1.0	0.8	1.4	**1.04**	0.24
Ulva spp.	<0.1	1.3	2.6	<0.1	**0.98**	1.21
Smithora naiadum	<0.1	<0.1	0.8	0.5	**0.33**	0.36
Cryptopleura violacea	1.3	<0.1	<0.1	<0.1	**0.33**	0.61
Calliarthron/Bossiella spp.-complex	0.3	0.1	<0.1	0.6	**0.26**	0.22
Pterosiphonia dendroidea	0.4	0.2	<0.1	0.3	**0.25**	0.14
Farlowia/Pikea spp.-complex	0.3	-	0.3	0.3	**0.23**	0.15
Chrysophyta	0.1	0.5	0.1	-	**0.19**	0.21
Sargassum muticum	0.3	<0.1	<0.1	0.4	**0.19**	0.22
Prionitis spp.	0.1	<0.1	<0.1	<0.1	**0.04**	0.07
Gelidium coulteri	-	<0.1	<0.1	0.1	**0.04**	0.07
Phycodrys spp.	<0.1	-	-	<0.1	**0.02**	0.03
Corallina chilensis	<0.1	-	-	-	**0.02**	0.04
Melobesia mediocris	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Colpomenia spp.	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Halicystis ovalis (=Derbesia marina)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryopsis spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Mastocarpus papillatus	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Chondracanthus canaliculatus	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Gastroclonium subarticulatum	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Cladophora spp.	<0.1	-	-	-	**<0.01**	<0.01
Chondracanthus corymbiferus	<0.1	-	-	-	**<0.01**	<0.01
Sarcodiotheca gaudichaudii	-	<0.1	<0.1	-	**<0.01**	<0.01
Acrosiphonia spp.	<0.1	-	-	-	**<0.01**	<0.01
Callophyllis spp.	<0.1	-	-	-	**<0.01**	<0.01
Rhodymenia spp.	-	-	<0.1	-	**<0.01**	<0.01
Invertebrate Counts						
Lottia scabra	141.8	91.0	97.8	150.6	**120.30**	30.25
Mytilus spp.	52.4	49.2	47.2	146.2	**73.75**	48.35
Tetraclita rubescens	58.0	6.8	32.2	58.2	**38.80**	24.58
Strongylocentrotus purpuratus	11.0	6.2	7.0	7.8	**8.00**	2.10
Fissurella volcano	6.0	3.2	3.2	8.4	**5.20**	2.51
Lottia pelta	3.4	3.0	2.0	12.4	**5.20**	4.84
Epiactis prolifera	3.0	1.6	4.8	9.4	**4.70**	3.40
Anthopleura elegantissima	7.4	3.8	1.2	3.8	**4.05**	2.55
Lottia gigantea	2.6	2.4	1.2	4.0	**2.55**	1.15
Lottia limatula	0.8	3.8	0.8	2.4	**1.95**	1.45

(table continued)

Table C13 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 2+0.3m (8+1).

Survey Survey Date Taxon	200 09-Jan-20 Mean	201 06-May-20 Mean	202 03-Aug-20 Mean	203 29-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Lottiidae	1.0	1.0	1.0	0.8	**0.95**	0.10
Pachygrapsus crassipes	0.2	1.2	1.0	0.8	**0.80**	0.43
Serpulidae	1.4	-	0.8	1.0	**0.80**	0.59
Mopalia spp.	1.4	0.4	-	0.8	**0.65**	0.60
Cyanoplax spp.	0.8	0.6	0.4	0.2	**0.50**	0.26
Barleeia spp.	0.2	0.4	0.6	0.2	**0.35**	0.19
Pugettia spp.	0.4	-	0.4	0.4	**0.30**	0.20
Nuttallina californica	0.2	-	-	0.8	**0.25**	0.38
Lacuna spp.	0.6	-	-	0.2	**0.20**	0.28
Ocinebrina spp.	0.4	0.2	-	0.2	**0.20**	0.16
Sipuncula	-	0.4	0.2	0.2	**0.20**	0.16
Elysia hedgpethi	-	0.2	0.4	-	**0.15**	0.19
Septifer bifurcatus	0.2	0.2	0.2	-	**0.15**	0.10
Cancridae	-	-	0.4	-	**0.10**	0.20
Diodora spp.	0.4	-	-	-	**0.10**	0.20
Diopatra ornata	-	0.2	0.2	-	**0.10**	0.12
Grapsidae	0.4	-	-	-	**0.10**	0.20
Ophiactis simplex	0.2	0.2	-	-	**0.10**	0.12
Ophiothrix spiculata	-	-	0.4	-	**0.10**	0.20
Serpulorbis squamigerus	0.2	-	0.2	-	**0.10**	0.12
Acmaea mitra	0.2	-	-	-	**0.05**	0.10
Anthopleura xanthogrammica	0.2	-	-	-	**0.05**	0.10
Chlorostoma funebralis	-	0.2	-	-	**0.05**	0.10
Crassadoma gigantea	-	-	-	0.2	**0.05**	0.10
Homolopoma luridum/Lirularia succincta	0.2	-	-	-	**0.05**	0.10
Ischnochitonidae	-	-	0.2	-	**0.05**	0.10
Leucilla nuttingi	-	-	0.2	-	**0.05**	0.10
Littorina spp.	-	0.2	-	-	**0.05**	0.10
Nemertea	-	-	0.2	-	**0.05**	0.10
Pelecypoda boring	-	-	0.2	-	**0.05**	0.10
Romaleon antennarius	-	-	0.2	-	**0.05**	0.10
Stenoplax spp.	-	0.2	-	-	**0.05**	0.10
Trimusculus reticulatus	0.2	-	-	-	**0.05**	0.10
Triopha spp.	-	-	0.2	-	**0.05**	0.10

(table continued)

Table C13 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 2+0.3m (8+1).

Survey / Survey Date / Taxon	200 09-Jan-20 Mean	201 06-May-20 Mean	202 03-Aug-20 Mean	203 29-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Pista spp.	3.3	0.4	<0.1	3.8	**1.88**	1.98
Chthamalus fissus	0.7	0.3	0.1	0.6	**0.42**	0.25
Phragmatopoma californica	0.1	<0.1	<0.1	0.5	**0.16**	0.23
tunicates, compound/social	<0.1	<0.1	0.1	<0.1	**0.04**	0.07
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Bryozoa (encrusting)	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Porifera (encrusting)	<0.1	-	<0.1	-	**<0.01**	<0.01
Salmacina tribranchiata	-	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	16.4	27.5	15.5	16.6	**18.99**	5.69
sand (shell gravel)	1.2	5.7	6.0	8.5	**5.37**	3.06
cobble	4.3	0.3	0.3	3.3	**2.07**	2.06

Table C14. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 2+0.9m (8+3).

Taxon / Survey / Survey Date	200 09-Jan-20 Mean	201 06-May-20 Mean	202 03-Aug-20 Mean	203 29-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	16.2	9.0	13.7	21.9	**15.19**	5.41
filamentous red algae complex	0.7	1.5	4.4	5.2	**2.95**	2.21
coralline crust	3.0	1.7	0.5	2.2	**1.83**	1.04
Ulva spp.	-	0.1	5.6	<0.1	**1.44**	2.79
Corallina vancouveriensis	1.1	2.2	<0.1	0.7	**1.01**	0.87
juv. articulated coralline algae	1.4	0.5	0.5	0.3	**0.66**	0.49
Codium fragile subsp. *californicum*	0.2	<0.1	0.3	<0.1	**0.14**	0.13
Gelidium pusillum	<0.1	<0.1	-	0.2	**0.06**	0.10
Mastocarpus papillatus	<0.1	-	<0.1	<0.1	**0.02**	0.04
Cladophora spp.	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Chlorophyta (filamentous)	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Mazzaella affinis	-	-	<0.1	-	**<0.01**	<0.01
Gelidium coulteri	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Prionitis spp.	-	<0.1	<0.1	-	**<0.01**	<0.01
Chondracanthus canaliculatus	<0.1	<0.1	-	-	**<0.01**	<0.01
Endocladia muricata	-	<0.1	-	-	**<0.01**	<0.01
Bryopsis spp.	-	<0.1	-	-	**<0.01**	<0.01
Calliarthron/Bossiella spp.-complex	-	-	-	<0.1	**<0.01**	<0.01
Chrysophyta	<0.1	-	-	-	**<0.01**	<0.01
Colpomenia spp.	-	-	<0.1	-	**<0.01**	<0.01
Grateloupia californica	-	-	<0.1	-	**<0.01**	<0.01
Mazzaella leptorhynchos	-	-	-	<0.1	**<0.01**	<0.01
Invertebrate Counts						
Lottia scabra	467.8	183.4	228.4	214.4	**273.50**	130.89
Mytilus spp.	44.8	38.4	30.0	39.0	**38.05**	6.09
Anthopleura elegantissima	35.4	19.4	17.6	15.6	**22.00**	9.07
Epiactis prolifera	15.6	9.0	15.6	20.0	**15.05**	4.54
Lottia gigantea	10.8	8.8	9.0	6.6	**8.80**	1.72
Lottiidae	6.0	4.2	19.2	1.4	**7.70**	7.90
Chlorostoma funebralis	5.2	0.6	-	12.0	**4.45**	5.54
Lottia limatula	4.4	2.0	2.6	5.8	**3.70**	1.73
Lottia pelta	3.0	0.6	1.2	3.8	**2.15**	1.50
Strongylocentrotus purpuratus	4.0	1.4	0.2	0.6	**1.55**	1.71
Pachygrapsus crassipes	0.6	3.0	1.6	0.6	**1.45**	1.14
Cyanoplax spp.	1.0	1.2	1.4	0.4	**1.00**	0.43
Fissurella volcano	2.8	0.8	-	0.2	**0.95**	1.28
Tetraclita rubescens	1.8	0.2	-	0.8	**0.70**	0.81
Pagurus spp.	0.4	0.6	0.2	1.4	**0.65**	0.53
Littorina spp.	-	1.0	0.6	0.2	**0.45**	0.44
Littorina scutulata	1.0	-	-	-	**0.25**	0.50
Mopalia spp.	0.2	0.2	-	0.4	**0.20**	0.16
Elysia hedgpethi	-	0.4	0.2	-	**0.15**	0.19
Nuttallina californica	0.4	-	-	0.2	**0.15**	0.19
Serpulidae	-	0.2	0.2	0.2	**0.15**	0.10

(table continued)

Table C14 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 2+0.9m (8+3).

Survey Survey Date Taxon	200 09-Jan-20 Mean	201 06-May-20 Mean	202 03-Aug-20 Mean	203 29-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Balanus spp.	-	-	-	0.4	**0.10**	0.20
Lottia scutum	-	0.4	-	-	**0.10**	0.20
Lottia ochracea	0.2	-	-	-	**0.05**	0.10
Pelecypoda boring	-	0.2	-	-	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	13.3	16.0	12.7	27.4	**17.34**	6.84
Phragmatopoma californica	0.6	0.4	<0.1	<0.1	**0.25**	0.26
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	-	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	61.3	66.0	63.0	42.9	**58.32**	10.45
cobble	2.8	1.6	1.8	3.0	**2.31**	0.71
sand (shell gravel)	<0.1	-	0.3	<0.1	0.09	0.17

Table C15. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 3+0.3m (9+1).

Survey Survey Date Taxon	200 13-Jan-20 Mean	201 04-Apr-20 Mean	202 07-Jul-20 Mean	203 17-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
Codium fragile subsp. *californicum*	24.5	34.2	65.0	21.0	**36.20**	20.00
non-coralline crust	19.3	23.6	26.0	23.2	**23.04**	2.79
Corallina vancouveriensis	14.0	8.3	3.3	14.6	**10.05**	5.31
filamentous red algae complex	7.7	7.2	7.6	11.6	**8.55**	2.05
coralline crust	8.4	6.0	7.4	12.0	**8.46**	2.57
Acrosorium ciliolatum	9.4	5.6	4.4	8.6	**7.01**	2.36
juv. articulated coralline algae	3.3	8.7	4.1	8.8	**6.20**	2.93
Farlowia/Pikea spp.-complex	3.1	1.0	0.9	6.2	**2.78**	2.48
Chlorophyta (filamentous)	0.8	1.3	0.8	1.5	**1.10**	0.31
Ulva spp.	<0.1	<0.1	3.2	0.6	**0.96**	1.52
Calliarthron/Bossiella spp.-complex	1.5	0.1	0.7	0.6	**0.75**	0.58
Cryptopleura violacea	0.8	0.3	0.4	0.3	**0.45**	0.21
Bryopsis spp.	0.3	<0.1	0.5	-	**0.19**	0.24
Chrysophyta	0.3	0.4	-	-	**0.17**	0.21
Gelidium coulteri	0.4	<0.1	<0.1	<0.1	**0.11**	0.21
Pterosiphonia dendroidea	<0.1	<0.1	<0.1	0.2	**0.09**	0.09
Prionitis spp.	<0.1	<0.1	<0.1	<0.1	**0.05**	0.03
Callophyllis spp.	-	0.1	<0.1	-	**0.04**	0.07
Cystoseira osmundacea	<0.1	0.1	<0.1	-	**0.04**	0.07
Gelidium pusillum	<0.1	-	<0.1	-	**0.04**	0.04
Sargassum muticum	<0.1	<0.1	-	-	**0.02**	0.03
Corallina chilensis	-	<0.1	<0.1	-	**0.02**	0.03
Colpomenia spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Halicystis ovalis (=Derbesia marina)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Cladophora spp.	-	<0.1	-	-	**<0.01**	<0.01
Rhodymenia spp.	<0.1	<0.1	-	-	**<0.01**	<0.01
Callithamnion spp./*Pleonosporium* spp.	<0.1	<0.1	-	-	**<0.01**	<0.01
Chondracanthus corymbiferus	<0.1	-	-	-	**<0.01**	<0.01
Acrosiphonia spp.	-	<0.1	-	-	**<0.01**	<0.01
Chondracanthus canaliculatus	<0.1	-	<0.1	-	**<0.01**	<0.01
Halymenia/Schizymenia spp.-complex	<0.1	<0.1	-	-	**<0.01**	<0.01
Dictyota binghamiae	<0.1	-	-	-	**<0.01**	<0.01
Grateloupia californica	<0.1	-	-	-	**<0.01**	<0.01
Laminariales	-	<0.1	-	-	**<0.01**	<0.01
Mastocarpus papillatus	<0.1	-	-	-	**<0.01**	<0.01
Mazzaella volans	-	-	<0.1	-	**<0.01**	<0.01
Invertebrate Counts						
Tetraclita rubescens	154.4	118.0	76.8	156.8	**126.50**	37.59
Lottia scabra	193.2	59.0	67.6	69.0	**97.20**	64.15
Mytilus spp.	67.0	40.8	36.0	17.4	**40.30**	20.46
Fissurella volcano	10.8	21.6	11.0	13.2	**14.15**	5.08
Epiactis prolifera	3.6	5.8	3.6	10.4	**5.85**	3.21
Lottia pelta	5.6	6.4	5.2	3.8	**5.25**	1.09
Balanus spp.	14.6	1.8	2.4	-	**4.70**	6.68
Lottia gigantea	5.4	3.0	1.6	3.6	**3.40**	1.57

(table continued)

Table C15 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 3+0.3m (9+1).

Survey Survey Date Taxon	200 13-Jan-20 Mean	201 04-Apr-20 Mean	202 07-Jul-20 Mean	203 17-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Strongylocentrotus purpuratus	3.0	1.4	1.8	3.2	**2.35**	0.89
Lottia limatula	2.2	4.0	0.6	2.4	**2.30**	1.39
Serpulidae	2.4	1.8	2.2	1.2	**1.90**	0.53
Pachygrapsus crassipes	1.6	1.2	0.4	2.6	**1.45**	0.91
Lottiidae	1.0	1.0	1.0	1.0	**1.00**	<0.01
Mopalia spp.	0.4	0.2	1.0	0.8	**0.60**	0.37
Cyanoplax spp.	0.8	0.2	0.2	0.4	**0.40**	0.28
Barleeia spp.	0.4	0.2	-	0.4	**0.25**	0.19
Pugettia spp.	0.2	0.2	0.6	-	**0.25**	0.25
Anthopleura elegantissima	0.2	-	-	0.6	**0.20**	0.28
Nuttallina californica	0.2	0.4	0.2	-	**0.20**	0.16
Ophiactis simplex	-	-	-	0.8	**0.20**	0.40
Lottia ochracea	0.2	-	-	0.4	**0.15**	0.19
Pagurus spp.	0.4	0.2	-	-	**0.15**	0.19
Grapsidae	0.6	-	-	-	**0.15**	0.30
Ischnochitonidae	0.2	0.2	-	-	**0.10**	0.12
Acmaea mitra	0.2	-	-	-	**0.05**	0.10
Alpheus spp.	-	-	-	0.2	**0.05**	0.10
Elysia hedgpethi	-	-	-	0.2	**0.05**	0.10
Epitonium/Opalia spp.	0.2	-	-	-	**0.05**	0.10
Nereididae	-	-	0.2	-	**0.05**	0.10
Ophiothrix spiculata	-	-	-	0.2	**0.05**	0.10
Pseudochama spp.	-	-	-	0.2	**0.05**	0.10
Romaleon antennarius	-	-	0.2	-	**0.05**	0.10
Serpulorbis squamigerus	0.2	-	-	-	**0.05**	0.10
Sipuncula	-	-	-	0.2	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	1.3	1.0	1.4	0.7	**1.08**	0.31
Phragmatopoma californica	0.5	<0.1	<0.1	1.0	**0.39**	0.50
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
tunicates, compound/social	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Hydroidolina	-	-	-	<0.1	**<0.01**	<0.01
Pista spp.	-	-	-	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	-	-	-	<0.1	**<0.01**	<0.01
Substrate Cover						
rock	17.5	16.5	15.1	13.1	**15.56**	1.93
cobble	4.9	3.3	1.5	3.1	**3.18**	1.36
sand (shell gravel)	1.0	0.4	<0.1	0.2	**0.42**	0.45

Table C16. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 3+0.9m (9+3).

Survey / Survey Date / Taxon	200 13-Jan-20 Mean	201 04-Apr-20 Mean	202 07-Jul-20 Mean	203 17-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	22.2	27.5	25.4	24.1	**24.79**	2.25
Codium fragile subsp. *californicum*	8.4	12.8	14.0	9.3	**11.15**	2.71
coralline crust	4.2	1.6	2.4	3.7	**2.99**	1.19
filamentous red algae complex	2.4	1.6	1.9	2.0	**1.98**	0.31
Acrosorium ciliolatum	1.4	1.4	0.8	2.2	**1.42**	0.57
Chlorophyta (filamentous)	0.2	2.2	1.7	0.7	**1.20**	0.90
Ulva spp.	<0.1	0.3	2.3	1.5	**1.01**	1.07
juv. articulated coralline algae	0.9	0.6	1.1	1.4	**1.01**	0.32
Corallina vancouveriensis	1.2	0.7	0.2	0.1	**0.56**	0.48
Chrysophyta	1.0	0.3	-	-	**0.33**	0.49
Cryptopleura violacea	0.3	0.2	0.6	-	**0.28**	0.26
Bryopsis spp.	0.1	0.1	0.6	<0.1	**0.21**	0.24
Gelidium pusillum	<0.1	-	0.3	0.2	**0.13**	0.14
Pterosiphonia dendroidea	-	<0.1	<0.1	0.4	**0.12**	0.20
Farlowia/Pikea spp.-complex	0.4	<0.1	<0.1	-	**0.12**	0.20
Gelidium coulteri	-	<0.1	<0.1	<0.1	**0.02**	0.03
Chondracanthus canaliculatus	-	<0.1	<0.1	-	**0.02**	0.03
Mastocarpus papillatus	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Prionitis spp.	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Halicystis ovalis (=Derbesia marina)	<0.1	<0.1	-	-	**<0.01**	<0.01
Chondracanthus corymbiferus	<0.1	-	-	-	**<0.01**	<0.01
Cladophora spp.	-	-	<0.1	<0.1	**<0.01**	<0.01
Mazzaella affinis	-	-	<0.1	<0.1	**<0.01**	<0.01
Sarcodiotheca gaudichaudii	-	<0.1	<0.1	-	**<0.01**	<0.01
Calliarthron/Bossiella spp.-complex	<0.1	-	-	-	**<0.01**	<0.01
Colpomenia spp.	-	<0.1	-	-	**<0.01**	<0.01
Endocladia muricata	-	-	-	<0.1	**<0.01**	<0.01
Rhodophyta (juv. blades)	<0.1	-	-	-	**<0.01**	<0.01
Invertebrate Counts						
Lottia scabra	460.0	242.0	202.8	199.4	**276.05**	124.15
Mytilus spp.	110.4	55.4	78.8	80.4	**81.25**	22.54
Tetraclita rubescens	23.8	35.0	29.0	19.8	**26.90**	6.58
Epiactis prolifera	23.2	14.0	14.4	14.2	**16.45**	4.50
Lottia gigantea	15.6	17.0	13.2	10.8	**14.15**	2.73
Lottiidae	6.8	5.4	6.0	6.6	**6.20**	0.63
Fissurella volcano	2.2	7.0	4.4	10.6	**6.05**	3.61
Balanus spp.	11.6	-	-	10.4	**5.50**	6.37
Lottia limatula	3.4	2.6	4.6	0.8	**2.85**	1.59
Lottia pelta	3.2	2.4	3.6	0.2	**2.35**	1.52
Pachygrapsus crassipes	2.4	0.8	3.2	0.8	**1.80**	1.20
Strongylocentrotus purpuratus	1.4	1.2	1.4	1.4	**1.35**	0.10
Anthopleura elegantissima	1.2	0.2	1.2	2.4	**1.25**	0.90
Cyanoplax spp.	2.4	0.8	0.8	0.6	**1.15**	0.84
Serpulidae	1.4	1.4	0.2	1.4	**1.10**	0.60
Littorina spp.	0.2	-	1.0	0.8	**0.50**	0.48

(table continued)

Table C16 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for North Diablo Cove Station NDC 3+0.9m (9+3).

Survey Survey Date Taxon	200 13-Jan-20 Mean	201 04-Apr-20 Mean	202 07-Jul-20 Mean	203 17-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Sipuncula	0.8	-	0.2	0.2	**0.30**	0.35
Barleeia spp.	0.4	-	-	0.4	**0.20**	0.23
Chlorostoma funebralis	0.6	-	-	0.2	**0.20**	0.28
Grapsidae	-	0.4	0.4	-	**0.20**	0.23
Ischnochitonidae	0.4	0.2	0.2	-	**0.20**	0.16
Littorina scutulata	0.4	0.4	-	-	**0.20**	0.23
Pagurus spp.	0.8	-	-	-	**0.20**	0.40
Anthopleura xanthogrammica	0.2	0.2	-	-	**0.10**	0.12
Ocinebrina spp.	-	-	0.4	-	**0.10**	0.20
Acanthinucella spp.	0.2	-	-	-	**0.05**	0.10
Amphissa spp.	0.2	-	-	-	**0.05**	0.10
Cirratulidae/Terebellidae	-	-	-	0.2	**0.05**	0.10
Lottia insessa	0.2	-	-	-	**0.05**	0.10
Lottia scutum	-	0.2	-	-	**0.05**	0.10
Nuttallina californica	0.2	-	-	-	**0.05**	0.10
Pollicipes polymerus	0.2	-	-	-	**0.05**	0.10
Septifer bifurcatus	-	-	0.2	-	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	12.6	12.6	16.9	19.5	**15.43**	3.39
Phragmatopoma californica	1.1	<0.1	<0.1	2.0	**0.80**	0.95
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
tunicates, compound/social	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Substrate Cover						
rock	43.3	42.8	40.3	36.7	**40.78**	2.98
cobble	2.8	2.6	1.7	3.6	**2.71**	0.77
sand (shell gravel)	0.4	<0.1	<0.1	<0.1	**0.11**	0.17

Table C17. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 1+0.3m (10+1).

Survey Survey Date Taxon	200 10-Jan-20 Mean	201 10-Apr-20 Mean	202 06-Jul-20 Mean	203 15-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
Corallina vancouveriensis	15.2	23.1	25.8	13.4	**19.39**	6.02
filamentous red algae complex	19.4	26.2	16.2	10.0	**17.97**	6.73
non-coralline crust	10.2	11.9	17.6	12.8	**13.14**	3.19
coralline crust	6.3	9.4	5.6	18.0	**9.83**	5.68
Sargassum muticum	4.9	14.9	7.2	3.3	**7.57**	5.15
juv. articulated coralline algae	1.6	13.1	2.6	4.9	**5.54**	5.19
Chrysophyta	-	7.9	3.1	0.1	**2.80**	3.71
Acrosorium ciliolatum	1.7	<0.1	1.0	1.1	**0.98**	0.69
Colpomenia spp.	<0.1	2.4	0.1	<0.1	**0.64**	1.19
Chlorophyta (filamentous)	0.3	0.3	<0.1	<0.1	**0.16**	0.14
Ulva spp.	<0.1	0.4	<0.1	<0.1	**0.11**	0.21
Pterosiphonia dendroidea	0.3	<0.1	<0.1	<0.1	**0.09**	0.13
Endocladia muricata	-	-	-	0.3	**0.07**	0.14
Calliarthron/Bossiella spp.-complex	-	-	-	0.2	**0.05**	0.11
Farlowia/Pikea spp.-complex	<0.1	<0.1	<0.1	-	**0.04**	0.04
Prionitis spp.	<0.1	<0.1	<0.1	-	**0.02**	0.04
Codium fragile subsp. *californicum*	-	<0.1	<0.1	-	**0.02**	0.03
Gelidium robustum	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Cryptopleura violacea	-	<0.1	-	<0.1	**<0.01**	<0.01
Halymenia/Schizymenia spp.-complex	<0.1	<0.1	-	-	**<0.01**	<0.01
Callithamnion spp./*Pleonosporium* spp.	-	<0.1	-	-	**<0.01**	<0.01
Callophyllis spp.	-	<0.1	-	-	**<0.01**	<0.01
Chondracanthus corymbiferus	-	<0.1	-	-	**<0.01**	<0.01
Corallina chilensis	<0.1	-	-	-	**<0.01**	<0.01
Gelidium coulteri	-	-	-	<0.1	**<0.01**	<0.01
Gelidium pusillum	-	-	-	<0.1	**<0.01**	<0.01
Mazzaella affinis	-	-	-	<0.1	**<0.01**	<0.01
Osmundea spp.	-	-	-	<0.1	**<0.01**	<0.01
Rhodophyta (juv. blades)	<0.1	-	-	-	**<0.01**	<0.01
Invertebrate Counts						
Tetraclita rubescens	32.2	42.8	33.8	77.8	**46.65**	21.28
Lottia scabra	48.6	34.8	43.0	37.2	**40.90**	6.18
Anthopleura elegantissima	30.6	19.4	32.4	24.6	**26.75**	5.93
Balanus spp.	68.2	16.6	-	-	**21.20**	32.30
Fissurella volcano	9.0	7.6	13.0	17.4	**11.75**	4.41
Lottia pelta	6.8	11.6	7.8	9.2	**8.85**	2.08
Lottia limatula	4.2	6.6	3.6	4.8	**4.80**	1.30
Epiactis prolifera	4.2	2.6	4.8	1.4	**3.25**	1.54
Lottiidae	1.0	0.6	0.8	1.8	**1.05**	0.53
Strongylocentrotus purpuratus	-	0.4	1.4	1.8	**0.90**	0.84
Barleeia spp.	0.8	0.8	1.0	0.4	**0.75**	0.25
Mytilus spp.	0.6	0.2	0.8	1.4	**0.75**	0.50
Chlorostoma funebralis	1.0	-	-	1.6	**0.65**	0.79
Pagurus spp.	1.6	-	-	-	**0.40**	0.80
Serpulidae	0.2	0.2	0.4	0.4	**0.30**	0.12

(table continued)

Table C17 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 1+0.3m (10+1).

Survey Survey Date Taxon	200 10-Jan-20 Mean	201 10-Apr-20 Mean	202 06-Jul-20 Mean	203 15-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Mopalia spp.	0.2	-	0.4	0.6	**0.30**	0.26
Pachygrapsus crassipes	-	-	1.2	-	**0.30**	0.60
Epitonium/Opalia spp.	0.2	0.2	0.4	0.2	**0.25**	0.10
Anthopleura artemisia	-	0.4	0.4	-	**0.20**	0.23
Cyanoplax spp.	-	0.6	0.2	-	**0.20**	0.28
Pelecypoda boring	-	-	-	0.8	**0.20**	0.40
Pseudochama spp.	0.4	0.2	-	0.2	**0.20**	0.16
Pteropurpura festiva	0.2	0.2	0.2	0.2	**0.20**	<0.01
Anthopleura xanthogrammica	0.4	-	-	-	**0.10**	0.20
Cirratulidae/Terebellidae	-	-	0.4	-	**0.10**	0.20
Lottia gigantea	0.2	-	0.2	-	**0.10**	0.12
Mitra idae	0.2	-	0.2	-	**0.10**	0.12
Sipuncula	-	-	0.2	0.2	**0.10**	0.12
Chlorostoma brunnea	0.2	-	-	-	**0.05**	0.10
Diopatra ornata	-	-	-	0.2	**0.05**	0.10
Homolopoma luridum/Lirularia succincta	-	0.2	-	-	**0.05**	0.10
Ischnochitonidae	-	-	0.2	-	**0.05**	0.10
Lottia ochracea	-	0.2	-	-	**0.05**	0.10
Nemertea	-	-	-	0.2	**0.05**	0.10
Nereididae	-	-	0.2	-	**0.05**	0.10
Ophiactis simplex	-	-	0.2	-	**0.05**	0.10
Invertebrate Cover						
Phragmatopoma californica	4.8	0.8	<0.1	7.6	**3.32**	3.56
Chthamalus fissus	0.1	0.6	0.8	4.3	**1.48**	1.91
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Substrate Cover						
rock	25.0	14.5	20.2	20.6	**20.07**	4.30
cobble	7.2	4.1	0.5	7.6	**4.84**	3.30
sand (shell gravel)	3.8	3.6	6.3	3.5	**4.29**	1.32

Table C18. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 1+0.6m (10+2).

Survey / Survey Date / Taxon	200 10-Jan-20 Mean	201 10-Apr-20 Mean	202 06-Jul-20 Mean	203 15-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	31.9	27.4	28.4	24.9	**28.18**	2.91
filamentous red algae complex	8.4	19.6	11.7	4.8	**11.13**	6.31
Corallina vancouveriensis	14.1	4.0	17.2	0.3	**8.91**	8.04
juv. articulated coralline algae	2.2	19.2	1.9	11.9	**8.80**	8.36
coralline crust	5.8	4.2	3.3	9.3	**5.66**	2.64
Sargassum muticum	2.4	11.3	5.2	2.8	**5.40**	4.10
Chrysophyta	-	1.2	5.5	-	**1.68**	2.60
Ulva spp.	<0.1	0.8	0.4	<0.1	**0.28**	0.36
Acrosorium ciliolatum	0.3	<0.1	0.7	<0.1	**0.26**	0.31
Colpomenia spp.	-	0.7	<0.1	<0.1	**0.19**	0.34
Pterosiphonia dendroidea	0.3	-	<0.1	0.2	**0.16**	0.15
Calliarthron/Bossiella spp.-complex	-	0.5	-	-	**0.12**	0.24
Prionitis spp.	<0.1	<0.1	0.3	<0.1	**0.07**	0.14
Chlorophyta (filamentous)	<0.1	<0.1	<0.1	<0.1	**0.04**	0.04
Corallina chilensis	<0.1	0.1	-	<0.1	**0.04**	0.07
Farlowia/Pikea spp.-complex	<0.1	-	<0.1	-	**0.02**	0.04
Mastocarpus papillatus	-	<0.1	-	<0.1	**<0.01**	<0.01
Gelidium coulteri	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Gelidium pusillum	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Callithamnion spp./*Pleonosporium* spp.	-	<0.1	-	<0.1	**<0.01**	<0.01
Cladophora spp.	-	-	-	<0.1	**<0.01**	<0.01
Cryptopleura violacea	-	<0.1	-	<0.1	**<0.01**	<0.01
Rhodophyta (juv. blades)	<0.1	-	-	-	**<0.01**	<0.01
Chondracanthus canaliculatus	-	-	<0.1	-	**<0.01**	<0.01
Chondracanthus corymbiferus	<0.1	-	-	-	**<0.01**	<0.01
Gelidium robustum	<0.1	-	-	-	**<0.01**	<0.01
Grateloupia californica	<0.1	-	-	-	**<0.01**	<0.01
Rhodymenia spp.	-	<0.1	-	-	**<0.01**	<0.01
Invertebrate Counts						
Tetraclita rubescens	113.8	72.4	97.6	74.4	**89.55**	19.80
Lottia scabra	90.6	54.6	143.6	52.4	**85.30**	42.63
Anthopleura elegantissima	59.0	37.4	68.6	36.6	**50.40**	15.96
Balanus spp.	67.0	39.8	-	16.6	**30.85**	29.11
Fissurella volcano	11.4	7.4	12.0	23.6	**13.60**	6.97
Lottia pelta	7.6	9.8	8.8	21.6	**11.95**	6.50
Chlorostoma funebralis	8.6	0.2	-	31.8	**10.15**	14.98
Lottia limatula	6.2	8.8	4.0	9.4	**7.10**	2.49
Pagurus spp.	2.4	0.2	-	3.6	**1.55**	1.75
Mytilus spp.	1.4	0.8	1.0	1.4	**1.15**	0.30
Pachygrapsus crassipes	0.4	0.2	2.8	0.4	**0.95**	1.24
Lottiidae	1.0	1.0	1.0	0.6	**0.90**	0.20
Serpulorbis squamigerus	1.4	-	0.2	1.4	**0.75**	0.75
Barleeia spp.	0.8	0.6	0.4	0.6	**0.60**	0.16
Strongylocentrotus purpuratus	0.2	0.2	1.2	0.6	**0.55**	0.47
Serpulidae	0.6	-	0.2	0.8	**0.40**	0.37

(table continued)

Table C18 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 1+0.6m (10+2).

Survey Survey Date Taxon	200 10-Jan-20 Mean	201 10-Apr-20 Mean	202 06-Jul-20 Mean	203 15-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Epiactis prolifera	0.6	-	0.8	-	**0.35**	0.41
Cyanoplax spp.	0.4	0.2	0.6	-	**0.30**	0.26
Mopalia spp.	0.2	0.6	-	0.4	**0.30**	0.26
Nemertea	0.2	0.2	0.2	-	**0.15**	0.10
Pisaster ochraceus	-	-	0.2	0.4	**0.15**	0.19
Anthopleura artemisia	-	-	0.2	0.2	**0.10**	0.12
Epitonium/Opalia spp.	0.2	0.2	-	-	**0.10**	0.12
Lottia ochracea	-	0.4	-	-	**0.10**	0.20
Ophiactis simplex	-	-	0.4	-	**0.10**	0.20
Sipuncula	0.2	-	0.2	-	**0.10**	0.12
Heptacarpus spp.	0.2	-	-	-	**0.05**	0.10
Ischnochitonidae	-	-	0.2	-	**0.05**	0.10
Leptasterias spp.	-	-	-	0.2	**0.05**	0.10
Littorina scutulata	0.2	-	-	-	**0.05**	0.10
Lottia gigantea	0.2	-	-	-	**0.05**	0.10
Mitra idae	-	-	0.2	-	**0.05**	0.10
Nereididae	-	-	0.2	-	**0.05**	0.10
Ocinebrina spp.	-	-	-	0.2	**0.05**	0.10
Pelecypoda boring	-	-	-	0.2	**0.05**	0.10
Pollicipes polymerus	-	-	0.2	-	**0.05**	0.10
Pteropurpura festiva	-	0.2	-	-	**0.05**	0.10
Pugettia spp.	-	-	0.2	-	**0.05**	0.10
Septifer bifurcatus	-	0.2	-	-	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	0.6	1.3	1.2	2.0	**1.27**	0.60
Phragmatopoma californica	0.7	0.1	<0.1	3.0	**0.96**	1.39
Pista spp.	0.2	0.6	0.2	0.1	**0.30**	0.22
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.02**	0.04
Porifera (encrusting)	<0.1	-	<0.1	-	**<0.01**	<0.01
tunicates, compound/social	-	-	<0.1	-	**<0.01**	<0.01
Substrates Cover						
rock	23.3	18.9	20.9	28.8	**22.97**	4.26
cobble	7.8	5.8	3.0	4.5	**5.30**	2.06
sand (shell gravel)	0.6	3.8	7.6	6.3	**4.57**	3.12

Table C19. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 2+0.3m (11+1).

Survey Survey Date Taxon	200 10-Feb-20 Mean	201 05-Jun-20 Mean	202 16-Sep-20 Mean	203 19-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	47.8	35.4	30.8	39.7	**38.42**	7.26
coralline crust	8.3	11.7	10.9	14.6	**11.37**	2.57
Corallina vancouveriensis	7.6	9.6	14.2	10.5	**10.47**	2.74
juv. articulated coralline algae	3.1	3.3	0.9	4.0	**2.83**	1.35
Sargassum muticum	1.5	1.6	0.3	1.1	**1.11**	0.59
Colpomenia spp.	<0.1	4.0	-	<0.1	**1.01**	1.97
filamentous red algae complex	<0.1	0.8	-	0.5	**0.31**	0.38
Gelidium coulteri	<0.1	<0.1	0.2	0.1	**0.11**	0.09
Endocladia muricata	-	-	0.3	-	**0.07**	0.14
Chlorophyta (filamentous)	<0.1	<0.1	-	0.2	**0.05**	0.10
Gelidium pusillum	<0.1	<0.1	-	0.1	**0.04**	0.07
Cladophora spp.	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Mastocarpus papillatus	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Ulva spp.	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Prionitis spp.	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Cystoseira osmundacea	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Calliarthron/Bossiella spp.-complex	-	-	-	<0.1	**<0.01**	<0.01
Acrosorium ciliolatum	<0.1	-	-	-	**<0.01**	<0.01
Chondracanthus canaliculatus	<0.1	-	-	-	**<0.01**	<0.01
Chrysophyta	<0.1	-	-	-	**<0.01**	<0.01
Gelidium spp.	-	-	<0.1	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	41.4	56.6	91.2	76.8	**66.50**	21.94
Lottia scabra	57.2	64.6	30.6	58.6	**52.75**	15.11
Anthopleura elegantissima	31.4	47.0	50.8	42.8	**43.00**	8.40
Strongylocentrotus purpuratus	13.0	20.6	4.4	4.6	**10.65**	7.75
Tetraclita rubescens	9.0	8.6	4.0	5.8	**6.85**	2.37
Lottia pelta	4.6	5.8	6.4	5.8	**5.65**	0.75
Lottia limatula	3.8	3.4	4.4	3.6	**3.80**	0.43
Serpulorbis squamigerus	3.8	3.4	3.4	4.2	**3.70**	0.38
Fissurella volcano	4.0	3.8	1.2	1.8	**2.70**	1.41
Pachygrapsus crassipes	0.2	4.2	0.6	1.6	**1.65**	1.80
Lottiidae	0.8	1.6	1.4	1.2	**1.25**	0.34
Mopalia spp.	0.4	1.0	1.8	1.0	**1.05**	0.57
Mytilus spp.	0.6	0.6	0.8	1.2	**0.80**	0.28
Anthopleura artemisia	0.8	0.6	0.2	1.4	**0.75**	0.50
Barleeia spp.	0.2	0.4	1.0	1.0	**0.65**	0.41
Pelecypoda boring	0.2	1.0	0.8	0.6	**0.65**	0.34
Pagurus spp.	-	-	0.8	1.2	**0.50**	0.60
Cyanoplax spp.	-	0.4	0.8	0.6	**0.45**	0.34
Acanthinucella spp.	0.4	0.2	0.8	0.2	**0.40**	0.28
Epitonium/Opalia spp.	0.2	0.8	0.6	-	**0.40**	0.37
Ocinebrina spp.	0.4	0.6	0.4	0.2	**0.40**	0.16
Sipuncula	0.2	0.2	0.8	0.4	**0.40**	0.28
Cirratulidae/Terebellidae	-	-	0.8	0.2	**0.25**	0.38

(table continued)

Table C19 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 2+0.3m (11+1).

Survey Survey Date Taxon	200 10-Feb-20 Mean	201 05-Jun-20 Mean	202 16-Sep-20 Mean	203 19-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Pollicipes polymerus	-	0.4	0.2	0.4	**0.25**	0.19
Ischnochitonidae	-	-	0.4	0.4	**0.20**	0.23
Lottia scutum	-	0.4	0.2	0.2	**0.20**	0.16
Nemertea	-	-	0.6	-	**0.15**	0.30
Aeolidia papillosa	-	-	0.4	-	**0.10**	0.20
Diopatra ornata	-	-	0.2	0.2	**0.10**	0.12
Lottia ochracea	-	0.4	-	-	**0.10**	0.20
Placiphorella velata	-	0.2	-	0.2	**0.10**	0.12
Serpulidae	0.2	-	0.2	-	**0.10**	0.12
Sipunculidae	-	0.4	-	-	**0.10**	0.20
Balanus spp.	-	-	-	0.2	**0.05**	0.10
Cancridae	-	-	0.2	-	**0.05**	0.10
Chaetopteridae	-	-	0.2	-	**0.05**	0.10
Chlorostoma brunnea	0.2	-	-	-	**0.05**	0.10
Diodora spp.	-	0.2	-	-	**0.05**	0.10
Littorina scutulata	-	-	-	0.2	**0.05**	0.10
Littorina spp.	0.2	-	-	-	**0.05**	0.10
Octopus spp.	-	0.2	-	-	**0.05**	0.10
Pugettia spp.	-	-	0.2	-	**0.05**	0.10
Pycnogonida	-	-	-	0.2	**0.05**	0.10
Haliotis spp.	-	-	-	0.1	**0.02**	0.05
Invertebrate Cover						
Chthamalus fissus	0.6	2.8	3.5	7.4	**3.56**	2.83
Phragmatopoma californica	1.7	1.0	1.0	2.4	**1.55**	0.68
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Dodecaceria fewkesi	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Porifera (encrusting)	<0.1	-	<0.1	-	**<0.01**	<0.01
Substrate Cover						
rock	24.6	28.3	29.6	17.5	**25.00**	5.43
cobble	2.4	0.5	4.7	1.0	**2.15**	1.89
sand (shell gravel)	2.6	1.4	1.7	1.7	**1.82**	0.51

Table C20. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 2+0.9m (11+3).

Taxon / Survey / Survey Date	200 10-Feb-20 Mean	201 05-Jun-20 Mean	202 16-Sep-20 Mean	203 19-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	31.4	24.4	22.3	21.6	**24.91**	4.48
Corallina vancouveriensis	0.7	1.7	2.0	2.6	**1.77**	0.81
coralline crust	1.1	0.4	0.9	0.8	**0.82**	0.29
juv. articulated coralline algae	0.5	0.6	0.3	<0.1	**0.35**	0.22
Mastocarpus papillatus	<0.1	<0.1	0.4	<0.1	**0.11**	0.21
Gelidium pusillum	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Gelidium coulteri	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Mazzaella leptorhynchos	<0.1	-	<0.1	-	**<0.01**	<0.01
Prionitis spp.	<0.1	<0.1	-	-	**<0.01**	<0.01
Chlorophyta (filamentous)	<0.1	-	-	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	163.6	365.4	117.2	296.6	**235.70**	115.14
Anthopleura elegantissima	79.8	66.4	75.4	121.0	**85.65**	24.22
Lottia scabra	69.4	86.0	44.6	57.4	**64.35**	17.63
Lottia limatula	3.2	1.4	7.0	4.6	**4.05**	2.36
Lottia pelta	1.0	1.4	4.2	2.2	**2.20**	1.42
Acanthinucella spp.	-	2.8	4.4	1.2	**2.10**	1.91
Lottiidae	1.0	1.2	1.4	2.0	**1.40**	0.43
Pachygrapsus crassipes	-	0.8	2.6	0.6	**1.00**	1.12
Mytilus spp.	0.6	0.8	0.4	1.4	**0.80**	0.43
Pagurus spp.	0.4	0.4	2.0	0.4	**0.80**	0.80
Cyanoplax spp.	-	0.2	0.8	0.6	**0.40**	0.37
Fissurella volcano	0.4	1.2	-	-	**0.40**	0.57
Littorina spp.	0.8	-	-	0.8	**0.40**	0.46
Epitonium/Opalia spp.	0.2	0.2	0.6	0.4	**0.35**	0.19
Anthopleura artemisia	-	0.6	-	0.4	**0.25**	0.30
Cirratulidae/Terebellidae	-	0.4	0.6	-	**0.25**	0.30
Littorina scutulata	-	0.6	0.4	-	**0.25**	0.30
Mopalia spp.	0.2	-	0.6	-	**0.20**	0.28
Lottia gigantea	0.2	0.2	-	0.2	**0.15**	0.10
Tetraclita rubescens	0.2	-	0.2	0.2	**0.15**	0.10
Isopoda	-	-	-	0.6	**0.15**	0.30
Ischnochitonidae	-	0.2	0.2	-	**0.10**	0.12
Ocinebrina spp.	0.2	0.2	-	-	**0.10**	0.12
Pelecypoda boring	0.2	0.2	-	-	**0.10**	0.12
Aeolidia papillosa	-	-	0.2	-	**0.05**	0.10
Barleeia spp.	-	-	-	0.2	**0.05**	0.10
Hermissenda crassicornis	-	-	0.2	-	**0.05**	0.10
Lottia scutum	-	-	-	0.2	**0.05**	0.10
Nemertea	-	-	0.2	-	**0.05**	0.10
Sipuncula	-	-	0.2	-	**0.05**	0.10
Strongylocentrotus purpuratus	-	-	-	0.2	**0.05**	0.10

(table continued)

Table C20 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 2+0.9m (11+3).

Survey Survey Date Taxon	200 10-Feb-20 Mean	201 05-Jun-20 Mean	202 16-Sep-20 Mean	203 19-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Chthamalus fissus	2.1	8.1	7.2	11.3	**7.19**	3.83
Spirorbidae	-	<0.1	<0.1	-	**<0.01**	<0.01
Phragmatopoma californica	<0.1	-	<0.1	-	**<0.01**	<0.01
Substrate Cover						
rock	49.2	47.6	52.8	51.3	**50.23**	2.27
sand (shell gravel)	12.7	11.4	8.9	4.3	**9.33**	3.70
cobble	0.6	2.1	1.4	1.0	**1.27**	0.64

Table C21. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 3+0.3m (12+1).

Survey / Survey Date / Taxon	200 18-Feb-20 Mean	201 07-Apr-20 Mean	202 05-Aug-20 Mean	203 13-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	35.2	24.4	29.0	42.9	**32.86**	8.04
coralline crust	0.4	0.3	0.4	<0.1	**0.25**	0.16
Mastocarpus papillatus	<0.1	<0.1	0.3	<0.1	**0.09**	0.13
juv. articulated coralline algae	0.2	<0.1	<0.1	<0.1	**0.09**	0.09
Gelidium pusillum	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Gelidium coulteri	-	<0.1	<0.1	-	**<0.01**	<0.01
Corallina vancouveriensis	<0.1	-	-	-	**<0.01**	<0.01
Chondracanthus canaliculatus	-	<0.1	-	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	156.8	121.0	163.0	57.8	**124.65**	48.26
Lottia scabra	60.6	36.2	28.8	31.4	**39.25**	14.56
Anthopleura elegantissima	17.8	14.8	12.4	18.6	**15.90**	2.85
Lottia limatula	8.6	9.4	5.6	10.4	**8.50**	2.07
Strongylocentrotus purpuratus	0.8	1.4	4.6	6.0	**3.20**	2.50
Mytilus spp.	3.4	2.8	0.6	1.4	**2.05**	1.28
Pagurus spp.	4.2	1.4	0.2	-	**1.45**	1.93
Lottiidae	1.0	0.8	0.8	1.0	**0.90**	0.12
Serpulorbis squamigerus	1.2	1.6	0.6	0.2	**0.90**	0.62
Tetraclita rubescens	1.4	1.0	0.4	0.6	**0.85**	0.44
Lottia pelta	2.0	0.4	0.2	-	**0.65**	0.91
Ocinebrina spp.	0.6	0.4	1.0	0.4	**0.60**	0.28
Pachygrapsus crassipes	-	-	2.0	-	**0.50**	1.00
Fissurella volcano	-	0.4	0.2	0.2	**0.20**	0.16
Acanthinucella spp.	0.2	0.2	0.2	-	**0.15**	0.10
Cirratulidae/Terebellidae	-	0.2	0.4	-	**0.15**	0.19
Mopalia spp.	0.2	-	0.2	0.2	**0.15**	0.10
Serpulidae	-	0.4	0.2	-	**0.15**	0.19
Balanus spp.	-	0.4	-	-	**0.10**	0.20
Cyanoplax spp.	0.2	-	0.2	-	**0.10**	0.12
Epiactis prolifera	-	0.2	0.2	-	**0.10**	0.12
Epitonium/Opalia spp.	0.2	0.2	-	-	**0.10**	0.12
Pelecypoda boring	-	0.2	-	0.2	**0.10**	0.12
Williamia peltoides	0.2	0.2	-	-	**0.10**	0.12
Anthopleura artemisia	-	-	0.2	-	**0.05**	0.10
Barleeia spp.	0.2	-	-	-	**0.05**	0.10
Chlorostoma brunnea	-	0.2	-	-	**0.05**	0.10
Hermissenda crassicornis	-	-	0.2	-	**0.05**	0.10
Ischnochitonidae	-	-	-	0.2	**0.05**	0.10
Littorina spp.	0.2	-	-	-	**0.05**	0.10
Lottia gigantea	0.2	-	-	-	**0.05**	0.10
Lottia ochracea	-	0.2	-	-	**0.05**	0.10
Lottia scutum	-	0.2	-	-	**0.05**	0.10
Patiria miniata	-	-	-	0.2	**0.05**	0.10

(table continued)

Table C21 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 3+0.3m (12+1).

Survey / Survey Date / Taxon	200 18-Feb-20 Mean	201 07-Apr-20 Mean	202 05-Aug-20 Mean	203 13-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Chthamalus fissus	4.8	3.5	3.1	1.5	**3.25**	1.35
tunicates, compound/social	-	<0.1	-	-	**0.02**	0.03
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Phragmatopoma californica	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Substrate Cover						
rock	40.0	43.9	41.6	37.0	**40.62**	2.89
cobble	17.2	23.1	20.9	15.8	**19.25**	3.32
sand (shell gravel)	1.7	4.9	6.2	3.0	**3.96**	2.03

Table C22. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Cove Station SDC 3+0.9m (12+3).

Taxon / Survey / Survey Date	200 18-Feb-20 Mean	201 07-Apr-20 Mean	202 05-Aug-20 Mean	203 13-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	30.4	23.0	30.1	41.5	**31.25**	7.63
Gelidium pusillum	<0.1	<0.1	<0.1	0.4	**0.10**	0.17
Mastocarpus papillatus	<0.1	<0.1	<0.1	0.1	**0.08**	0.06
coralline crust	<0.1	<0.1	<0.1	<0.1	**0.04**	0.04
Gelidium coulteri	-	<0.1	<0.1	-	**0.02**	0.03
Cladophora spp.	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
juv. articulated coralline algae	<0.1	<0.1	-	-	**<0.01**	<0.01
Corallina vancouveriensis	-	<0.1	-	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	106.8	116.4	195.6	62.8	**120.40**	55.30
Lottia scabra	56.4	49.2	18.4	21.8	**36.45**	19.16
Anthopleura elegantissima	32.8	39.2	30.6	36.4	**34.75**	3.81
Mytilus spp.	12.4	15.6	8.2	10.2	**11.60**	3.17
Lottia limatula	4.0	3.6	3.0	4.8	**3.85**	0.75
Ocinebrina spp.	1.8	4.6	2.8	3.4	**3.15**	1.17
Lottiidae	2.0	1.0	1.0	0.8	**1.20**	0.54
Pagurus spp.	3.6	0.2	-	1.0	**1.20**	1.66
Acanthinucella spp.	0.6	1.4	1.0	0.8	**0.95**	0.34
Lottia pelta	1.4	-	0.4	1.2	**0.75**	0.66
Pachygrapsus crassipes	0.8	0.4	1.0	0.2	**0.60**	0.37
Littorina spp.	1.0	-	0.6	0.4	**0.50**	0.42
Tetraclita rubescens	1.2	0.6	0.2	-	**0.50**	0.53
Cyanoplax spp.	0.4	0.2	1.0	0.2	**0.45**	0.38
Cirratulidae/Terebellidae	-	0.4	0.4	-	**0.20**	0.23
Littorina scutulata	-	0.8	-	-	**0.20**	0.40
Mopalia spp.	0.2	0.2	-	-	**0.10**	0.12
Pelecypoda boring	0.2	0.2	-	-	**0.10**	0.12
Serpulidae	0.2	0.2	-	-	**0.10**	0.12
Anthopleura artemisia	-	-	0.2	-	**0.05**	0.10
Eulithidium spp.	-	0.2	-	-	**0.05**	0.10
Lottia scutum	0.2	-	-	-	**0.05**	0.10
Polychaeta	-	-	-	0.2	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	4.6	1.6	2.9	1.4	**2.63**	1.47
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Phragmatopoma californica	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Pista spp.	-	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	44.0	43.5	26.5	34.2	**37.05**	8.39
cobble	16.5	20.2	33.3	18.6	**22.15**	7.61
sand (shell gravel)	3.5	9.9	7.6	3.5	**6.09**	3.17

Table C23. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Point Station SDP 1+0.9m (22+3).

Survey / Survey Date / Taxon	200 07-Feb-20 Mean	201 04-Jun-20 Mean	202 18-Aug-20 Mean	203 20-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	35.7	21.3	26.5	33.0	**29.11**	6.48
coralline crust	5.9	9.2	5.1	7.4	**6.91**	1.83
juv. articulated coralline algae	1.7	0.4	0.5	0.9	**0.87**	0.62
Gelidium coulteri	<0.1	<0.1	0.6	0.9	**0.38**	0.46
Cladophora spp.	-	<0.1	<0.1	0.7	**0.18**	0.35
Corallina vancouveriensis	0.6	<0.1	-	<0.1	**0.16**	0.27
Ulva spp.	-	<0.1	0.4	-	**0.11**	0.21
Calliarthron/Bossiella spp.-complex	<0.1	<0.1	<0.1	<0.1	**0.06**	0.03
Colpomenia spp.	-	-	0.1	-	**0.04**	0.07
Gelidium pusillum	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Mastocarpus papillatus	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryopsis spp.	-	-	<0.1	<0.1	**<0.01**	<0.01
Chlorophyta (filamentous)	-	-	<0.1	-	**<0.01**	<0.01
filamentous red algae complex	-	-	-	<0.1	**<0.01**	<0.01
Cryptopleura violacea	-	-	-	<0.1	**<0.01**	<0.01
Prionitis spp.	-	-	<0.1	-	**<0.01**	<0.01
Invertebrate Counts						
Mytilus spp.	828.0	815.2	739.6	999.0	**845.45**	109.55
Lottia scabra	96.2	130.8	52.6	80.8	**90.10**	32.59
Balanus spp.	100.8	33.2	48.6	76.6	**64.80**	29.98
Tetraclita rubescens	51.4	63.0	37.8	64.8	**54.25**	12.47
Anthopleura elegantissima	35.2	34.4	28.4	36.6	**33.65**	3.62
Lottia pelta	1.2	12.6	7.6	14.6	**9.00**	5.98
Strongylocentrotus purpuratus	7.8	2.2	5.6	16.4	**8.00**	6.06
Chlorostoma funebralis	7.4	16.0	1.2	7.0	**7.90**	6.10
Lottia gigantea	7.6	8.6	3.8	10.2	**7.55**	2.72
Nuttallina californica	7.0	9.4	2.6	5.4	**6.10**	2.85
Lottia limatula	2.0	2.6	2.0	6.6	**3.30**	2.22
Fissurella volcano	2.4	5.0	2.0	3.0	**3.10**	1.33
Lottiidae	3.2	1.0	3.4	4.0	**2.90**	1.31
Pachygrapsus crassipes	-	3.4	1.4	1.0	**1.45**	1.43
Pollicipes polymerus	1.0	1.0	1.0	2.2	**1.30**	0.60
Anthopleura xanthogrammica	1.0	1.0	1.0	1.2	**1.05**	0.10
Ocinebrina spp.	0.2	0.6	0.4	1.6	**0.70**	0.62
Cyanoplax spp.	0.4	1.2	0.4	0.4	**0.60**	0.40
Chlorostoma brunnea	0.4	-	-	1.6	**0.50**	0.76
Sipuncula	-	0.8	-	0.8	**0.40**	0.46
Nemertea	-	0.2	-	1.2	**0.35**	0.57
Pelecypoda boring	0.4	0.4	-	0.6	**0.35**	0.25
Epiactis prolifera	-	-	-	1.2	**0.30**	0.60
Cirratulidae/Terebellidae	-	0.4	-	0.6	**0.25**	0.30
Lottia ochracea	-	0.8	-	0.2	**0.25**	0.38
Serpulidae	0.2	0.2	-	0.6	**0.25**	0.25
Nucella spp.	-	0.2	0.2	0.4	**0.20**	0.16

(table continued)

Table C23 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Point Station SDP 1+0.9m (22+3).

Survey / Survey Date / Taxon	200 07-Feb-20 Mean	201 04-Jun-20 Mean	202 18-Aug-20 Mean	203 20-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Mopalia spp.	-	-	0.2	0.2	**0.10**	0.12
Ophiactis simplex	-	-	0.2	0.2	**0.10**	0.12
Acanthinucella spp.	-	-	-	0.2	**0.05**	0.10
Acmaea mitra	-	-	-	0.2	**0.05**	0.10
Aeolidia papillosa	-	-	-	0.2	**0.05**	0.10
Anthozoa	-	0.2	-	-	**0.05**	0.10
Diodora spp.	-	-	-	0.2	**0.05**	0.10
Epitonium/Opalia spp.	0.2	-	-	-	**0.05**	0.10
Lepidozona spp.	-	-	-	0.2	**0.05**	0.10
Littorina scutulata	-	0.2	-	-	**0.05**	0.10
Littorina spp.	-	-	-	0.2	**0.05**	0.10
Ophiothrix spiculata	-	0.2	-	-	**0.05**	0.10
Pycnogonida	-	-	-	0.2	**0.05**	0.10
Serpulorbis squamigerus	0.2	-	-	-	**0.05**	0.10
Tonicella lineata	-	-	-	0.2	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	0.8	4.4	0.6	2.1	**1.98**	1.77
Phragmatopoma californica	0.8	0.9	0.2	2.1	**0.99**	0.79
Dodecaceria fewkesi	0.2	0.4	0.3	0.6	**0.38**	0.18
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Bryozoa (encrusting)	-	-	<0.1	<0.1	**<0.01**	<0.01
Porifera (encrusting)	-	-	-	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	-	-	-	<0.1	**<0.01**	<0.01
Substrate Cover						
rock	4.4	11.8	12.2	5.1	**8.39**	4.20
cobble	-	<0.1	-	<0.1	**0.02**	0.03
sand (shell gravel)	-	-	-	-	**-**	-

Table C24. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Point Station SDP 2+0.9m (14+3).

Survey / Survey Date / Taxon	200 08-Jan-20 Mean	201 11-Apr-20 Mean	202 31-Jul-20 Mean	203 30-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
coralline crust	21.7	24.2	21.5	17.4	**21.20**	2.84
juv. articulated coralline algae	3.6	6.6	4.2	3.1	**4.39**	1.54
Corallina vancouveriensis	8.1	2.3	2.7	0.5	**3.39**	3.26
Calliarthron/Bossiella spp.-complex	3.2	2.7	1.5	2.9	**2.59**	0.73
non-coralline crust	0.3	2.5	0.6	1.5	**1.22**	0.99
Callithamnion spp./*Pleonosporium* spp.	-	<0.1	1.2	-	**0.33**	0.61
filamentous red algae complex	<0.1	-	0.7	-	**0.19**	0.34
Prionitis spp.	0.4	<0.1	<0.1	<0.1	**0.12**	0.20
Gelidium pusillum	-	<0.1	0.4	-	**0.11**	0.21
Chrysophyta	-	<0.1	0.2	-	**0.05**	0.10
Codium fragile subsp. *californicum*	<0.1	-	<0.1	0.2	**0.05**	0.10
Gelidium coulteri	<0.1	0.1	<0.1	<0.1	**0.04**	0.07
Bryopsis spp.	<0.1	<0.1	<0.1	-	**0.02**	0.03
Cryptopleura violacea	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Mastocarpus papillatus	-	-	<0.1	-	**<0.01**	<0.01
Egregia menziesii	<0.1	-	-	<0.1	**<0.01**	<0.01
Colpomenia spp.	<0.1	-	<0.1	-	**<0.01**	<0.01
Ulva spp.	-	-	<0.1	-	**<0.01**	<0.01
Chlorophyta (filamentous)	-	-	<0.1	-	**<0.01**	<0.01
Chondracanthus canaliculatus	-	<0.1	-	-	**<0.01**	<0.01
Gelidium robustum	<0.1	-	-	-	**<0.01**	<0.01
Pterosiphonia dendroidea	-	-	<0.1	-	**<0.01**	<0.01
Rhodymenia spp.	-	-	<0.1	-	**<0.01**	<0.01
Invertebrate Counts						
Mytilus spp.	560.8	636.4	654.0	675.8	**631.75**	49.97
Balanus spp.	312.4	147.6	58.6	10.6	**132.30**	132.81
Anthopleura elegantissima	206.8	105.4	128.8	54.8	**123.95**	63.28
Strongylocentrotus purpuratus	41.0	39.4	17.4	32.4	**32.55**	10.77
Tetraclita rubescens	13.6	12.0	10.2	47.4	**20.80**	17.79
Pollicipes polymerus	17.0	41.8	16.4	5.2	**20.10**	15.45
Lottia pelta	16.4	20.2	2.0	0.4	**9.75**	10.02
Chlorostoma funebralis	6.6	2.6	12.6	16.6	**9.60**	6.22
Nuttallina californica	2.8	4.2	5.2	8.4	**5.15**	2.38
Fissurella volcano	4.2	2.8	5.4	6.8	**4.80**	1.70
Anthopleura xanthogrammica	7.0	2.8	3.4	4.8	**4.50**	1.87
Serpulidae	3.6	5.4	5.0	2.4	**4.10**	1.37
Lottia scabra	2.8	4.8	5.2	1.4	**3.55**	1.78
Nucella spp.	1.8	3.8	2.4	5.6	**3.40**	1.69
Chlorostoma brunnea	3.8	3.0	2.4	2.2	**2.85**	0.72
Lottiidae	1.6	1.6	4.0	1.4	**2.15**	1.24
Pachygrapsus crassipes	0.6	1.2	5.8	0.4	**2.00**	2.56
Lottia limatula	1.8	2.2	3.2	0.4	**1.90**	1.16
Pelecypoda boring	1.6	0.8	0.4	0.6	**0.85**	0.53
Tonicella lineata	0.6	1.0	1.2	0.4	**0.80**	0.37
Leptasterias spp.	-	1.2	1.8	-	**0.75**	0.90

(table continued)

Table C24 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Diablo Point Station SDP 2+0.9m (14+3).

Survey Survey Date Taxon	200 08-Jan-20 Mean	201 11-Apr-20 Mean	202 31-Jul-20 Mean	203 30-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Acmaea mitra	0.8	1.2	0.6	0.2	**0.70**	0.42
Mopalia spp.	0.4	1.6	-	0.4	**0.60**	0.69
Lottia gigantea	0.6	1.0	0.4	0.2	**0.55**	0.34
Lottia ochracea	0.6	1.0	0.4	-	**0.50**	0.42
Sipuncula	-	1.2	0.8	-	**0.50**	0.60
Pisaster ochraceus	0.2	-	1.0	0.4	**0.40**	0.43
Nemertea	0.2	0.8	0.4	-	**0.35**	0.34
Amphissa spp.	0.4	-	0.2	0.4	**0.25**	0.19
Serpulorbis squamigerus	0.2	0.2	0.4	-	**0.20**	0.16
Grapsidae	-	0.2	0.4	-	**0.15**	0.19
Ischnochitonidae	-	-	0.2	0.4	**0.15**	0.19
Cirratulidae/Terebellidae	-	-	0.6	-	**0.15**	0.30
Cyanoplax spp.	0.2	0.2	-	-	**0.10**	0.12
Elysia hedgpethi	-	-	0.4	-	**0.10**	0.20
Lottia scutum	-	-	0.2	0.2	**0.10**	0.12
Octopus spp.	0.2	-	0.2	-	**0.10**	0.12
Diaulula sandiegensis	-	-	-	0.2	**0.05**	0.10
Epiactis prolifera	0.2	-	-	-	**0.05**	0.10
Hemigrapsus nudus	0.2	-	-	-	**0.05**	0.10
Isopoda	-	0.2	-	-	**0.05**	0.10
Nereididae	-	-	0.2	-	**0.05**	0.10
Ophiactis simplex	-	-	0.2	-	**0.05**	0.10
Ophiothrix spiculata	-	0.2	-	-	**0.05**	0.10
Placiphorella velata	-	-	0.2	-	**0.05**	0.10
Pododesmus cepio	-	0.2	-	-	**0.05**	0.10
Pycnogonida	-	0.2	-	-	**0.05**	0.10
Invertebrate Cover						
Phragmatopoma californica	1.1	0.4	<0.1	1.6	**0.80**	0.68
Dodecaceria fewkesi	0.3	0.6	0.6	0.2	**0.44**	0.19
Chthamalus fissus	<0.1	0.6	0.4	0.2	**0.32**	0.21
Spheciospongia confoederata	0.3	<0.1	0.2	0.1	**0.16**	0.12
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.02**	0.04
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
tunicates, compound/social	<0.1	<0.1	-	-	**<0.01**	<0.01
Hydroidolina	-	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	10.6	8.1	9.0	9.6	**9.29**	1.05
cobble	-	-	-	-	**-**	-
sand (shell gravel)	-	-	-	-	**-**	-

Table C25. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Control Station SC 1+0.3m (19+1).

Taxon / Survey / Survey Date	200 06-Feb-20 Mean	201 09-Apr-20 Mean	202 20-Aug-20 Mean	203 18-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	26.9	28.1	20.7	31.8	**26.89**	4.62
Mazzaella flaccida	11.3	24.2	30.1	14.1	**19.93**	8.75
Phyllospadix spp.	12.6	13.8	13.5	10.1	**12.48**	1.69
coralline crust	7.3	17.5	12.4	10.1	**11.82**	4.33
Gastroclonium subarticulatum	6.9	8.0	11.0	7.2	**8.26**	1.86
juv. articulated coralline algae	4.1	7.5	7.1	11.9	**7.64**	3.20
Gelidium coulteri	3.6	5.3	7.2	2.6	**4.67**	2.01
Prionitis spp.	5.8	4.5	2.9	4.1	**4.32**	1.17
Cryptopleura violacea	4.9	2.4	4.0	3.3	**3.63**	1.07
Mastocarpus papillatus	1.0	7.4	3.8	1.4	**3.39**	2.96
Corallina vancouveriensis	6.0	3.1	0.5	1.2	**2.71**	2.44
Mazzaella splendens	<0.1	0.1	6.9	-	**1.75**	3.41
Chondracanthus canaliculatus	1.9	0.5	1.3	1.3	**1.24**	0.57
Mazzaella oregona	<0.1	1.7	1.3	0.2	**0.80**	0.78
Mastocarpus jardinii	0.7	0.6	0.9	0.8	**0.73**	0.15
Smithora naiadum	-	<0.1	2.6	<0.1	**0.68**	1.31
Mazzaella affinis	0.3	0.6	0.6	-	**0.35**	0.27
Endocladia muricata	-	-	0.1	0.8	**0.24**	0.40
Mazzaella leptorhynchos	<0.1	0.1	<0.1	0.4	**0.13**	0.16
Osmundea spp.	<0.1	<0.1	0.1	<0.1	**0.07**	0.06
Gelidium pusillum	0.1	<0.1	-	<0.1	**0.04**	0.07
Calliarthron/Bossiella spp.-complex	<0.1	<0.1	<0.1	<0.1	**0.02**	0.03
Halosaccion americanum	<0.1	-	<0.1	-	**0.02**	0.04
Sarcodiotheca gaudichaudii	<0.1	-	<0.1	-	**0.02**	0.03
Cladophora spp.	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Melobesia mediocris	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Microcladia coulteri	-	-	<0.1	-	**<0.01**	<0.01
Cryptopleura ruprechtiana	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Chlorophyta (filamentous)	-	-	<0.1	-	**<0.01**	<0.01
Farlowia/Pikea spp.-complex	<0.1	-	<0.1	-	**<0.01**	<0.01
Chondracanthus corymbiferus	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Ulva spp.	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Rhodymenia spp.	-	-	<0.1	<0.1	**<0.01**	<0.01
Corallina chilensis	<0.1	-	-	-	**<0.01**	<0.01
Pterosiphonia dendroidea	<0.1	-	-	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	66.4	29.0	72.0	161.2	**82.15**	56.05
Tetraclita rubescens	41.6	13.4	6.2	0.2	**15.35**	18.31
Pagurus spp.	3.6	8.0	13.0	10.0	**8.65**	3.94
Fissurella volcano	6.8	1.4	6.2	6.4	**5.20**	2.55
Lottia limatula	6.0	3.6	7.8	2.2	**4.90**	2.49
Strongylocentrotus purpuratus	2.8	1.8	5.2	4.4	**3.55**	1.54
Lottia scabra	4.4	-	2.0	1.8	**2.05**	1.81
Lottia scutum	0.6	3.4	0.4	1.8	**1.55**	1.38

(table continued)

Table C25 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Control Station SC 1+0.3m (19+1).

Survey / Survey Date / Taxon	200 06-Feb-20 Mean	201 09-Apr-20 Mean	202 20-Aug-20 Mean	203 18-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Mopalia spp.	2.0	0.4	1.4	1.6	**1.35**	0.68
Patiria miniata	1.2	1.0	1.8	1.0	**1.25**	0.38
Lottiidae	1.2	1.0	1.4	1.0	**1.15**	0.19
Nemertea	-	-	2.6	2.0	**1.15**	1.35
Serpulidae	2.4	0.2	1.0	0.8	**1.10**	0.93
Lottia pelta	1.6	1.0	1.2	0.2	**1.00**	0.59
Acmaea mitra	0.8	0.8	0.6	0.8	**0.75**	0.10
Chlorostoma brunnea	-	-	2.2	0.8	**0.75**	1.04
Anthopleura elegantissima	0.8	0.8	0.4	0.6	**0.65**	0.19
Crepidula spp.	0.8	0.6	0.6	0.6	**0.65**	0.10
Pachygrapsus crassipes	0.8	0.4	0.6	-	**0.45**	0.34
Mytilus spp.	0.4	0.2	0.2	0.8	**0.40**	0.28
Epiactis prolifera	-	-	0.8	0.2	**0.25**	0.38
Clavelina huntsmani	-	0.4	0.2	0.2	**0.20**	0.16
Leptasterias spp.	-	0.2	0.2	0.4	**0.20**	0.16
Nuttallina californica	-	-	0.2	0.6	**0.20**	0.28
Grapsidae	0.2	-	0.4	-	**0.15**	0.19
Ischnochitonidae	0.2	0.4	-	-	**0.15**	0.19
Lacuna spp.	-	0.2	-	0.4	**0.15**	0.19
Balanus spp.	-	-	0.4	-	**0.10**	0.20
Calliostoma ligatum	-	0.2	-	0.2	**0.10**	0.12
Lottia ochracea	-	-	0.2	0.2	**0.10**	0.12
Pachycheles spp.	-	-	0.4	-	**0.10**	0.20
Tonicella lineata	0.4	-	-	-	**0.10**	0.20
Alia spp.	-	-	-	0.2	**0.05**	0.10
Anthopleura artemisia	-	0.2	-	-	**0.05**	0.10
Cryptochiton stelleri	-	-	-	0.2	**0.05**	0.10
Diodora spp.	-	-	-	0.2	**0.05**	0.10
Doriopsilla albopunctata	0.2	-	-	-	**0.05**	0.10
Fissurellidea bimaculata	-	0.2	-	-	**0.05**	0.10
Homolopoma luridum/Lirularia succincta	-	-	0.2	-	**0.05**	0.10
Loxorhynchus spp.	-	-	0.2	-	**0.05**	0.10
Nereididae	-	-	-	0.2	**0.05**	0.10
Octopus spp.	-	0.2	-	-	**0.05**	0.10
Placiphorella velata	-	-	0.2	-	**0.05**	0.10
Pseudoceros montereyensis	-	-	0.2	-	**0.05**	0.10
Pugettia spp.	-	0.2	-	-	**0.05**	0.10
Romaleon antennarius	-	0.2	-	-	**0.05**	0.10

(table continued)

Table C25 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Control Station SC 1+0.3m (19+1).

Survey / Survey Date / Taxon	200 06-Feb-20 Mean	201 09-Apr-20 Mean	202 20-Aug-20 Mean	203 18-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Cover						
Phragmatopoma californica	12.5	6.9	6.3	15.3	**10.26**	4.39
Pista spp.	<0.1	-	2.2	0.6	**0.71**	1.05
Bryozoa (encrusting)	0.3	<0.1	<0.1	<0.1	**0.07**	0.14
tunicates, compound/social	<0.1	<0.1	<0.1	0.2	**0.07**	0.10
Bryozoa (erect)	-	-	0.1	-	**0.03**	0.07
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Chthamalus fissus	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Hydroidolina	-	<0.1	-	-	**<0.01**	<0.01
Salmacina tribranchiata	-	<0.1	-	-	**<0.01**	<0.01
Substrate Cover						
rock	9.4	13.3	6.7	6.4	**8.94**	3.22
sand (shell gravel)	7.1	1.3	3.1	5.5	**4.24**	2.55
cobble	4.2	3.4	3.4	1.7	**3.18**	1.03

Table C26. Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Control Station SC 1+0.9m (19+3).

Survey / Survey Date / Taxon	200 06-Feb-20 Mean	201 09-Apr-20 Mean	202 20-Aug-20 Mean	203 18-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae Cover						
non-coralline crust	38.7	31.2	32.2	34.2	**34.06**	3.31
Silvetia compressa	8.7	8.8	8.3	6.4	**8.06**	1.13
Endocladia muricata	6.2	9.5	7.0	8.5	**7.81**	1.50
coralline crust	5.1	8.2	3.6	5.4	**5.57**	1.91
Mastocarpus papillatus	1.4	2.6	8.6	4.4	**4.26**	3.15
Mastocarpus jardinii	1.9	0.8	0.4	0.8	**0.97**	0.67
Mazzaella flaccida	0.6	0.4	0.4	0.3	**0.44**	0.14
Mazzaella affinis	1.4	-	<0.1	-	**0.35**	0.69
Gelidium pusillum	<0.1	0.2	<0.1	<0.1	**0.08**	0.10
Mazzaella splendens	-	-	0.3	-	**0.07**	0.14
juv. articulated coralline algae	<0.1	<0.1	<0.1	0.1	**0.05**	0.07
Mazzaella oregona	<0.1	-	<0.1	<0.1	**0.04**	0.04
Cryptopleura violacea	0.1	-	-	-	**0.03**	0.07
Corallina vancouveriensis	<0.1	-	-	<0.1	**0.02**	0.03
Cladophora spp.	<0.1	-	<0.1	<0.1	**0.01**	<0.01
Gelidium coulteri	-	-	<0.1	<0.1	**<0.01**	<0.01
Chondracanthus canaliculatus	-	-	<0.1	<0.1	**<0.01**	<0.01
Mazzaella leptorhynchos	-	-	<0.1	-	**<0.01**	<0.01
Gastroclonium subarticulatum	-	<0.1	-	-	**<0.01**	<0.01
Porphyra spp.	<0.1	-	-	-	**<0.01**	<0.01
Invertebrate Counts						
Chlorostoma funebralis	67.0	79.6	125.6	64.8	**84.25**	28.33
Lottia scabra	53.6	50.6	94.2	60.0	**64.60**	20.12
Lottia limatula	9.6	6.4	15.4	6.0	**9.35**	4.34
Ocinebrina spp.	5.6	2.2	11.4	7.8	**6.75**	3.86
Lottia scutum	3.8	6.4	6.6	4.6	**5.35**	1.37
Lottia pelta	7.8	1.4	4.8	2.2	**4.05**	2.89
Anthopleura elegantissima	3.0	2.8	3.4	3.6	**3.20**	0.37
Pagurus spp.	3.4	1.0	0.4	6.8	**2.90**	2.91
Mytilus spp.	1.6	2.6	2.0	3.4	**2.40**	0.78
Lottiidae	2.6	1.0	1.0	1.0	**1.40**	0.80
Cyanoplax spp.	0.2	0.2	2.2	1.0	**0.90**	0.95
Tetraclita rubescens	1.4	0.2	0.8	0.6	**0.75**	0.50
Pachygrapsus crassipes	1.4	0.2	-	0.2	**0.45**	0.64
Mopalia spp.	0.4	-	0.4	0.4	**0.30**	0.20
Balanus spp.	1.0	-	0.2	-	**0.30**	0.48
Acanthinucella spp.	-	0.4	0.6	-	**0.25**	0.30
Crepidula spp.	0.2	0.6	0.2	-	**0.25**	0.25
Leptasterias spp.	0.2	-	0.4	0.2	**0.20**	0.16
Littorina scutulata	0.2	0.4	-	-	**0.15**	0.19
Serpulidae	0.4	-	0.2	-	**0.15**	0.19
Acmaea mitra	-	0.2	-	0.2	**0.10**	0.12
Littorina spp.	-	-	0.2	0.2	**0.10**	0.12
Anthopleura xanthogrammica	0.2	-	-	-	**0.05**	0.10
Calliostoma ligatum	-	-	-	0.2	**0.05**	0.10

(table continued)

Table C26 (continued). Intertidal algae, sessile invertebrates, and substrates (percent cover) and motile invertebrates (abundance per 1.0 m^2) survey means, standard deviations and 2020 annual means for South Control Station SC 1+0.9m (19+3).

Survey / Survey Date / Taxon	200 06-Feb-20 Mean	201 09-Apr-20 Mean	202 20-Aug-20 Mean	203 18-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrate Counts (continued)						
Fissurella volcano	-	0.2	-	-	**0.05**	0.10
Hemigrapsus nudus	-	0.2	-	-	**0.05**	0.10
Ischnochitonidae	-	0.2	-	-	**0.05**	0.10
Lottia ochracea	-	-	0.2	-	**0.05**	0.10
Strongylocentrotus purpuratus	-	-	-	0.2	**0.05**	0.10
Tonicella lineata	-	-	-	0.2	**0.05**	0.10
Invertebrate Cover						
Chthamalus fissus	3.0	7.5	7.2	6.8	**6.13**	2.11
Phragmatopoma californica	0.1	0.4	0.1	<0.1	**0.16**	0.14
tunicates, compound/social	-	-	0.1	-	**0.03**	0.07
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Substrate Cover						
rock	30.8	28.6	31.7	37.1	**32.05**	3.60
cobble	11.0	17.4	8.2	8.9	**11.35**	4.17
sand (shell gravel)	2.6	1.0	2.2	4.5	**2.57**	1.47

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Appendix D

Intertidal Fishes

Table D1. Intertidal fish survey totals, 2020 annual means, and standard deviations, North Control Station NC 1V (N).

Survey	160	161	162	163		
Survey Date	23-Jan-20	10-May-20	20-Jul-20	16-Dec-20		
Taxon	Total	Total	Total	Total	Annual Mean	Std. Dev.
Pholidae/Stichaeidae	6	10	1	4	**5.25**	3.77
Xiphister atropurpureus	6	6	5	3	**5.00**	1.41
Cebidichthys violaceus	1	3	3	3	**2.50**	1.00
Gobiesox maeandricus	4	1	1	3	**2.25**	1.50
Oligocottus snyderi	2	1	-	4	**1.75**	1.71
Anoplarchus purpurescens	3	1	1	1	**1.50**	1.00
Gibbonsia spp.	-	1	-	4	**1.25**	1.89
Xiphister mucosus	-	1	2	-	**0.75**	0.96
Cottidae	-	2	1	-	**0.75**	0.96
Apodichthys fucorum	-	1	1	-	**0.50**	0.58
Oligocottus maculosus	1	-	-	-	**0.25**	0.50
Clinocottus recalvus	-	-	-	1	**0.25**	0.50
Typhlogobius californiensis	-	-	-	1	**0.25**	0.50

Table D2. Intertidal fish survey totals, 2020 annual means, and standard deviations, Field's Cove Station FC 1V (C).

Survey	160	161	162	163		
Survey Date	21-Jan-20	11-May-20	23-Jul-20	18-Nov-20		
Taxon	Total	Total	Total	Total	Annual Mean	Std. Dev.
Cebidichthys violaceus	3	11	4	11	**7.25**	4.35
Pholidae/Stichaeidae	3	3	10	9	**6.25**	3.77
Xiphister atropurpureus	-	10	5	2	**4.25**	4.35
Oligocottus snyderi	3	5	1	8	**4.25**	2.99
Gobiesox maeandricus	2	11	-	1	**3.50**	5.07
Cottidae	1	1	-	6	**2.00**	2.71
Artedius spp.	1	1	-	2	**1.00**	0.82
Xiphister mucosus	-	3	1	-	**1.00**	1.41
Gibbonsia spp.	-	-	-	3	**0.75**	1.50
Anoplarchus purpurescens	2	-	-	1	**0.75**	0.96

Table D3. Intertidal fish survey totals, 2020 annual means, and standard deviations, North Diablo Cove Station NDC 1V (L).

Survey	160	161	162	163		
Survey Date	20-Feb-20	9-May-20	20-Aug-20	17-Nov-20		
Taxon	Total	Total	Total	Total	Annual Mean	Std. Dev.
Cebidichthys violaceus	-	1	-	1	**0.50**	0.58
Oligocottus maculosus	-	-	-	1	**0.25**	0.50

Table D4. Intertidal fish survey totals, 2020 annual means, and standard deviations, South Diablo Cove Station SDC 2V (H).

Survey / Survey Date / Taxon	160 7-Feb-20 Total	161 8-May-20 Total	162 22-Jul-20 Total	163 14-Dec-20 Total	Annual Mean	Std. Dev.
Cebidichthys violaceus	9	6	2	2	**4.75**	3.40
Xiphister atropurpureus	1	2	3	1	**1.75**	0.96
Pholidae/Stichaeidae	2	1	3	-	**1.50**	1.29
Scytalina cerdale	-	1	1	-	**0.50**	0.58
Oligocottus snyderi	1	-	-	-	**0.25**	0.50
Cottidae	-	-	-	1	**0.25**	0.50

Table D5. Intertidal fish survey totals, 2020 annual means, and standard deviations, South Control Station SC 1V (S).

Survey / Survey Date / Taxon	160 22-Jan-20 Total	161 7-May-20 Total	162 21-Jul-20 Total	163 16-Nov-20 Total	Annual Mean	Std. Dev.
Pholidae/Stichaeidae	16	16	13	9	**13.50**	3.32
Gobiesox maeandricus	13	24	6	9	**13.00**	7.87
Cebidichthys violaceus	9	16	12	10	**11.75**	3.10
Anoplarchus purpurescens	8	17	12	7	**11.00**	4.55
Oligocottus snyderi	4	5	12	2	**5.75**	4.35
Gibbonsia spp.	8	5	-	1	**3.50**	3.70
Xiphister mucosus	-	5	2	3	**2.50**	2.08
Xiphister atropurpureus	3	5	-	-	**2.00**	2.45
Micrometrus aurora	-	-	5	-	**1.25**	2.50
Cottidae	1	4	-	-	**1.25**	1.89
Oligocottus maculosus	-	-	3	-	**0.75**	1.50
Pholidae	-	2	-	-	**0.50**	1.00

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Appendix E

Subtidal Algae and Invertebrates (SAQ Method)

Table E1. Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, Field's Cove Station FC 1 -3m (22-10).

Survey / Survey Date / Taxon	188 21-Feb-20 Mean	189 09-Jul-20 Mean	190 28-Jul-20 Mean	191 08-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
(no target algae observed in 2020)	-	-	-	-	-	-
Invertebrates						
Strongylocentrotus purpuratus	351.8	905.8	273.8	380.0	**477.81**	288.81
Acmaea mitra	113.3	81.8	68.3	78.8	**85.50**	19.38
Chlorostoma brunnea	60.0	117.8	39.8	12.0	**57.38**	44.80
Serpulidae	7.8	13.8	9.0	9.3	**9.94**	2.62
Tonicella lineata	6.0	5.3	5.3	2.3	**4.69**	1.66
Patiria miniata	3.0	3.0	4.3	8.3	**4.62**	2.49
Ophiothrix spiculata	0.5	2.0	3.8	4.5	**2.69**	1.80
Serpulorbis squamigerus	3.8	2.8	2.0	1.5	**2.50**	0.98
Diodora spp.	1.5	2.3	2.0	3.0	**2.19**	0.62
Anthopleura elegantissima	3.3	2.0	1.0	1.8	**2.00**	0.94
Pagurus spp.	3.5	1.3	-	1.8	**1.62**	1.45
Strongylocentrotus franciscanus	1.3	2.0	1.5	1.0	**1.44**	0.43
Crassadoma gigantea	0.8	1.0	0.8	0.8	**0.81**	0.12
Haliotis spp.	-	1.8	0.8	0.8	**0.81**	0.72
Cucumaria spp.	0.3	-	-	2.5	**0.69**	1.21
Leptasterias spp.	0.5	0.5	-	1.5	**0.62**	0.63
Doriopsilla albopunctata	0.5	0.8	0.3	-	**0.38**	0.32
Hermissenda crassicornis	-	-	0.8	0.8	**0.38**	0.43
Tethya californiana	0.5	0.5	0.3	0.3	**0.38**	0.14
Anthopleura artemisia	0.3	0.3	0.5	0.3	**0.31**	0.12
Eudistylia polymorpha	-	0.8	0.5	-	**0.31**	0.38
Pelecypoda boring	0.3	-	0.3	0.8	**0.31**	0.31
Octopus spp.	0.8	-	0.3	-	**0.25**	0.35
Calliostoma ligatum	0.8	-	-	-	**0.19**	0.38
Okenia rosacea	0.3	0.3	-	0.3	**0.19**	0.12
Ophioplocus esmarki	0.5	0.3	-	-	**0.19**	0.24
Pisaster/Henricia spp. (juv.)	0.3	0.3	-	0.3	**0.19**	0.12
Placiphorella velata	0.3	0.3	0.3	-	**0.19**	0.12
Diopatra ornata	-	-	0.3	0.3	**0.12**	0.14
Lottia pelta	-	-	0.5	-	**0.12**	0.25
Ophiopteris papillosa	-	0.5	-	-	**0.12**	0.25
Sabellidae	-	0.5	-	-	**0.12**	0.25
Sipuncula	-	0.5	-	-	**0.12**	0.25
Diaulula sandiegensis	-	-	-	0.3	**<0.1**	0.12
Fissurella volcano	-	0.3	-	-	**<0.1**	0.12
Megathura crenulata	-	-	0.3	-	**<0.1**	0.12
Mitra idea	0.3	-	-	-	**<0.1**	0.12
Mopalia spp.	-	-	0.3	-	**<0.1**	0.12
Nemertea	-	0.3	-	-	**<0.1**	0.12
Phidiana hiltoni	-	-	0.3	-	**<0.1**	0.12
Pododesmus cepio	-	-	0.3	-	**<0.1**	0.12
Pomaulax gibberosa	0.3	-	-	-	**<0.1**	0.12
Pseudomelatoma torosa	-	-	0.3	-	**<0.1**	0.12

Table E2. Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, North Diablo Cove Station NDC 2 -3m (8-10).

Survey / Survey Date / Taxon	188 12-Mar-20 Mean	189 20-Apr-20 Mean	190 21-Jul-20 Mean	191 20-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
Sargassum muticum	57.3	49.5	1.3	-	**27.00**	30.62
Cystoseira osmundacea	7.8	10.0	3.8	2.3	**5.94**	3.57
Macrocystis pyrifera	-	-	0.3	0.5	**0.19**	0.24
Invertebrates						
Strongylocentrotus purpuratus	181.5	218.3	115.5	165.0	**170.06**	42.64
Acmaea mitra	20.3	12.8	4.5	5.3	**10.69**	7.38
Anthopleura elegantissima	8.8	7.8	3.3	7.5	**6.81**	2.44
Epiactis prolifera	2.0	4.8	14.0	4.8	**6.38**	5.25
Ophiothrix spiculata	5.8	7.3	1.5	5.8	**5.06**	2.48
Serpulidae	3.8	4.3	-	4.8	**3.19**	2.16
Strongylocentrotus franciscanus	0.5	1.0	0.3	1.0	**0.69**	0.38
Tonicella lineata	0.8	0.8	-	0.8	**0.56**	0.38
Mitra idea	-	-	1.3	0.3	**0.38**	0.60
Sabellidae	1.0	0.3	-	-	**0.31**	0.47
Crassadoma gigantea	0.5	-	-	0.5	**0.25**	0.29
Doris spp.	-	0.5	-	0.5	**0.25**	0.29
Placiphorella velata	0.5	0.5	-	-	**0.25**	0.29
Pteropurpura festiva	0.3	0.8	-	-	**0.25**	0.35
Eudistylia polymorpha	-	-	-	0.8	**0.19**	0.38
Ophiopteris papillosa	0.5	0.3	-	-	**0.19**	0.24
Megathura crenulata	0.3	0.3	-	-	**0.12**	0.14
Serpulorbis squamigerus	0.3	-	-	0.3	**0.12**	0.14
Aeolidia papillosa	-	-	0.3	-	**<0.1**	0.12
Anthopleura artemisia	-	-	-	0.3	**<0.1**	0.12
Boltenia villosa	-	-	-	0.3	**<0.1**	0.12
Ceratostoma nuttalli	-	-	0.3	-	**<0.1**	0.12
Diopatra ornata	0.3	-	-	-	**<0.1**	0.12
Mexichromis porterae	-	0.3	-	-	**<0.1**	0.12
Mopalia spp.	-	0.3	-	-	**<0.1**	0.12
Nemertea	0.3	-	-	-	**<0.1**	0.12
Urticina spp.	-	-	-	0.3	**<0.1**	0.12

Table E3. Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, North Diablo Cove Station NDC 3 -3m (9-10).

Survey / Survey Date / Taxon	188 13-Mar-20 Mean	189 05-May-20 Mean	190 22-Jul-20 Mean	191 30-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
Sargassum muticum	72.3	177.0	108.3	293.0	**162.62**	97.17
Cystoseira osmundacea	15.5	24.3	16.3	24.3	**20.06**	4.84
Macrocystis pyrifera	-	0.3	2.0	1.5	**0.94**	0.97
Invertebrates						
Strongylocentrotus purpuratus	364.5	191.8	203.8	320.8	**270.19**	85.67
Ophiothrix spiculata	4.5	6.0	7.0	7.8	**6.31**	1.40
Anthopleura elegantissima	6.0	5.3	7.3	6.0	**6.12**	0.83
Epiactis prolifera	-	5.8	6.3	6.5	**4.62**	3.10
Acmaea mitra	3.8	7.5	0.8	5.3	**4.31**	2.83
Serpulidae	4.3	5.3	3.5	4.3	**4.31**	0.72
Anthopleura spp.	-	-	-	13.5	**3.38**	6.75
Anthozoa	11.3	-	-	-	**2.81**	5.62
Strongylocentrotus franciscanus	-	1.0	0.5	1.5	**0.75**	0.65
Pteropurpura festiva	0.5	1.3	1.0	-	**0.69**	0.55
Mitra idea	0.8	-	1.3	0.5	**0.62**	0.52
Megathura crenulata	0.5	1.0	-	-	**0.38**	0.48
Sabellidae	-	0.8	0.3	-	**0.25**	0.35
Crassadoma gigantea	-	0.3	-	0.5	**0.19**	0.24
Ophiactis simplex	-	0.8	-	-	**0.19**	0.38
Pelecypoda boring	0.5	-	-	0.3	**0.19**	0.24
Cucumaria spp.	-	0.5	-	-	**0.12**	0.25
Diaulula sandiegensis	0.3	-	-	0.3	**0.12**	0.14
Doris spp.	-	-	-	0.5	**0.12**	0.25
Pagurus spp.	0.3	0.3	-	-	**0.12**	0.14
Pododesmus cepio	0.3	0.3	-	-	**0.12**	0.14
Aeolidia papillosa	-	-	0.3	-	**<0.1**	0.12
Cirratulidae/Terebellidae	-	-	-	0.3	**<0.1**	0.12
Diodora spp.	-	-	-	0.3	**<0.1**	0.12
Doriopsilla albopunctata	0.3	-	-	-	**<0.1**	0.12
Eudistylia polymorpha	-	-	0.3	-	**<0.1**	0.12
Haliotis spp.	-	-	-	0.3	**<0.1**	0.12
Hermissenda crassicornis	-	-	-	0.3	**<0.1**	0.12
Mopalia spp.	-	0.3	-	-	**<0.1**	0.12
Nemertea	-	-	-	0.3	**<0.1**	0.12
Ophiopteris papillosa	-	-	0.3	-	**<0.1**	0.12
Pandalus spp.	-	-	-	0.3	**<0.1**	0.12
Panulirus interruptus	0.3	-	-	-	**<0.1**	0.12
Parastichopus spp.	-	0.3	-	-	**<0.1**	0.12
Placiphorella velata	-	-	-	0.3	**<0.1**	0.12
Platyhelminthes	-	-	0.3	-	**<0.1**	0.12

Table E4. Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, North Diablo Cove Station NDC 4 -4m (9-15).

Survey / Survey Date / Taxon	188 04-Mar-20 Mean	189 29-Apr-20 Mean	190 23-Jul-20 Mean	191 12-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
Laminariales	-	0.5	-	-	**0.12**	0.25
Invertebrates						
Strongylocentrotus purpuratus	224.8	290.5	300.0	216.3	**257.88**	43.47
Serpulidae	24.5	23.5	29.0	33.0	**27.50**	4.38
Ophiothrix spiculata	19.0	9.8	39.8	14.0	**20.62**	13.30
Anthopleura elegantissima	19.8	18.5	16.3	12.0	**16.62**	3.41
Acmaea mitra	27.8	18.8	3.0	7.5	**14.25**	11.17
Serpulorbis squamigerus	5.8	6.3	17.8	4.8	**8.62**	6.12
Strongylocentrotus franciscanus	3.3	3.8	4.5	4.5	**4.00**	0.61
Placiphorella velata	1.8	1.0	1.8	0.3	**1.19**	0.72
Cucumaria spp.	0.5	1.5	1.8	0.5	**1.06**	0.66
Pelecypoda boring	-	0.5	3.0	0.5	**1.00**	1.35
Ophiopteris papillosa	1.5	1.0	0.5	0.5	**0.88**	0.48
Mitra idae	-	-	2.8	0.5	**0.81**	1.31
Patiria miniata	0.8	0.5	0.8	1.0	**0.75**	0.20
Sabellidae	1.0	1.0	1.0	-	**0.75**	0.50
Crassadoma gigantea	1.3	0.5	0.5	0.5	**0.69**	0.38
Tethya californiana	0.5	1.0	0.5	0.8	**0.69**	0.24
Eudistylia polymorpha	-	0.5	1.0	1.0	**0.62**	0.48
Epiactis prolifera	0.3	1.8	0.3	-	**0.56**	0.80
Pteropurpura festiva	-	0.8	1.0	0.3	**0.50**	0.46
Diopatra ornata	0.8	0.5	-	0.5	**0.44**	0.31
Pododesmus cepio	0.3	0.3	0.8	0.5	**0.44**	0.24
Anthopleura artemisia	0.8	0.5	-	0.3	**0.38**	0.32
Parastichopus spp.	0.5	0.8	0.3	-	**0.38**	0.32
Haliotis spp.	0.3	0.3	-	0.3	**0.19**	0.12
Tonicella lineata	-	-	0.8	-	**0.19**	0.38
Cypraea spadicea	-	-	0.5	-	**0.12**	0.25
Diodora spp.	-	-	-	0.5	**0.12**	0.25
Megathura crenulata	-	0.3	-	0.3	**0.12**	0.14
Nemertea	-	-	0.3	0.3	**0.12**	0.14
Okenia rosacea	-	-	-	0.5	**0.12**	0.25
Pseudochama spp.	0.3	0.3	-	-	**0.12**	0.14
Diaulula sandiegensis	-	-	-	0.3	**<0.1**	0.12
Lysmata californica	-	-	0.3	-	**<0.1**	0.12
Octopus spp.	0.3	-	-	-	**<0.1**	0.12

Table E5. Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, South Diablo Cove Station SDC 2 -3m (12-10).

Survey / Survey Date / Taxon	188 07-Feb-20 Mean	189 29-May-20 Mean	190 12-Aug-20 Mean	191 13-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
Cystoseira osmundacea	1.8	-	-	-	**0.44**	0.88
Sargassum muticum	-	-	0.8	-	**0.19**	0.38
Invertebrates						
Strongylocentrotus purpuratus	200.8	209.0	161.3	214.3	**196.31**	24.03
Ophiothrix spiculata	25.0	6.8	31.8	8.3	**17.94**	12.38
Serpulorbis squamigerus	17.0	17.0	15.3	17.5	**16.69**	0.99
Diopatra ornata	10.0	5.0	18.5	15.0	**12.12**	5.89
Serpulidae	8.0	9.5	10.8	5.0	**8.31**	2.48
Strongylocentrotus franciscanus	6.3	3.8	6.0	5.5	**5.38**	1.13
Anthopleura elegantissima	5.8	3.5	5.3	4.3	**4.69**	1.01
Patiria miniata	0.8	1.5	2.3	5.3	**2.44**	1.97
Pteropurpura festiva	5.0	0.5	3.5	0.8	**2.44**	2.18
Mitra idea	2.0	0.5	4.3	2.8	**2.38**	1.56
Acmaea mitra	2.3	0.8	3.8	2.3	**2.25**	1.22
Conus californicus	-	0.3	7.5	-	**1.94**	3.71
Cucumaria spp.	2.3	2.8	2.5	0.3	**1.94**	1.14
Anthopleura artemisia	0.3	0.3	2.3	1.0	**0.94**	0.94
Pelecypoda boring	0.5	1.3	1.3	-	**0.75**	0.61
Ophiopteris papillosa	1.0	0.3	0.3	0.8	**0.56**	0.38
Pagurus spp.	0.5	-	0.8	1.0	**0.56**	0.43
Doriopsilla albopunctata	0.5	1.3	-	-	**0.44**	0.59
Crassadoma gigantea	0.3	0.3	0.5	0.3	**0.31**	0.12
Pachycerianthus fimbriatus	0.5	-	0.3	0.5	**0.31**	0.24
Cirratulidae/Terebellidae	-	-	1.0	-	**0.25**	0.50
Halcampa decemtentaculata	-	-	0.8	0.3	**0.25**	0.35
Octopus spp.	0.5	0.3	-	0.3	**0.25**	0.20
Sabellidae	-	0.8	-	0.3	**0.25**	0.35
Tethya californiana	0.3	0.3	0.3	0.3	**0.25**	<0.1
Amphiodia occidentalis	-	-	0.8	-	**0.19**	0.38
Cypraea spadicea	0.5	-	-	0.3	**0.19**	0.24
Epiactis prolifera	-	0.5	-	-	**0.12**	0.25
Anthozoa	-	0.3	-	-	**<0.1**	0.12
Babakina festiva	-	-	0.3	-	**<0.1**	0.12
Boltenia villosa	0.3	-	-	-	**<0.1**	0.12
Crangon spp.	-	-	0.3	-	**<0.1**	0.12
Diodora spp.	-	-	-	0.3	**<0.1**	0.12
Doris spp.	-	-	-	0.3	**<0.1**	0.12
Haliotis spp.	-	-	0.3	-	**<0.1**	0.12
Heptacarpus spp.	0.3	-	-	-	**<0.1**	0.12
Hermissenda crassicornis	-	-	0.3	-	**<0.1**	0.12
Lissothuria nutriens	-	-	-	0.3	**<0.1**	0.12
Loxorhynchus spp.	-	-	-	0.3	**<0.1**	0.12
Lytechinus anamesus	-	-	-	0.3	**<0.1**	0.12
Maxwellia gemma	0.3	-	-	-	**<0.1**	0.12
Megathura crenulata	-	0.3	-	-	**<0.1**	0.12

(table continued)

Table E5 (continued). Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, South Diablo Cove Station SDC 2 -3m (12-10).

Survey / Survey Date / Taxon	188 07-Feb-20 Mean	189 29-May-20 Mean	190 12-Aug-20 Mean	191 13-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrates (continued)						
Modiolus spp.	-	-	0.3	-	**<0.1**	0.12
Mytilus spp.	0.3	-	-	-	**<0.1**	0.12
Nemertea	-	-	0.3	-	**<0.1**	0.12
Pandalus spp.	-	-	0.3	-	**<0.1**	0.12
Parastichopus spp.	0.3	-	-	-	**<0.1**	0.12
Romaleon antennarius	-	-	0.3	-	**<0.1**	0.12

Table E6. Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, South Diablo Cove Station SDC 3 -4m (10-15).

Survey / Survey Date / Taxon	188 11-Feb-20 Mean	189 18-Jun-20 Mean	190 11-Aug-20 Mean	191 21-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
Cystoseira osmundacea	7.3	3.0	5.8	5.8	**5.44**	1.77
Macrocystis pyrifera	0.5	3.3	6.3	1.5	**2.88**	2.52
Laminariales	1.3	6.0	-	-	**1.81**	2.85
Pterygophora californica	-	-	1.8	0.3	**0.50**	0.84
Laminaria setchellii	0.3	-	1.0	0.5	**0.44**	0.43
Sargassum muticum	-	0.5	0.3	-	**0.19**	0.24
Invertebrates						
Strongylocentrotus purpuratus	218.8	158.8	175.0	190.0	**185.62**	25.51
Serpulorbis squamigerus	24.0	23.5	17.8	24.8	**22.50**	3.21
Anthopleura elegantissima	17.5	13.8	19.8	22.3	**18.31**	3.61
Diopatra ornata	9.8	0.8	2.5	6.0	**4.75**	3.98
Mitra idae	4.3	2.0	3.3	8.5	**4.50**	2.82
Pteropurpura festiva	1.3	1.3	3.3	6.5	**3.06**	2.48
Anthopleura artemisia	1.0	1.8	3.8	4.5	**2.75**	1.65
Conus californicus	-	-	3.8	5.3	**2.25**	2.67
Serpulidae	1.5	2.3	3.3	1.5	**2.12**	0.83
Cucumaria spp.	2.0	1.3	4.3	0.3	**1.94**	1.70
Acmaea mitra	1.5	3.0	0.8	0.8	**1.50**	1.06
Strongylocentrotus franciscanus	2.3	-	1.3	1.8	**1.31**	0.97
Boltenia villosa	0.5	0.5	0.5	2.8	**1.06**	1.12
Pelecypoda boring	1.0	0.5	1.5	0.5	**0.88**	0.48
Hermissenda crassicornis	-	1.3	2.0	-	**0.81**	0.99
Pollicipes polymerus	-	-	-	3.3	**0.81**	1.62
Ophiothrix spiculata	-	0.3	2.5	0.3	**0.75**	1.17
Doriopsilla albopunctata	0.5	1.3	0.8	0.3	**0.69**	0.43
Cypraea spadicea	1.0	-	1.3	0.3	**0.62**	0.60
Kelletia kelletii	-	0.5	0.3	1.8	**0.62**	0.78
Sabellidae	0.3	1.3	0.8	-	**0.56**	0.55
Diodora spp.	0.5	0.3	0.3	1.0	**0.50**	0.35
Patiria miniata	0.8	0.3	-	1.0	**0.50**	0.46
Pagurus spp.	0.5	-	0.8	0.5	**0.44**	0.31
Anthopleura spp.	0.8	0.8	-	-	**0.38**	0.43
Crassadoma gigantea	0.5	0.3	-	0.8	**0.38**	0.32
Eudistylia polymorpha	0.3	0.3	0.5	0.5	**0.38**	0.14
Scyra acutifrons	0.3	-	-	1.3	**0.38**	0.60
Cnemidocarpa finmarkiensis	-	0.3	-	0.8	**0.25**	0.35
Halcampa decemtentaculata	-	-	1.0	-	**0.25**	0.50
Pododesmus cepio	-	0.5	-	0.5	**0.25**	0.29
Cirratulidae/Terebellidae	0.3	-	0.5	-	**0.19**	0.24
Cryptochiton stelleri	-	-	0.3	0.5	**0.19**	0.24
Megathura crenulata	0.5	-	0.3	-	**0.19**	0.24
Ophiopteris papillosa	0.3	0.3	-	0.3	**0.19**	0.12
Pachycerianthus fimbriatus	-	0.3	-	0.5	**0.19**	0.24
Pseudochama spp.	-	-	0.5	0.3	**0.19**	0.24
Tonicella lineata	-	0.8	-	-	**0.19**	0.38
Urticina spp.	0.3	-	0.3	0.3	**0.19**	0.12

(table continued)

Table E6 (continued). Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, South Diablo Cove Station SDC 3 -4m (10-15).

Survey / Survey Date / Taxon	188 11-Feb-20 Mean	189 18-Jun-20 Mean	190 11-Aug-20 Mean	191 21-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrates (continued)						
Haliotis spp.	-	0.3	0.3	-	**0.12**	0.14
Pandalus spp.	-	-	0.5	-	**0.12**	0.25
Pugettia spp.	-	-	0.5	-	**0.12**	0.25
Aphrodita spp.	-	-	-	0.3	**<0.1**	0.12
Eupentacta quinquesemita	0.3	-	-	-	**<0.1**	0.12
Hipponix spp.	-	-	-	0.3	**<0.1**	0.12
Loxorhynchus spp.	-	-	0.3	-	**<0.1**	0.12
Maxwellia gemma	-	-	0.3	-	**<0.1**	0.12
Mimulus foliatus	-	-	-	0.3	**<0.1**	0.12
Ophioplocus esmarki	-	-	-	0.3	**<0.1**	0.12
Paracyathus stearnsii	0.3	-	-	-	**<0.1**	0.12
Parastichopus spp.	-	-	-	0.3	**<0.1**	0.12
Placiphorella velata	-	-	-	0.3	**<0.1**	0.12
Pomaulax gibberosa	0.3	-	-	-	**<0.1**	0.12
Pomaulax undosa	-	-	0.3	-	**<0.1**	0.12
Pseudomelatoma torosa	0.3	-	-	-	**<0.1**	0.12
Styela spp.	-	-	-	0.3	**<0.1**	0.12
Terebratalia transversa	-	-	-	0.3	**<0.1**	0.12

Table E7. Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, South Control Station SC 1 -3m (19-10).

Survey / Survey Date / Taxon	188 05-Mar-20 Mean	189 25-Jun-20 Mean	190 30-Jul-20 Mean	191 21-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
Cystoseira osmundacea	12.0	12.0	20.3	19.0	**15.81**	4.43
Laminaria setchellii	4.8	2.8	1.5	1.8	**2.69**	1.48
Pterygophora californica	0.5	2.0	2.3	1.8	**1.62**	0.78
Invertebrates						
Chlorostoma brunnea	285.0	61.5	196.5	152.3	**173.81**	93.02
Pagurus spp.	134.5	11.5	20.0	71.8	**59.44**	56.68
Strongylocentrotus purpuratus	25.0	11.5	16.3	14.8	**16.88**	5.77
Acmaea mitra	10.5	18.8	12.8	9.0	**12.75**	4.29
Tonicella lineata	12.8	9.8	5.3	12.0	**9.94**	3.38
Patiria miniata	5.0	5.8	6.3	4.0	**5.25**	0.98
Calliostoma ligatum	6.8	1.5	1.5	6.0	**3.94**	2.83
Cryptochiton stelleri	3.3	2.5	2.3	3.5	**2.88**	0.60
Clavelina huntsmani	-	6.5	0.8	-	**1.81**	3.14
Serpulorbis squamigerus	1.0	3.0	0.8	1.3	**1.50**	1.02
Anthopleura elegantissima	2.0	1.8	1.3	0.8	**1.44**	0.55
Haliotis spp.	1.3	0.5	0.8	3.3	**1.44**	1.25
Leptasterias spp.	0.5	1.5	1.0	2.3	**1.31**	0.75
Pugettia spp.	1.3	0.3	0.5	1.8	**0.94**	0.69
Serpulidae	0.5	1.0	0.5	0.3	**0.56**	0.31
Conus californicus	-	1.5	0.3	0.3	**0.50**	0.68
Mopalia spp.	-	0.8	0.5	0.5	**0.44**	0.31
Chlorostoma montereyi	0.8	-	0.8	-	**0.38**	0.43
Diaulula sandiegensis	-	1.3	-	0.3	**0.38**	0.60
Diopatra ornata	1.0	0.3	-	0.3	**0.38**	0.43
Doriopsilla albopunctata	0.5	1.0	-	-	**0.38**	0.48
Diodora spp.	0.3	-	0.5	0.5	**0.31**	0.24
Mitra idae	-	0.3	0.8	-	**0.25**	0.35
Pisaster/Henricia spp. (juv.)	-	-	-	1.0	**0.25**	0.50
Styela spp.	0.8	0.3	-	-	**0.25**	0.35
Boltenia villosa	0.5	-	-	0.3	**0.19**	0.24
Doris spp.	-	-	0.8	-	**0.19**	0.38
Okenia rosacea	0.3	0.3	0.3	-	**0.19**	0.12
Cryptolithodes sitchensis	0.5	-	-	-	**0.12**	0.25
Henricia leviuscula	-	0.3	0.3	-	**0.12**	0.14
Scyra acutifrons	0.3	-	-	0.3	**0.12**	0.14
Urticina spp.	0.5	-	-	-	**0.12**	0.25
Anthopleura artemisia	-	-	0.3	-	**<0.1**	0.12
Cnemidocarpa finmarkiensis	0.3	-	-	-	**<0.1**	0.12
Cucumaria spp.	0.3	-	-	-	**<0.1**	0.12
Eudistylia polymorpha	-	-	-	0.3	**<0.1**	0.12
Mimulus foliatus	-	-	0.3	-	**<0.1**	0.12
Placiphorella velata	-	-	-	0.3	**<0.1**	0.12
Pododesmus cepio	-	-	-	0.3	**<0.1**	0.12
Pomaulax gibberosa	-	-	0.3	-	**<0.1**	0.12
Pseudomelatoma torosa	-	-	0.3	-	**<0.1**	0.12
Tethya californiana	-	-	-	0.3	**<0.1**	0.12
Triopha catalinae	-	-	-	0.3	**<0.1**	0.12

Table E8. Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, South Control Station SC 2 -6m (20-20).

Survey / Survey Date / Taxon	188 26-Feb-20 Mean	189 11-Jun-20 Mean	190 25-Aug-20 Mean	191 28-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
Pterygophora californica	0.3	-	-	-	**<0.1**	0.12
Invertebrates						
Serpulorbis squamigerus	311.3	302.5	211.3	226.3	**262.81**	51.37
Strongylocentrotus purpuratus	148.5	191.3	144.0	148.5	**158.06**	22.23
Acmaea mitra	111.8	58.5	85.5	83.3	**84.75**	21.76
Chlorostoma brunnea	64.5	99.8	46.5	43.5	**63.56**	25.85
Serpulidae	17.0	17.5	10.3	11.8	**14.12**	3.67
Tonicella lineata	14.3	7.5	13.5	16.5	**12.94**	3.84
Ophiothrix spiculata	8.0	1.3	10.3	13.3	**8.19**	5.10
Calliostoma ligatum	11.3	6.0	8.3	6.8	**8.06**	2.32
Patiria miniata	4.0	3.5	5.3	6.8	**4.88**	1.45
Anthopleura elegantissima	6.3	5.3	4.3	2.8	**4.62**	1.49
Pagurus spp.	4.3	4.3	2.8	5.8	**4.25**	1.22
Pododesmus cepio	3.0	1.8	3.3	3.0	**2.75**	0.68
Strongylocentrotus franciscanus	2.5	2.5	3.5	1.8	**2.56**	0.72
Chlorostoma montereyi	1.5	-	6.0	1.5	**2.25**	2.60
Cucumaria spp.	0.5	0.3	5.3	1.0	**1.75**	2.35
Eudistylia polymorpha	2.3	0.8	1.8	1.3	**1.50**	0.65
Placiphorella velata	0.5	1.5	1.0	1.8	**1.19**	0.55
Crassadoma gigantea	1.0	1.0	1.0	1.0	**1.00**	<0.1
Urticina spp.	0.3	0.8	1.0	1.0	**0.75**	0.35
Anthopleura artemisia	0.5	1.0	0.5	0.5	**0.62**	0.25
Cryptochiton stelleri	1.3	-	1.0	0.3	**0.62**	0.60
Diodora spp.	1.0	0.5	0.3	0.8	**0.62**	0.32
Doriopsilla albopunctata	0.8	0.8	1.0	-	**0.62**	0.43
Ceratostoma foliatum	0.5	0.8	0.5	0.5	**0.56**	0.12
Leptasterias spp.	0.3	0.5	1.0	0.5	**0.56**	0.31
Tethya californiana	0.5	0.5	0.5	0.5	**0.50**	<0.1
Mytilus spp.	0.5	0.5	0.3	0.5	**0.44**	0.12
Pisaster/Henricia spp. (juv.)	1.0	0.3	-	0.5	**0.44**	0.43
Mitra idae	0.5	0.8	0.3	-	**0.38**	0.32
Ophioplocus esmarki	0.5	-	-	1.0	**0.38**	0.48
Cnemidocarpa finmarkiensis	0.5	-	0.3	0.5	**0.31**	0.24
Kelletia kelletii	0.3	0.8	0.3	-	**0.31**	0.31
Boltenia villosa	0.3	-	0.5	-	**0.19**	0.24
Cirratulidae/Terebellidae	0.3	0.3	-	0.3	**0.19**	0.12
Conus californicus	-	-	0.5	0.3	**0.19**	0.24
Diopatra ornata	0.5	-	0.3	-	**0.19**	0.24
Henricia leviuscula	-	-	0.8	-	**0.19**	0.38
Ophiopteris papillosa	0.3	-	-	0.5	**0.19**	0.24
Pachycheles spp.	-	-	-	0.8	**0.19**	0.38
Pomaulax gibberosa	-	-	0.8	-	**0.19**	0.38
Balanus spp.	0.5	-	-	-	**0.12**	0.25
Cadlina spp.	-	-	-	0.5	**0.12**	0.25

(table continued)

Table E8 (continued). Subtidal algae and invertebrates (SAQ Method) 2020 survey means (abundance per 7 m^2), standard deviations and annual means, South Control Station SC 2 -6m (20-20).

Survey / Survey Date / Taxon	188 26-Feb-20 Mean	189 11-Jun-20 Mean	190 25-Aug-20 Mean	191 28-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrates (continued)						
Clavelina huntsmani	-	-	-	0.5	**0.12**	0.25
Parastichopus spp.	-	-	0.5	-	**0.12**	0.25
Pisaster ochraceus	-	0.5	-	-	**0.12**	0.25
Anthopleura spp.	-	0.3	-	-	**<0.1**	0.12
Halcampa decemtentaculata	-	-	-	0.3	**<0.1**	0.12
Megathura crenulata	0.3	-	-	-	**<0.1**	0.12
Mimulus foliatus	-	-	-	0.3	**<0.1**	0.12
Nereididae	-	-	-	0.3	**<0.1**	0.12
Paraxanthias taylori	-	-	0.3	-	**<0.1**	0.12
Pisaster giganteus	-	0.3	-	-	**<0.1**	0.12
Romaleon antennarius	-	-	-	0.3	**<0.1**	0.12
Sabellidae	-	-	-	0.3	**<0.1**	0.12
Spheciospongia confoederata	0.3	-	-	-	**<0.1**	0.12
Stenoplax spp.	-	0.3	-	-	**<0.1**	0.12
Styela spp.	-	-	-	0.3	**<0.1**	0.12

Diablo Canyon Power Plant

Appendix F

Subtidal Algae (SLC Method)

Table F1. Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, Field's Cove Station FC 1 -3m (22-10).

Survey / Survey Date / Taxon	188 21-Feb-20 Mean	189 09-Jul-20 Mean	190 28-Jul-20 Mean	191 08-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
non-coralline crust	31.0	52.0	54.0	55.0	**48.00**	11.40
coralline crust	46.0	26.0	22.0	28.0	**30.50**	10.63
Chrysophyta	-	<0.1	-	3.0	**0.75**	1.50
Calliarthron/Bossiella spp.-complex	0.5	<0.1	1.0	0.5	**0.51**	0.41
Chlorophyta (filamentous)	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Chondracanthus corymbiferus	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
filamentous red algae complex	-	<0.1	<0.1	-	**<0.01**	<0.01
Halicystis ovalis (Derbesia marina)	-	-	<0.1	<0.1	**<0.01**	<0.01
Opuntiella californica	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Pterosiphonia dendroidea	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Callophyllis flabellulata	-	-	<0.1	-	**<0.01**	<0.01
Callophyllis spp.	-	-	-	<0.1	**<0.01**	<0.01
Rhodymenia spp.	<0.1	-	<0.1	-	**<0.01**	<0.01
Bryopsis spp.	-	-	-	<0.1	**<0.01**	<0.01
Codium fragile subsp. *californicum*	-	-	<0.1	-	**<0.01**	<0.01
Cryptopleura violacea	<0.1	-	-	-	**<0.01**	<0.01
Halymenia/Schizymenia spp.-complex	-	-	<0.1	-	**<0.01**	<0.01
Prionitis spp.	-	-	-	<0.1	**<0.01**	<0.01
Rhodophyta (juv. blades)	<0.1	-	-	-	**<0.01**	<0.01
Invertebrates						
Anthopleura elegantissima	0.5	-	-	-	**0.12**	0.25
Tetraclita rubescens	-	-	0.5	-	**0.12**	0.25
Substrates						
colonized rock	75.0	71.5	70.0	75.0	**72.88**	2.53
rock	14.5	16.0	18.0	9.5	**14.50**	3.63
colonized cobble	3.0	6.5	7.5	9.0	**6.50**	2.55
cobble	6.5	5.0	4.0	6.0	**5.38**	1.11
sand (shell gravel)	0.5	1.0	0.5	0.5	**0.62**	0.25

Table F2. Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, North Diablo Cove Station NDC 2 -3m (8-10).

Survey / Survey Date / Taxon	188 12-Mar-20 Mean	189 20-Apr-20 Mean	190 21-Jul-20 Mean	191 20-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
coralline crust	44.5	50.5	46.5	67.0	**52.12**	10.23
Acrosorium ciliolatum	23.5	15.0	7.5	33.0	**19.75**	10.99
Sargassum muticum	20.0	11.5	3.5	2.0	**9.25**	8.29
Chlorophyta (filamentous)	2.5	6.5	10.0	10.0	**7.25**	3.57
Calliarthron/Bossiella spp.-complex	3.5	5.5	10.0	4.0	**5.75**	2.96
Chrysophyta	8.0	6.5	2.0	0.5	**4.25**	3.57
filamentous red algae complex	1.0	4.5	9.0	0.5	**3.75**	3.92
Colpomenia spp.	4.5	3.0	6.0	<0.1	**3.38**	2.56
Cystoseira osmundacea	1.0	2.0	2.0	1.5	**1.63**	0.48
Pterosiphonia dendroidea	2.5	3.0	-	-	**1.38**	1.60
Cryptopleura violacea	<0.1	0.5	4.5	-	**1.25**	2.18
Ectocarpales	1.5	1.5	1.0	0.5	**1.13**	0.48
Codium fragile subsp. *californicum*	<0.1	1.0	3.0	<0.1	**1.01**	1.41
Farlowia/Pikea spp.-complex	1.0	1.5	0.5	1.0	**1.00**	0.41
non-coralline crust	2.0	2.0	<0.1	<0.1	**1.00**	1.15
Dictyota binghamiae	1.0	-	2.0	0.5	**0.88**	0.85
Callithamnion spp./*Pleonosporium* spp.	2.5	<0.1	-	<0.1	**0.63**	1.25
Ulva spp.	0.5	0.5	1.0	<0.1	**0.50**	0.41
Corallina chilensis	0.5	0.5	0.5	-	**0.38**	0.25
Cladophora spp.	0.5	-	-	-	**0.13**	0.25
Gelidium robustum	<0.1	<0.1	0.5	<0.1	**0.13**	0.25
Rhodophyta (juv. blades)	<0.1	0.5	-	-	**0.13**	0.25
Halicystis ovalis (Derbesia marina)	0.5	<0.1	-	-	**0.13**	0.25
Laminariales	<0.1	-	-	-	**<0.01**	<0.01
Macrocystis pyrifera	-	-	<0.1	<0.1	**<0.01**	<0.01
Bryopsis spp.	<0.1	-	-	-	**<0.01**	<0.01
Callophyllis spp.	<0.1	-	-	-	**<0.01**	<0.01
Chondracanthus corymbiferus	-	<0.1	-	-	**<0.01**	<0.01
Prionitis spp.	-	-	<0.1	-	**<0.01**	<0.01
Rhodymenia spp.	-	-	<0.1	-	**<0.01**	<0.01
Invertebrates						
Phragmatopoma californica	-	-	-	1.0	**0.25**	0.50
Substrates						
colonized rock	59.5	61.5	74.0	67.0	**65.50**	6.49
colonized cobble	35.5	32.5	10.5	20.5	**24.75**	11.50
sand (shell gravel)	3.5	5.0	6.5	1.0	**4.00**	2.35
cobble	1.5	1.0	7.5	5.5	**3.88**	3.15
rock	-	-	1.5	6.0	**1.88**	2.84

Table F3. Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, North Diablo Cove Station NDC 3 -3m (9-10).

Survey / Survey Date / Taxon	188 13-Mar-20 Mean	189 05-May-20 Mean	190 22-Jul-20 Mean	191 30-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
coralline crust	46.5	43.0	41.0	85.0	**53.88**	20.87
Acrosorium ciliolatum	41.0	7.5	17.0	45.5	**27.75**	18.41
Sargassum muticum	20.0	20.5	6.5	19.5	**16.63**	6.76
Chrysophyta	4.0	33.5	3.5	-	**10.25**	15.60
Cystoseira osmundacea	5.5	10.0	7.0	3.0	**6.38**	2.93
Calliarthron/Bossiella spp.-complex	5.0	2.5	9.5	6.0	**5.75**	2.90
filamentous red algae complex	4.0	<0.1	17.0	1.5	**5.63**	7.76
Colpomenia spp.	0.5	4.5	16.0	<0.1	**5.25**	7.44
Chlorophyta (filamentous)	2.0	<0.1	2.5	<0.1	**1.13**	1.31
Callithamnion spp./*Pleonosporium* spp.	4.5	<0.1	-	-	**1.13**	2.25
Farlowia/Pikea spp.-complex	0.5	1.0	<0.1	2.5	**1.01**	1.08
Ulva spp.	0.5	1.5	1.5	<0.1	**0.88**	0.75
Pterosiphonia dendroidea	1.0	1.0	-	1.0	**0.75**	0.50
non-coralline crust	<0.1	0.5	<0.1	1.0	**0.38**	0.48
Prionitis spp.	0.5	<0.1	1.0	<0.1	**0.38**	0.48
Dictyota binghamiae	<0.1	-	1.5	<0.1	**0.38**	0.75
Ectocarpales	1.0	0.5	<0.1	<0.1	**0.38**	0.48
Corallina chilensis	<0.1	0.5	0.5	-	**0.25**	0.29
Gelidium robustum	0.5	<0.1	<0.1	<0.1	**0.13**	0.25
Macrocystis pyrifera	-	0.5	<0.1	<0.1	**0.13**	0.25
Neoptilota spp.	0.5	-	-	-	**0.12**	0.25
Codium fragile subsp. *californicum*	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Rhodymenia spp.	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Cryptopleura violacea	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Halicystis ovalis (Derbesia marina)	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Bryopsis spp.	<0.1	-	-	-	**<0.01**	<0.01
Callophyllis spp.	<0.1	<0.1	-	-	**<0.01**	<0.01
Rhodophyta (juv. blades)	-	<0.1	-	-	**<0.01**	<0.01
Laminariales	<0.1	-	-	-	**<0.01**	<0.01
Antithamnion/Pterothamnion spp.-complex	-	-	<0.1	-	**<0.01**	<0.01
Callophyllis flabellulata	-	<0.1	-	-	**<0.01**	<0.01
Chondracanthus corymbiferus	-	<0.1	-	-	**<0.01**	<0.01
Cladophora spp.	<0.1	-	-	-	**<0.01**	<0.01
Sarcodiotheca gaudichaudii	<0.1	-	-	-	**<0.01**	<0.01
Invertebrates						
Anthopleura elegantissima	-	0.5	-	-	**0.12**	0.25
Substrates						
colonized rock	82.5	75.5	82.5	87.5	**82.00**	4.93
colonized cobble	16.0	20.0	6.0	6.5	**12.12**	6.98
sand (shell gravel)	1.0	4.0	5.5	-	**2.62**	2.56
rock	0.5	-	3.5	4.5	**2.12**	2.21
cobble	-	0.5	2.5	1.5	**1.12**	1.11

Table F4. Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, North Diablo Cove Station NDC 4 -4m (9-15).

Survey Survey Date Taxon	188 04-Mar-20 Mean	189 29-Apr-20 Mean	190 23-Jul-20 Mean	191 12-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
coralline crust	75.0	67.0	59.0	69.5	**67.62**	6.65
Chrysophyta	-	20.5	3.5	-	**6.00**	9.81
non-coralline crust	4.5	3.0	2.0	7.0	**4.13**	2.18
Chlorophyta (filamentous)	2.5	4.0	9.0	0.5	**4.00**	3.63
Calliarthron/Bossiella spp.-complex	4.0	5.5	3.0	3.0	**3.88**	1.18
filamentous red algae complex	3.5	-	<0.1	1.0	**1.13**	1.65
Pterosiphonia dendroidea	4.5	-	-	<0.1	**1.13**	2.25
Ectocarpales	<0.1	2.0	<0.1	<0.1	**0.50**	1.00
Callithamnion spp./*Pleonosporium* spp.	-	1.0	-	-	**0.25**	0.50
Ulva spp.	-	1.0	-	-	**0.25**	0.50
Acrosorium ciliolatum	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Rhodymenia spp.	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Colpomenia spp.	<0.1	<0.1	-	-	**<0.01**	<0.01
Codium fragile subsp. *californicum*	<0.1	<0.1	-	-	**<0.01**	<0.01
Dictyota binghamiae	<0.1	-	-	-	**<0.01**	<0.01
Laminariales	-	<0.1	-	-	**<0.01**	<0.01
Bryopsis spp.	<0.1	-	-	-	**<0.01**	<0.01
Callophyllis flabellulata	-	-	-	<0.1	**<0.01**	<0.01
Cryptopleura violacea	<0.1	-	-	-	**<0.01**	<0.01
Halicystis ovalis (Derbesia marina)	-	-	-	<0.1	**<0.01**	<0.01
Rhodophyta (juv. blades)	<0.1	-	-	-	**<0.01**	<0.01
Invertebrates						
Phragmatopoma californica	1.0	0.5	-	2.5	**1.00**	1.08
Anthopleura elegantissima	1.0	1.0	1.0	-	**0.75**	0.50
Serpulidae	-	1.0	-	-	**0.25**	0.50
Serpulorbis squamigerus	0.5	-	-	-	**0.12**	0.25
Substrates						
colonized rock	81.0	80.5	67.5	77.5	**76.62**	6.28
rock	9.0	2.5	12.0	15.5	**9.75**	5.52
colonized cobble	8.0	12.5	7.5	4.5	**8.12**	3.30
sand (shell gravel)	0.5	4.0	11.5	0.5	**4.12**	5.19
cobble	1.5	0.5	1.5	1.5	**1.25**	0.50

Table F5. Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, South Diablo Cove Station SDC 2 -3m (12-10).

Survey Survey Date Taxon	188 07-Feb-20 Mean	189 29-May-20 Mean	190 12-Aug-20 Mean	191 13-Nov-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
coralline crust	48.0	49.5	55.0	68.5	**55.25**	9.33
Chrysophyta	4.0	8.0	8.5	4.0	**6.13**	2.46
Calliarthron/Bossiella spp.-complex	3.0	4.0	4.0	3.0	**3.50**	0.58
non-coralline crust	4.5	1.5	4.0	2.0	**3.00**	1.47
filamentous red algae complex	3.5	2.5	1.0	1.5	**2.13**	1.11
Pterosiphonia dendroidea	4.0	0.5	-	<0.1	**1.13**	1.93
Chlorophyta (filamentous)	<0.1	2.5	0.5	-	**0.75**	1.19
Acrosorium ciliolatum	<0.1	0.5	<0.1	<0.1	**0.13**	0.25
Ectocarpales	<0.1	0.5	<0.1	<0.1	**0.13**	0.25
Ulva spp.	-	0.5	<0.1	<0.1	**0.13**	0.25
Antithamnion/Pterothamnion spp.	-	0.5	-	-	**0.13**	0.25
Callithamnion spp./*Pleonosporium* spp.	-	-	-	0.5	**0.13**	0.25
Dictyota binghamiae	-	-	0.5	-	**0.12**	0.25
Rhodymenia spp.	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Colpomenia spp.	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Prionitis spp.	-	<0.1	-	<0.1	**<0.01**	<0.01
Rhodophyta (juv. blades)	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Sargassum muticum	-	-	<0.1	-	**<0.01**	<0.01
Bryopsis spp.	<0.1	-	-	<0.1	**<0.01**	<0.01
Codium fragile subsp. *californicum*	<0.1	<0.1	-	-	**<0.01**	<0.01
Corallina chilensis	<0.1	-	-	-	**<0.01**	<0.01
Cryptopleura violacea	-	-	-	<0.1	**<0.01**	<0.01
Cystoseira osmundacea	<0.1	-	-	-	**<0.01**	<0.01
Farlowia/Pikea spp.-complex	-	<0.1	-	-	**<0.01**	<0.01
Halicystis ovalis (Derbesia marina)	-	-	-	<0.1	**<0.01**	<0.01
Nienburgia andersoniana	-	-	<0.1	-	**<0.01**	<0.01
Invertebrates						
Phragmatopoma californica	5.5	3.5	0.5	1.5	**2.75**	2.22
Serpulorbis squamigerus	0.5	0.5	-	1.0	**0.50**	0.41
Serpulidae	-	0.5	-	-	**0.12**	0.25
Substrates						
colonized rock	59.0	57.0	55.5	56.5	**57.00**	1.47
sand (shell gravel)	4.0	15.0	27.5	10.5	**14.25**	9.92
colonized cobble	5.5	13.5	10.5	22.5	**13.00**	7.14
rock	18.5	5.5	5.0	5.5	**8.62**	6.59

Table F6. Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, South Diablo Cove Station SDC 3 -4m (10-15).

Survey / Survey Date / Taxon	188 11-Feb-20 Mean	189 18-Jun-20 Mean	190 11-Aug-20 Mean	191 21-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
coralline crust	52.5	64.0	51.5	66.0	**58.50**	7.56
Chrysophyta	-	7.5	25.5	7.5	**10.12**	10.84
Calliarthron/Bossiella spp.-complex	13.5	9.5	8.0	6.0	**9.25**	3.18
filamentous red algae complex	8.5	17.0	9.0	2.0	**9.13**	6.14
non-coralline crust	4.5	5.5	4.0	9.5	**5.88**	2.50
Rhodymenia spp.	-	2.0	3.0	1.0	**1.50**	1.29
Cystoseira osmundacea	<0.1	0.5	0.5	1.0	**0.51**	0.41
Pterosiphonia dendroidea	-	-	-	1.5	**0.38**	0.75
Colpomenia spp.	<0.1	0.5	0.5	-	**0.26**	0.29
Callophyllis flabellulata	-	0.5	0.5	<0.1	**0.25**	0.29
Macrocystis pyrifera	<0.1	<0.1	<0.1	0.5	**0.13**	0.25
Laminariales	<0.1	0.5	<0.1	-	**0.13**	0.25
Callophyllis spp.	-	0.5	<0.1	-	**0.13**	0.25
Prionitis spp.	0.5	<0.1	-	-	**0.13**	0.25
Pterygophora californica	-	-	0.5	-	**0.13**	0.25
Chondracanthus corymbiferus	-	-	0.5	-	**0.13**	0.25
Corallina chilensis	0.5	-	-	-	**0.12**	0.25
Nienburgia andersoniana	-	-	0.5	-	**0.12**	0.25
Farlowia/Pikea spp.-complex	-	<0.1	<0.1	<0.1	**0.01**	0.01
Acrosorium ciliolatum	-	<0.1	-	<0.1	**<0.01**	0.01
Ectocarpales	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Fauchea laciniata	-	<0.1	<0.1	-	**<0.01**	<0.01
Sargassum muticum	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Rhodophyta (juv. blades)	<0.1	-	<0.1	-	**<0.01**	<0.01
Dictyota binghamiae	-	<0.1	<0.1	-	**<0.01**	<0.01
Ulva spp.	-	<0.1	-	-	**<0.01**	<0.01
Ahnfeltiopsis linearis	-	-	<0.1	-	**<0.01**	<0.01
Bryopsis spp.	-	-	<0.1	<0.1	**<0.01**	<0.01
Chlorophyta (filamentous)	-	<0.1	-	<0.1	**<0.01**	<0.01
Cryptopleura ruprechtiana	-	<0.1	<0.1	-	**<0.01**	<0.01
Cryptopleura violacea	-	<0.1	-	-	**<0.01**	<0.01
Laminaria setchellii	-	-	<0.1	-	**<0.01**	<0.01
Scinaia confusa	-	-	<0.1	-	**<0.01**	<0.01
Desmarestia tabacoides	-	<0.1	-	-	**<0.01**	<0.01
Gelidium robustum	-	<0.1	-	-	**<0.01**	<0.01
Halicystis ovalis (Derbesia marina)	-	-	-	<0.1	**<0.01**	<0.01
Halymenia/Schizymenia spp.-complex	-	<0.1	-	-	**<0.01**	<0.01
Opuntiella californica	-	-	-	<0.1	**<0.01**	<0.01
Rhodoptilum plumosum	-	-	<0.1	-	**<0.01**	<0.01

(table continued)

Table F6 (continued). Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, South Diablo Cove Station SDC 3 -4m (10-15).

Survey / Survey Date / Taxon	188 11-Feb-20 Mean	189 18-Jun-20 Mean	190 11-Aug-20 Mean	191 21-Dec-20 Mean	Annual Mean	Annual Std. Dev.
Invertebrates						
Anthopleura elegantissima	-	1.5	-	2.0	**0.88**	1.03
Serpulorbis squamigerus	-	1.5	-	0.5	**0.50**	0.71
Phragmatopoma californica	-	-	-	1.0	**0.25**	0.50
Balanophyllia elegans	-	0.5	-	-	**0.12**	0.25
Substrates						
colonized rock	69.5	80.0	74.5	79.0	**75.75**	4.80
cobble	13.5	9.0	3.5	5.0	**7.75**	4.48
sand (shell gravel)	10.5	4.0	13.5	2.0	**7.50**	5.40
colonized cobble	4.5	4.5	8.5	3.5	**5.25**	2.22
rock	2.0	2.5	-	10.5	**3.75**	4.63

Table F7. Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, South Control Station SC 1 -3m (19-10).

Survey / Survey Date / Taxon	188 05-Mar-20 Mean	189 25-Jun-20 Mean	190 30-Jul-20 Mean	191 21-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
coralline crust	34.5	38.5	54.5	39.0	**41.62**	8.82
Rhodymenia spp.	25.5	30.0	31.0	23.5	**27.50**	3.58
Calliarthron/Bossiella spp.-complex	20.5	22.5	32.5	32.0	**26.88**	6.26
Cystoseira osmundacea	18.0	14.0	4.0	10.0	**11.50**	5.97
non-coralline crust	7.5	8.5	7.0	10.0	**8.25**	1.32
Chondracanthus corymbiferus	5.5	5.5	8.5	8.5	**7.00**	1.73
Farlowia/Pikea spp.-complex	1.5	2.5	2.0	2.0	**2.01**	0.41
Cryptopleura ruprechtiana	2.0	1.0	1.0	2.5	**1.63**	0.75
Callophyllis spp.	0.5	0.5	2.5	<0.1	**0.88**	1.11
Cryptopleura violacea	1.0	1.0	0.5	1.0	**0.88**	0.25
Pterosiphonia dendroidea	0.5	0.5	1.5	1.0	**0.88**	0.48
Prionitis spp.	1.0	<0.1	0.5	0.5	**0.51**	0.41
Plocamium pacificum	0.5	0.5	0.5	0.5	**0.51**	<0.01
Gelidium robustum	<0.1	<0.1	1.0	0.5	**0.38**	0.48
Fredericqia chiton	0.5	<0.1	<0.1	1.0	**0.38**	0.48
Ahnfeltiopsis linearis	<0.1	<0.1	0.5	0.5	**0.26**	0.29
Microcladia coulteri	-	<0.1	<0.1	1.0	**0.25**	0.50
Laminaria setchellii	<0.1	0.5	<0.1	<0.1	**0.13**	0.25
Pterygophora californica	<0.1	0.5	<0.1	<0.1	**0.13**	0.25
Prionitis australis	0.5	<0.1	-	<0.1	**0.13**	0.25
Callophyllis flabellulata	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Clathromorphum parcum	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Ulva spp.	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Phyllospadix spp.	<0.1	-	<0.1	<0.1	**<0.01**	<0.01
Dictyoneurum californicum	-	<0.1	<0.1	<0.1	**<0.01**	<0.01
Fauchea laciniata	<0.1	-	-	<0.1	**<0.01**	<0.01
Osmundea spp.	-	-	<0.1	<0.1	**<0.01**	<0.01
filamentous red algae complex	-	-	<0.1	-	**<0.01**	<0.01
Colpomenia spp.	-	-	-	<0.1	**<0.01**	<0.01
Corallina chilensis	-	-	<0.1	-	**<0.01**	<0.01
Dictyota binghamiae	-	-	-	<0.1	**<0.01**	<0.01
Gastroclonium subarticulatum	-	-	-	<0.1	**<0.01**	<0.01
Halicystis ovalis (Derbesia marina)	-	-	-	<0.1	**<0.01**	<0.01
Laminariales	-	-	-	<0.1	**<0.01**	<0.01
Invertebrates						
Phragmatopoma californica	8.0	6.0	15.5	6.5	**9.00**	4.42
Substrates						
colonized rock	82.5	86.0	92.5	86.0	**86.75**	4.17
colonized cobble	10.5	10.0	1.5	13.0	**8.75**	5.01
sand (shell gravel)	5.0	2.0	3.0	1.0	**2.75**	1.71
cobble	2.0	1.5	1.5	-	**1.25**	0.87
rock	-	0.5	1.5	-	**0.50**	0.71

Table F8. Subtidal algae (SLC Method) 2020 survey means (percent cover), standard deviations and annual means, South Control Station SC 2 -6m (20-20).

Survey / Survey Date / Taxon	188 26-Feb-20 Mean	189 11-Jun-20 Mean	190 25-Aug-20 Mean	191 28-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Algae						
coralline crust	66.0	54.0	49.5	57.5	**56.75**	6.98
non-coralline crust	24.5	27.5	25.5	35.0	**28.12**	4.75
Calliarthron/Bossiella spp.-complex	4.0	0.5	2.5	1.5	**2.13**	1.49
Weeksia spp.	1.0	1.0	4.5	1.0	**1.88**	1.75
Opuntiella californica	1.0	0.5	<0.1	1.0	**0.63**	0.48
Rhodymenia spp.	<0.1	<0.1	0.5	<0.1	**0.13**	0.25
Callophyllis flabellulata	<0.1	0.5	<0.1	<0.1	**0.13**	0.25
Fauchea laciniata	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Halicystis ovalis (Derbesia marina)	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Cryptopleura violacea	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Chondracanthus corymbiferus	<0.1	<0.1	-	<0.1	**<0.01**	<0.01
Pterosiphonia dendroidea	<0.1	<0.1	<0.1	<0.1	**<0.01**	<0.01
Chlorophyta (filamentous)	<0.1	<0.1	-	-	**<0.01**	<0.01
Membranoptera/Branchioglossum spp.	<0.1	-	-	<0.1	**<0.01**	<0.01
Callophyllis spp.	<0.1	<0.1	-	-	**<0.01**	<0.01
Dictyota binghamiae	<0.1	<0.1	-	-	**<0.01**	<0.01
Laminaria setchellii	<0.1	-	-	-	**<0.01**	<0.01
Laminariales	-	<0.1	-	-	**<0.01**	<0.01
Pugetia firma	<0.1	-	-	-	**<0.01**	<0.01
Ulva spp.	-	<0.1	<0.1	-	**<0.01**	<0.01
Cryptopleura ruprechtiana	<0.1	-	-	-	**<0.01**	<0.01
filamentous red algae complex	<0.1	-	-	-	**<0.01**	<0.01
Pterygophora californica	<0.1	-	-	-	**<0.01**	<0.01
Invertebrates						
Serpulorbis squamigerus	5.5	5.0	4.5	3.5	**4.62**	0.85
Tetraclita rubescens	-	2.0	-	-	**0.50**	1.00
Phragmatopoma californica	-	1.0	-	-	**0.25**	0.50
Serpulidae	-	-	-	1.0	**0.25**	0.50
Anthopleura elegantissima	-	-	-	0.5	**0.12**	0.25
tunicates, compound/social	0.5	-	-	-	**0.12**	0.25
Substrates						
colonized rock	84.0	85.5	79.0	82.0	**82.62**	2.81
colonized cobble	13.0	2.5	3.5	14.5	**8.38**	6.25
rock	3.0	10.5	16.5	2.0	**8.00**	6.82
sand (shell gravel)	-	0.5	1.0	1.5	**0.75**	0.65
cobble	-	1.0	-	-	**0.25**	0.50

Diablo Canyon Power Plant

Appendix G

Subtidal Invertebrates (SFQ Method)

Table G1. Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, Field's Cove Station FC 1 -3m (22-10).

Survey / Survey Date / Taxon	188 21-Feb-20 Mean	189 09-Jul-20 Mean	190 28-Jul-20 Mean	191 08-Oct-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts						
Strongylocentrotus purpuratus	11.8	14.8	15.5	9.0	**12.75**	2.98
Acmaea mitra	6.3	5.5	3.8	6.3	**5.44**	1.18
Balanus/Tetraclita spp.	8.0	4.0	3.8	2.0	**4.44**	2.54
Lottiidae	3.3	4.0	2.8	4.8	**3.69**	0.88
Lottia ochracea	5.0	2.3	2.5	4.3	**3.50**	1.34
Sabellidae	-	8.8	1.3	-	**2.50**	4.21
Fissurella volcano	3.8	2.8	2.0	1.0	**2.38**	1.16
Pelecypoda boring	-	7.0	1.5	0.8	**2.31**	3.18
Chlorostoma brunnea	-	-	0.3	6.5	**1.69**	3.21
Serpulidae	1.3	0.8	1.8	1.8	**1.38**	0.48
Phragmatopoma californica	3.5	1.0	-	0.3	**1.19**	1.60
Crepidula spp.	-	-	1.5	1.0	**0.62**	0.75
Homolopoma luridum/Lirularia succincta	1.8	0.3	0.3	0.3	**0.62**	0.75
Serpulorbis squamigerus	0.8	0.3	0.5	0.8	**0.56**	0.24
Diodora spp.	0.3	0.5	0.5	0.8	**0.50**	0.20
Pagurus spp.	0.8	-	1.3	-	**0.50**	0.61
Lissothuria nutriens	0.5	0.3	0.5	0.3	**0.38**	0.14
Aptyxis luteopictus	0.3	1.0	-	-	**0.31**	0.47
Tonicella lineata	0.5	0.3	0.3	0.3	**0.31**	0.12
Cirratulidae/Terebellidae	0.5	-	0.5	-	**0.25**	0.29
Ischnochitonidae	0.5	0.3	0.3	-	**0.25**	0.20
Leptasterias spp.	-	0.3	0.3	0.5	**0.25**	0.20
Mitra idae	-	-	0.3	0.5	**0.19**	0.24
Octopus spp.	0.5	-	0.3	-	**0.19**	0.24
Patiria miniata	-	0.3	0.3	0.3	**0.19**	0.12
Haliotis spp.	-	0.5	-	-	**0.12**	0.25
Polychaeta	-	-	0.5	-	**0.12**	0.25
Pseudochama spp.	-	0.3	-	0.3	**0.12**	0.14
Amphissa spp.	0.3	-	-	-	**0.06**	0.12
Anthopleura elegantissima	0.3	-	-	-	**0.06**	0.12
Cucumaria spp.	0.3	-	-	-	**0.06**	0.12
Dendropoma spp.	0.3	-	-	-	**0.06**	0.12
Majidae	-	-	-	0.3	**0.06**	0.12
Ocinebrina spp.	0.3	-	-	-	**0.06**	0.12
Ophiothrix spiculata	-	-	0.3	-	**0.06**	0.12
Pododesmus cepio	-	0.3	-	-	**0.06**	0.12
Pyura haustor	-	-	-	0.3	**0.06**	0.12
Williamia peltoides	0.3	-	-	-	**0.06**	0.12
tunicates, compound/social	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Hydroidolina	<0.1	<0.1	<0.1	-	**0.01**	0.01
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Spirorbidae	<0.1	<0.1	-	-	**0.01**	0.01
Dodecaceria fewkesi	-	<0.1	-	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	<0.1	-	-	<0.1	**<0.01**	<0.01

Table G2. Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, North Diablo Cove Station NDC 2 -3m (8-10).

Survey / Survey Date / Taxon	188 12-Mar-20 Mean	189 20-Apr-20 Mean	190 21-Jul-20 Mean	191 20-Oct-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts						
Strongylocentrotus purpuratus	15.8	19.5	15.0	23.5	**18.44**	3.91
Fissurella volcano	4.5	8.8	6.0	7.8	**6.75**	1.88
Ophiactis simplex	6.5	6.3	4.8	3.8	**5.31**	1.30
Phragmatopoma californica	4.3	4.3	0.3	5.3	**3.50**	2.22
Pelecypoda boring	1.5	2.3	3.3	1.8	**2.19**	0.77
Acmaea mitra	3.3	2.5	1.5	1.3	**2.12**	0.92
Epiactis prolifera	-	0.8	2.8	3.3	**1.69**	1.56
Anthozoa	0.5	2.0	3.5	0.3	**1.56**	1.51
Serpulidae	1.8	1.0	1.8	0.5	**1.25**	0.61
Lottiidae	0.8	0.8	1.8	1.5	**1.19**	0.52
Balanus/Tetraclita spp.	3.0	1.5	-	-	**1.12**	1.44
Barleeia spp.	-	-	-	3.8	**0.94**	1.88
Ophiothrix spiculata	0.3	1.0	0.3	1.0	**0.62**	0.43
Sipuncula	-	1.3	0.3	0.8	**0.56**	0.55
Sabellidae	0.5	0.5	0.5	0.3	**0.44**	0.12
Chaetopteridae	-	-	0.3	1.0	**0.31**	0.47
Lottia ochracea	0.3	0.3	-	0.5	**0.25**	0.20
Pseudochama spp.	0.3	-	0.3	0.5	**0.25**	0.20
Alia spp.	-	-	0.8	-	**0.19**	0.38
Anthopleura elegantissima	-	0.3	0.3	0.3	**0.19**	0.12
Cucumaria spp.	0.8	-	-	-	**0.19**	0.38
Pista spp.	0.5	-	-	0.3	**0.19**	0.24
Ancula pacifica	-	-	0.5	-	**0.12**	0.25
Pododesmus cepio	0.3	-	0.3	-	**0.12**	0.14
Williamia peltoides	-	-	0.5	-	**0.12**	0.25
Amphissa spp.	-	-	0.3	-	**0.06**	0.12
Chama spp.	-	0.3	-	-	**0.06**	0.12
Fissurellidea bimaculata	-	-	0.3	-	**0.06**	0.12
Heptacarpus spp.	-	-	0.3	-	**0.06**	0.12
Lirobittium spp.	0.3	-	-	-	**0.06**	0.12
Lissothuria nutriens	-	0.3	-	-	**0.06**	0.12
Lophopanopeus spp.	-	-	0.3	-	**0.06**	0.12
Nemertea	-	-	0.3	-	**0.06**	0.12
Pandalus spp.	-	-	-	0.3	**0.06**	0.12
Pteropurpura festiva	-	-	0.3	-	**0.06**	0.12
Scyra acutifrons	-	-	-	0.3	**0.06**	0.12
Clathrina spp.	<0.1	-	-	-	**0.02**	0.03
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.01**	0.01
Spirorbidae	-	<0.1	<0.1	<0.1	**0.01**	0.01
Bryozoa (encrusting)	-	<0.1	<0.1	-	**<0.01**	0.01
Dodecaceria fewkesi	-	-	-	<0.1	**<0.01**	0.01
tunicates, compound/social	-	<0.1	<0.1	-	**<0.01**	<0.01
Hydroidolina	-	<0.1	-	-	**<0.01**	<0.01

Table G3. Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, North Diablo Cove Station NDC 3 -3m (9-10).

Survey / Survey Date / Taxon	188 13-Mar-20 Mean	189 05-May-20 Mean	190 22-Jul-20 Mean	191 30-Nov-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts						
Barleeia spp.	17.0	-	-	50.0	**16.75**	23.57
Phragmatopoma californica	2.5	11.5	3.8	7.5	**6.31**	4.06
Ophiactis simplex	11.3	2.3	1.8	6.3	**5.38**	4.40
Strongylocentrotus purpuratus	5.8	3.8	3.8	3.3	**4.12**	1.11
Anthozoa	-	3.3	2.3	1.3	**1.69**	1.39
Pelecypoda boring	1.8	0.8	1.0	3.3	**1.69**	1.12
Fissurella volcano	2.0	1.5	1.8	1.3	**1.62**	0.32
Dendropoma spp.	-	-	-	6.3	**1.56**	3.12
Epiactis prolifera	2.5	0.8	1.3	0.5	**1.25**	0.89
Acmaea mitra	1.8	1.0	0.5	0.5	**0.94**	0.59
Lottiidae	0.8	-	0.5	2.0	**0.81**	0.85
Anthopleura elegantissima	-	0.5	0.5	2.0	**0.75**	0.87
Pista spp.	0.3	2.3	0.5	-	**0.75**	1.02
Serpulidae	0.5	0.8	0.8	1.0	**0.75**	0.20
Sabellidae	-	1.0	1.3	-	**0.56**	0.66
Ophiothrix spiculata	-	0.3	-	1.5	**0.44**	0.72
Chaetopteridae	-	-	1.0	0.3	**0.31**	0.47
Sipuncula	-	0.5	0.3	0.5	**0.31**	0.24
Alia spp.	-	-	-	1.0	**0.25**	0.50
Mitra idae	0.5	0.3	0.3	-	**0.25**	0.20
Cucumaria spp.	-	0.3	-	0.5	**0.19**	0.24
Ischnochitonidae	-	0.3	0.3	0.3	**0.19**	0.12
Lottia ochracea	0.5	-	0.3	-	**0.19**	0.24
Pteropurpura festiva	-	0.8	-	-	**0.19**	0.38
Pugettia spp.	0.5	-	-	0.3	**0.19**	0.24
Lissothuria nutriens	-	-	-	0.5	**0.12**	0.25
Nereididae	0.5	-	-	-	**0.12**	0.25
Williamia peltoides	0.3	0.3	-	-	**0.12**	0.14
Balanus/Tetraclita spp.	-	0.3	-	-	**0.06**	0.12
Diopatra ornata	0.3	-	-	-	**0.06**	0.12
Fissurellidea bimaculata	-	0.3	-	-	**0.06**	0.12
Hermissenda crassicornis	-	-	0.3	-	**0.06**	0.12
Hipponix spp.	0.3	-	-	-	**0.06**	0.12
Lacuna spp.	-	-	-	0.3	**0.06**	0.12
Laila cockerelli	-	-	-	0.3	**0.06**	0.12
Nemertea	-	-	-	0.3	**0.06**	0.12
Pododesmus cepio	0.3	-	-	-	**0.06**	0.12
Pycnogonida	-	-	0.3	-	**0.06**	0.12
Scyra acutifrons	0.3	-	-	-	**0.06**	0.12
Tonicella lineata	-	0.3	-	-	**0.06**	0.12
Spirorbidae	-	<0.1	<0.1	0.1	**0.04**	0.06
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.01**	0.01
tunicates, compound/social	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
Bryozoa (encrusting)	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Hydroidolina	<0.1	-	-	-	**<0.01**	0.01

Table G4. Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, North Diablo Cove Station NDC 4 -4m (9-15).

Survey / Survey Date / Taxon	188 04-Mar-20 Mean	189 29-Apr-20 Mean	190 23-Jul-20 Mean	191 12-Nov-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts						
Phragmatopoma californica	29.0	46.8	13.8	21.8	**27.81**	14.08
Pelecypoda boring	19.8	31.8	32.3	10.5	**23.56**	10.45
Strongylocentrotus purpuratus	15.3	14.3	15.3	15.8	**15.12**	0.63
Ophiactis simplex	4.5	8.0	9.5	5.5	**6.88**	2.29
Serpulidae	3.5	4.3	5.3	4.3	**4.31**	0.72
Fissurella volcano	3.5	3.0	2.8	3.0	**3.06**	0.31
Ophiothrix spiculata	1.0	1.3	3.5	5.3	**2.75**	2.01
Lottiidae	2.3	0.5	4.0	1.8	**2.12**	1.45
Serpulorbis squamigerus	2.5	2.0	0.8	1.5	**1.69**	0.75
Lottia ochracea	3.0	-	1.8	1.8	**1.62**	1.23
Acmaea mitra	1.8	1.5	1.0	1.0	**1.31**	0.38
Anthopleura elegantissima	2.0	0.8	1.3	1.3	**1.31**	0.52
Balanus/Tetraclita spp.	2.0	1.3	0.8	1.3	**1.31**	0.52
Sipuncula	1.0	1.0	1.0	0.8	**0.94**	0.12
Sabellidae	0.8	1.0	1.3	-	**0.75**	0.54
Epiactis prolifera	1.5	0.8	0.3	-	**0.62**	0.66
Mitra idae	-	0.3	1.3	0.5	**0.50**	0.54
Pseudochama spp.	-	-	0.5	1.3	**0.44**	0.59
Chaetopteridae	-	-	1.3	0.3	**0.38**	0.60
Strongylocentrotus franciscanus	0.3	-	0.3	0.3	**0.19**	0.12
Chama spp.	0.3	0.3	-	-	**0.12**	0.14
Pododesmus cepio	0.3	-	-	0.3	**0.12**	0.14
Williamia peltoides	-	0.5	-	-	**0.12**	0.25
Amphissa spp.	-	-	-	0.3	**0.06**	0.12
Anthozoa	-	0.3	-	-	**0.06**	0.12
Cirratulidae/Terebellidae	-	0.3	-	-	**0.06**	0.12
Crassadoma gigantea	-	-	-	0.3	**0.06**	0.12
Cucumaria spp.	-	-	0.3	-	**0.06**	0.12
Cypraea spadicea	-	-	0.3	-	**0.06**	0.12
Diodora spp.	-	-	-	0.3	**0.06**	0.12
Lirobittium spp.	-	0.3	-	-	**0.06**	0.12
Megathura crenulata	-	-	-	0.3	**0.06**	0.12
Modiolus spp.	-	-	0.3	-	**0.06**	0.12
Placiphorella velata	-	-	-	0.3	**0.06**	0.12
Pteropurpura festiva	-	0.3	-	-	**0.06**	0.12
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.02**	0.01
Clathrina spp.	-	<0.1	-	-	**0.02**	0.03
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.01**	0.01
Hydroidolina	<0.1	<0.1	<0.1	<0.1	**0.01**	<0.01
tunicates, compound/social	<0.1	<0.1	<0.1	<0.1	**0.01**	0.01
Salmacina tribranchiata	-	-	-	<0.1	**<0.01**	0.01
Spirorbidae	<0.1	<0.1	-	-	**<0.01**	0.01
Didemnum/Tridemnum spp.	-	-	-	<0.1	**<0.01**	<0.01

Table G5. Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, South Diablo Cove Station SDC 2 -3m (12-10).

Survey / Survey Date / Taxon	188 07-Feb-20 Mean	189 29-May-20 Mean	190 12-Aug-20 Mean	191 13-Nov-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts						
Ophiactis simplex	26.3	34.0	2.3	19.8	**20.56**	13.53
Strongylocentrotus purpuratus	14.5	9.3	14.3	15.0	**13.25**	2.68
Pelecypoda boring	5.3	17.0	5.0	14.8	**10.50**	6.27
Serpulorbis squamigerus	5.8	4.0	6.3	7.0	**5.75**	1.27
Serpulidae	4.5	6.5	5.5	4.5	**5.25**	0.96
Ophiothrix spiculata	4.3	0.8	4.0	3.3	**3.06**	1.60
Phragmatopoma californica	2.8	2.3	5.0	0.8	**2.69**	1.76
Chaetopteridae	1.0	0.3	0.5	8.3	**2.50**	3.85
Pista spp.	1.5	2.5	1.0	4.5	**2.38**	1.55
Mitra idae	2.8	-	5.8	0.3	**2.19**	2.68
Diopatra ornata	2.5	1.8	1.0	2.5	**1.94**	0.72
Sabellidae	1.0	4.0	2.0	-	**1.75**	1.71
Cucumaria spp.	0.8	2.5	0.5	2.0	**1.44**	0.97
Lottiidae	-	0.8	1.5	2.8	**1.25**	1.17
Sipuncula	0.5	2.5	1.3	0.3	**1.12**	1.01
Acmaea mitra	1.3	0.5	0.8	0.8	**0.81**	0.31
Williamia peltoides	2.5	-	0.3	0.5	**0.81**	1.14
Lissothuria nutriens	0.8	0.8	1.0	0.5	**0.75**	0.20
Balanus/Tetraclita spp.	0.8	1.0	0.5	0.5	**0.69**	0.24
Crepidula spp.	-	-	0.3	2.3	**0.62**	1.09
Lottia ochracea	1.0	-	1.3	0.3	**0.62**	0.60
Cirratulidae/Terebellidae	0.8	0.3	0.3	0.8	**0.50**	0.29
Conus californicus	1.0	-	1.0	-	**0.50**	0.58
Pododesmus cepio	1.5	-	0.3	-	**0.44**	0.72
Strongylocentrotus franciscanus	0.8	0.5	0.3	0.3	**0.44**	0.24
Balanophyllia elegans	0.5	0.5	0.3	0.3	**0.38**	0.14
Fissurella volcano	0.3	0.5	-	0.5	**0.31**	0.24
Ischnochitonidae	0.5	0.8	-	-	**0.31**	0.38
Patiria miniata	-	0.8	0.3	0.3	**0.31**	0.31
Ophiuroidea	0.8	0.3	-	-	**0.25**	0.35
Pteropurpura festiva	0.5	0.3	0.3	-	**0.25**	0.20
Nemertea	-	-	0.3	0.5	**0.19**	0.24
Pseudochama spp.	-	0.5	0.3	-	**0.19**	0.24
Anthopleura artemisia	0.3	-	0.3	-	**0.12**	0.14
Modiolus spp.	0.3	-	0.3	-	**0.12**	0.14
Ophiopteris papillosa	-	-	-	0.5	**0.12**	0.25
Polychaeta	-	0.5	-	-	**0.12**	0.25
Amphissa spp.	0.3	-	-	-	**0.06**	0.12
Anthopleura elegantissima	-	-	0.3	-	**0.06**	0.12
Doriopsilla albopunctata	-	0.3	-	-	**0.06**	0.12
Epiactis prolifera	0.3	-	-	-	**0.06**	0.12
Epitonium/Opalia spp.	-	-	-	0.3	**0.06**	0.12
Eupentacta quinquesemita	-	0.3	-	-	**0.06**	0.12

(table continued)

Table G5 (continued). Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, South Diablo Cove Station SDC 2 -3m (12-10).

Survey / Survey Date / Taxon	188 07-Feb-20 Mean	189 29-May-20 Mean	190 12-Aug-20 Mean	191 13-Nov-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts (continued)						
Heptacarpus spp.	-	-	-	0.3	**0.06**	0.12
Isopoda	-	-	-	0.3	**0.06**	0.12
Lophopanopeus spp.	-	0.3	-	-	**0.06**	0.12
Ophioplocus esmarki	-	-	0.3	-	**0.06**	0.12
Pagurus spp.	-	-	-	0.3	**0.06**	0.12
Rictaxis punctocaelatus	-	-	-	0.3	**0.06**	0.12
Bryozoa (encrusting)	<0.1	-	<0.1	<0.1	**0.02**	0.03
tunicates, compound/social	<0.1	-	-	<0.1	**0.01**	0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	-	**<0.01**	<0.01
Hydroidolina	-	-	-	<0.1	**<0.01**	0.01
Spirorbidae	<0.1	-	<0.1	-	**<0.01**	<0.01

Table G6. Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, South Diablo Cove Station SDC 3 -4m (10-15).

Survey / Survey Date / Taxon	188 11-Feb-20 Mean	189 18-Jun-20 Mean	190 11-Aug-20 Mean	191 21-Dec-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts						
Balanophyllia elegans	19.8	12.3	7.8	16.5	**14.06**	5.21
Strongylocentrotus purpuratus	12.5	13.3	10.0	13.8	**12.38**	1.66
Serpulorbis squamigerus	7.0	6.8	10.8	7.8	**8.06**	1.84
Pelecypoda boring	7.3	6.3	1.5	1.0	**4.00**	3.21
Corynactis californica	2.8	7.5	4.3	-	**3.62**	3.13
Ophiactis simplex	7.3	5.5	0.3	0.8	**3.44**	3.47
Anthopleura elegantissima	1.8	2.5	2.0	2.5	**2.19**	0.38
Chaetopteridae	-	1.3	5.8	0.5	**1.88**	2.63
Phragmatopoma californica	2.3	1.5	0.3	3.0	**1.75**	1.17
Serpulidae	0.8	2.3	2.0	1.3	**1.56**	0.69
Mitra idae	2.0	0.5	0.8	2.3	**1.38**	0.88
Pteropurpura festiva	1.0	1.5	0.5	2.0	**1.25**	0.65
Conus californicus	1.0	0.3	0.3	2.8	**1.06**	1.18
Pista spp.	0.5	2.8	-	0.5	**0.94**	1.23
Sipuncula	2.0	1.0	0.3	0.3	**0.88**	0.83
Cucumaria spp.	2.0	0.8	-	0.5	**0.81**	0.85
Sabellidae	-	0.5	1.5	1.3	**0.81**	0.69
Diopatra ornata	0.8	0.8	0.3	0.5	**0.56**	0.24
Ischnochitonidae	0.8	1.3	-	0.3	**0.56**	0.55
Paracyathus stearnsii	0.5	0.8	0.5	0.5	**0.56**	0.12
Acmaea mitra	1.3	-	-	0.8	**0.50**	0.61
Anthopleura artemisia	0.3	0.8	0.3	0.5	**0.44**	0.24
Ophiothrix spiculata	0.5	1.0	-	-	**0.38**	0.48
Leucilla nuttingi	1.3	-	-	-	**0.31**	0.62
Diodora spp.	-	0.3	-	0.8	**0.25**	0.35
Scyra acutifrons	0.8	-	-	0.3	**0.25**	0.35
Cirratulidae/Terebellidae	0.3	0.5	-	-	**0.19**	0.24
Doriopsilla albopunctata	-	0.8	-	-	**0.19**	0.38
Kelletia kelletii	-	-	-	0.8	**0.19**	0.38
Lirobittium spp.	0.3	0.5	-	-	**0.19**	0.24
Lissothuria nutriens	-	0.3	0.5	-	**0.19**	0.24
Pagurus spp.	0.3	-	0.5	-	**0.19**	0.24
Amphissa spp.	-	0.3	0.3	-	**0.12**	0.14
Anthozoa	0.3	0.3	-	-	**0.12**	0.14
Balanus/Tetraclita spp.	0.3	-	-	0.3	**0.12**	0.14
Cypraea spadicea	-	-	0.5	-	**0.12**	0.25
Epitonium/Opalia spp.	-	0.3	-	0.3	**0.12**	0.14
Heptacarpus spp.	0.3	-	-	0.3	**0.12**	0.14
Lottiidae	-	-	0.5	-	**0.12**	0.25
Majidae	-	-	0.3	0.3	**0.12**	0.14
Ophiopteris papillosa	-	-	0.3	0.3	**0.12**	0.14
Pseudochama spp.	-	0.3	-	0.3	**0.12**	0.14

(table continued)

Table G6. (continued) Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, South Diablo Cove Station SDC 3 -4m (10-15).

Survey / Survey Date / Taxon	188 11-Feb-20 Mean	189 18-Jun-20 Mean	190 11-Aug-20 Mean	191 21-Dec-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrates Counts (continued)						
Alia spp.	-	-	-	0.3	**0.06**	0.12
Cadlina spp.	0.3	-	-	-	**0.06**	0.12
Cancridae	0.3	-	-	-	**0.06**	0.12
Ceratostoma foliatum	-	-	-	0.3	**0.06**	0.12
Crassadoma gigantea	-	0.3	-	-	**0.06**	0.12
Epiactis prolifera	0.3	-	-	-	**0.06**	0.12
Modiolus spp.	-	0.3	-	-	**0.06**	0.12
Ophioplocus esmarki	-	-	0.3	-	**0.06**	0.12
Phidiana hiltoni	-	0.3	-	-	**0.06**	0.12
Placiphorella velata	0.3	-	-	-	**0.06**	0.12
Pugettia spp.	-	-	-	0.3	**0.06**	0.12
Williamia peltoides	-	-	0.3	-	**0.06**	0.12
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.03**	<0.01
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.02**	<0.01
tunicates, compound/social	-	<0.1	<0.1	<0.1	**0.02**	0.01
Acanthancora cyanocrypta	-	<0.1	<0.1	<0.1	**0.02**	0.01
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.02**	0.01
Hydroidolina	<0.1	<0.1	<0.1	-	**0.01**	0.01
Abiet./Sertularella/Sertularia spp.	-	-	-	<0.1	**<0.01**	<0.01
Didemnum/Tridemnum spp.	-	-	-	<0.1	**<0.01**	<0.01
Salmacina tribranchiata	-	<0.1	-	-	**<0.01**	<0.01

Table G7. Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, South Control Station SC 1 -3m (19-10).

Survey / Survey Date / Taxon	188 05-Mar-20 Mean	189 25-Jun-20 Mean	190 30-Jul-20 Mean	191 21-Oct-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts						
Phragmatopoma californica	149.3	165.8	54.3	31.3	**100.12**	67.25
Chlorostoma brunnea	16.0	9.5	4.5	11.0	**10.25**	4.73
Homolopoma luridum/Lirularia succincta	8.5	5.8	5.3	6.8	**6.56**	1.43
Pagurus spp.	7.3	8.8	7.0	2.8	**6.44**	2.58
Strongylocentrotus purpuratus	5.8	4.3	3.3	6.3	**4.88**	1.38
Tonicella lineata	1.8	1.8	1.5	2.3	**1.81**	0.31
Clavelina huntsmani	-	7.0	-	-	**1.75**	3.50
Acmaea mitra	2.5	1.3	1.5	0.8	**1.50**	0.74
Balanus/Tetraclita spp.	1.3	0.8	1.3	1.8	**1.25**	0.41
Lissothuria nutriens	1.0	1.0	0.8	1.5	**1.06**	0.31
Leptasterias spp.	-	0.8	0.8	1.5	**0.75**	0.61
Serpulidae	0.5	0.8	0.5	1.0	**0.69**	0.24
Balanophyllia elegans	0.3	0.5	0.5	0.8	**0.50**	0.20
Calliostoma ligatum	0.3	0.5	0.8	0.5	**0.50**	0.20
Amphissa spp.	-	0.3	0.5	0.5	**0.31**	0.24
Cryptochiton stelleri	0.3	0.3	-	0.8	**0.31**	0.31
Diopatra ornata	0.3	0.3	0.5	0.3	**0.31**	0.12
Ischnochitonidae	0.3	0.5	0.3	0.3	**0.31**	0.12
Patiria miniata	0.3	0.5	0.3	0.3	**0.31**	0.12
Pista spp.	0.3	0.3	0.3	0.5	**0.31**	0.12
Serpulorbis squamigerus	1.0	0.3	-	-	**0.31**	0.47
Anthopleura elegantissima	0.3	0.3	0.3	0.3	**0.25**	<0.01
Dendropoma spp.	-	-	-	1.0	**0.25**	0.50
Sabellidae	-	-	0.3	0.8	**0.25**	0.35
Styela spp.	0.3	0.3	0.3	0.3	**0.25**	<0.01
Cryptolithodes sitchensis	0.3	0.3	-	0.3	**0.19**	0.12
Ocinebrina spp.	-	0.3	0.3	0.3	**0.19**	0.12
Scyra acutifrons	0.3	0.3	-	0.3	**0.19**	0.12
Chelyosoma productum	0.3	-	0.3	-	**0.12**	0.14
Conus californicus	-	0.3	-	0.3	**0.12**	0.14
Epiactis prolifera	-	-	0.5	-	**0.12**	0.25
Eupentacta quinquesemita	-	-	0.3	0.3	**0.12**	0.14
Lottiidae	-	-	0.5	-	**0.12**	0.25
Mitra idae	0.3	-	0.3	-	**0.12**	0.14
Mytilus spp.	-	-	-	0.5	**0.12**	0.25
Pododesmus cepio	-	0.3	-	0.3	**0.12**	0.14
Pugettia spp.	-	0.3	0.3	-	**0.12**	0.14
Alia spp.	-	-	0.3	-	**0.06**	0.12
Anthopleura artemisia	-	0.3	-	-	**0.06**	0.12
Aptyxis luteopictus	-	-	-	0.3	**0.06**	0.12
Diodora spp.	-	-	0.3	-	**0.06**	0.12
Doris spp.	-	-	-	0.3	**0.06**	0.12

(table continued)

Table G7 (continued). Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, South Control Station SC 1 -3m (19-10).

Survey / Survey Date / Taxon	188 05-Mar-20 Mean	189 25-Jun-20 Mean	190 30-Jul-20 Mean	191 21-Oct-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts (continued)						
Fissurella volcano	-	0.3	-	-	**0.06**	0.12
Hermissenda crassicornis	-	-	0.3	-	**0.06**	0.12
Idotea spp.	-	0.3	-	-	**0.06**	0.12
Lepidozona spp.	-	-	0.3	-	**0.06**	0.12
Lophopanopeus spp.	-	-	-	0.3	**0.06**	0.12
Lottia ochracea	-	-	0.3	-	**0.06**	0.12
Mimulus foliatus	-	-	-	0.3	**0.06**	0.12
Mopalia spp.	-	-	0.3	-	**0.06**	0.12
Pelecypoda boring	-	0.3	-	-	**0.06**	0.12
Pisaster/Henricia spp. (juv.)	-	-	0.3	-	**0.06**	0.12
Pomaulax gibberosa	-	-	-	0.3	**0.06**	0.12
Promartynia pulligo	0.3	-	-	-	**0.06**	0.12
Porifera (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.03**	<0.01
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.02**	<0.01
tunicates, compound/social	<0.1	<0.1	<0.1	<0.1	**0.02**	0.01
Spirorbidae	<0.1	<0.1	<0.1	<0.1	**0.01**	0.01
Didemnum/Tridemnum spp.	<0.1	-	<0.1	-	**<0.01**	<0.01
Hydroidolina	-	-	<0.1	-	**<0.01**	0.01
Salmacina tribranchiata	-	-	<0.1	-	**<0.01**	<0.01
Fissurella volcano	-	0.3	-	-	**0.06**	0.12

Table G8. Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, South Control Station SC 2 -6m (20-20).

Survey / Survey Date / Taxon	188 26-Feb-20 Mean	189 11-Jun-20 Mean	190 25-Aug-20 Mean	191 28-Oct-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts						
Serpulorbis squamigerus	24.0	27.0	17.0	30.8	**24.69**	5.82
Chlorostoma brunnea	6.8	8.8	3.3	7.8	**6.62**	2.39
Strongylocentrotus purpuratus	6.3	5.0	6.0	6.8	**6.00**	0.74
Serpulidae	2.8	3.3	6.0	5.0	**4.25**	1.51
Acmaea mitra	4.0	3.3	5.5	3.5	**4.06**	1.01
Balanus/Tetraclita spp.	2.8	5.5	2.8	4.3	**3.81**	1.33
Williamia peltoides	6.0	5.5	0.3	0.5	**3.06**	3.11
Corynactis californica	8.3	0.5	3.3	-	**3.00**	3.78
Lottiidae	1.5	3.5	3.0	3.0	**2.75**	0.87
Homolopoma luridum/Lirularia succincta	4.3	0.8	2.8	1.3	**2.25**	1.58
Tonicella lineata	1.3	1.5	1.8	3.0	**1.88**	0.78
Calliostoma ligatum	1.3	1.3	1.5	2.0	**1.50**	0.35
Balanophyllia elegans	2.8	0.5	1.3	1.3	**1.44**	0.94
Phragmatopoma californica	1.3	2.3	1.5	0.8	**1.44**	0.62
Cucumaria spp.	1.8	0.8	1.8	1.0	**1.31**	0.52
Lottia ochracea	3.0	0.5	0.8	0.5	**1.19**	1.21
Pelecypoda boring	0.8	2.3	1.0	0.3	**1.06**	0.85
Ophiothrix spiculata	0.5	0.5	1.8	1.0	**0.94**	0.59
Pagurus spp.	1.0	0.5	1.5	0.8	**0.94**	0.43
Aptyxis luteopictus	1.5	0.3	0.8	0.5	**0.75**	0.54
Chaetopteridae	0.5	0.5	0.5	1.3	**0.69**	0.38
Sabellidae	-	1.8	1.0	-	**0.69**	0.85
Leptasterias spp.	-	0.3	1.5	0.5	**0.56**	0.66
Cirratulidae/Terebellidae	0.3	0.8	0.3	0.8	**0.50**	0.29
Diodora spp.	0.8	0.3	0.3	0.8	**0.50**	0.29
Conus californicus	1.3	0.3	0.3	-	**0.44**	0.55
Crepidula spp.	1.3	0.3	-	0.3	**0.44**	0.55
Ophiactis simplex	-	0.5	-	0.8	**0.31**	0.38
Pododesmus cepio	1.0	-	-	0.3	**0.31**	0.47
Amphissa spp.	0.5	-	0.5	-	**0.25**	0.29
Anthopleura artemisia	0.5	0.5	-	-	**0.25**	0.29
Clavelina huntsmani	-	1.0	-	-	**0.25**	0.50
Ischnochitonidae	-	-	0.5	0.5	**0.25**	0.29
Mitra idae	0.5	0.3	-	0.3	**0.25**	0.20
Patiria miniata	0.3	-	-	0.8	**0.25**	0.35
Pisaster/Henricia spp. (juv.)	0.5	-	0.5	-	**0.25**	0.29
Anthopleura elegantissima	0.3	0.3	-	0.3	**0.19**	0.12
Chlorostoma montereyi	0.5	0.3	-	-	**0.19**	0.24
Fissurella volcano	-	0.3	-	0.5	**0.19**	0.24
Pomaulax gibberosa	-	0.5	0.3	-	**0.19**	0.24
Promartynia pulligo	-	0.3	0.3	0.3	**0.19**	0.12
Sipuncula	-	-	0.5	0.3	**0.19**	0.24
Tethya californiana	0.3	-	0.3	0.3	**0.19**	0.12
Alia spp.	0.3	-	0.3	-	**0.12**	0.14
Cnemidocarpa finmarkiensis	-	-	-	0.5	**0.12**	0.25
Dendropoma spp.	-	-	-	0.5	**0.12**	0.25
Epiactis prolifera	-	-	0.3	0.3	**0.12**	0.14

(table continued)

Table G8 (continued). Subtidal invertebrates (SFQ Method) 2020 survey means (abundance per 0.25 m^2; percent cover) standard deviations and annual means, South Control Station SC 2 -6m (20-20).

Survey / Survey Date / Taxon	188 26-Feb-20 Mean	189 11-Jun-20 Mean	190 25-Aug-20 Mean	191 28-Oct-20 Mean	Annual Mean	Mean Std. Dev.
Invertebrate Counts (continued)						
Eudistylia polymorpha	-	-	-	0.5	**0.12**	0.25
Ocinebrina spp.	-	0.3	0.3	-	**0.12**	0.14
Ophioplocus esmarki	-	0.3	-	0.3	**0.12**	0.14
Pyura haustor	-	-	-	0.5	**0.12**	0.25
Strongylocentrotus franciscanus	-	0.3	-	0.3	**0.12**	0.14
Anthozoa	-	-	0.3	-	**0.06**	0.12
Ceratostoma foliatum	-	0.3	-	-	**0.06**	0.12
Crassadoma gigantea	-	0.3	-	-	**0.06**	0.12
Cryptochiton stelleri	-	-	0.3	-	**0.06**	0.12
Diopatra ornata	0.3	-	-	-	**0.06**	0.12
Eupentacta quinquesemita	-	-	0.3	-	**0.06**	0.12
Lepidozona spp.	-	-	0.3	-	**0.06**	0.12
Lissothuria nutriens	0.3	-	-	-	**0.06**	0.12
Pachycheles spp.	-	-	0.3	-	**0.06**	0.12
Paracyathus stearnsii	0.3	-	-	-	**0.06**	0.12
Pseudochama spp.	-	-	0.3	-	**0.06**	0.12
Porifera (encrusting)	<0.1	<0.1	<0.1	0.1	**0.05**	0.06
tunicates, compound/social	<0.1	<0.1	<0.1	<0.1	**0.03**	<0.01
Bryozoa (encrusting)	<0.1	<0.1	<0.1	<0.1	**0.03**	<0.01
Hydroidolina	-	-	<0.1	<0.1	**0.01**	0.01
Salmacina tribranchiata	<0.1	-	<0.1	<0.1	**0.01**	0.01
Spirorbidae	<0.1	-	<0.1	<0.1	**0.01**	0.01
Bryozoa (erect)	-	-	<0.1	<0.1	**<0.01**	0.01
Dodecaceria fewkesi	-	<0.1	<0.1	<0.1	**<0.01**	<0.01

Diablo Canyon Power Plant

Appendix H

Subtidal Fishes (SFO Method)

Table H1. Subtidal fishes 2020 survey means (abundance per 50 x 4 x 2 m transect), standard deviations and annual means, Field's Cove Stations (FC FO-1 (1), FC FO-2 (2), FC FO-3 (3)).

Survey Survey Date Taxon	186 7-Apr-20 Mean	187 13-Jul-20 Mean	188 1-Sep-20 Mean	189 31-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Midwater						
Oxyjulis californica	14.8	<0.1	-	2.3	**4.31**	7.10
larval/post-larval fish	-	0.8	-	-	**0.21**	0.42
Paralabrax clathratus	0.2	-	<0.1	0.2	**0.10**	0.08
Rhacochilus vacca	0.2	-	-	-	**0.06**	0.12
Semicossyphus pulcher	0.2	-	-	-	**0.06**	0.12
Oxyjulis californica (juv.)	-	-	-	<0.1	**0.02**	0.04
Rhacochilus vacca (juv.)	-	-	<0.1	-	**0.02**	0.04
Sebastes mystinus (juv.)	-	<0.1	-	-	**0.02**	0.04
Benthic						
Oxylebius pictus	6.0	7.2	5.9	7.6	**6.67**	0.84
Oxyjulis californica	12.2	1.2	0.3	2.7	**4.08**	5.47
Sebastes mystinus (yoy)	-	4.5	2.0	0.9	**1.85**	1.94
Sebastes chrysomelas	1.2	2.8	1.0	0.5	**1.38**	0.97
Gibbonsia spp.	0.8	0.8	0.3	0.5	**0.58**	0.20
Semicossyphus pulcher	<0.1	1.1	0.8	<0.1	**0.50**	0.50
Oxylebius pictus (juv.)	-	<0.1	-	1.7	**0.44**	0.82
Scorpaenichthys marmoratus	0.6	0.6	0.2	0.4	**0.44**	0.20
Paralabrax clathratus	0.2	0.2	0.8	0.5	**0.40**	0.28
Rhinogobiops nicholsii	0.2	0.4	<0.1	0.8	**0.38**	0.28
Sebastes miniatus (yoy)	-	-	-	1.4	**0.35**	0.71
Sebastes atrovirens	0.4	0.4	0.2	0.2	**0.33**	0.10
Embiotoca jacksoni	0.4	0.3	0.4	-	**0.29**	0.20
Sebastes rastrelliger	0.2	0.5	0.2	0.2	**0.29**	0.14
Artedius spp.	0.2	0.3	0.2	0.2	**0.21**	0.08
Sebastes mystinus (juv.)	0.6	-	0.2	-	**0.19**	0.28
Embiotoca lateralis (juv.)	0.3	<0.1	0.2	-	**0.15**	0.14
Rhacochilus vacca	0.2	0.2	<0.1	0.2	**0.15**	0.04
Sebastes chrysomelas (juv.)	0.2	0.2	<0.1	-	**0.12**	0.11
Embiotoca lateralis	-	-	0.3	<0.1	**0.10**	0.16
Sebastes melanops (yoy)	-	0.2	0.2	-	**0.10**	0.12
Gobiesox maeandricus	-	0.2	<0.1	<0.1	**0.08**	0.07
Sebastes serranoides/S. flavidus (yoy)	-	0.2	-	-	**0.06**	0.12
Brachyistius frenatus (juv.)	-	-	0.2	-	**0.04**	0.08
Cebidichthys violaceus	<0.1	<0.1	-	-	**0.04**	0.05
Embiotoca jacksoni (juv.)	-	-	0.2	-	**0.04**	0.08
Gibbonsia spp. (juv.)	-	-	0.2	-	**0.04**	0.08
Oxyjulis californica (juv.)	-	-	-	0.2	**0.04**	0.08
Artedius spp. (juv.)	-	<0.1	-	-	**0.02**	0.04
Cottidae	<0.1	-	-	-	**0.02**	0.04
Oligocottus spp. (juv.)	-	<0.1	-	-	**0.02**	0.04
Orthonopias triacis	-	-	<0.1	-	**0.02**	0.04
Orthonopias triacis (juv.)	-	-	<0.1	-	**0.02**	0.04
Rhacochilus toxotes	<0.1	-	-	-	**0.02**	0.04
Rhacochilus vacca (juv.)	-	-	<0.1	-	**0.02**	0.04
Sebastes rastrelliger (yoy)	<0.1	-	-	-	**0.02**	0.04

Table H2. Subtidal fishes 2020 survey means (abundance per 50 x 4 x 2 m transect), standard deviations and annual means, North Diablo Cove Stations (NDC FO-1 (5), NDC FO-2 (6), NDC FO-3 (7)).

Survey Survey Date Taxon	186 7-Apr-20 Mean	187 13-Jul-20 Mean	188 1-Sep-20 Mean	189 31-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Midwater						
larval/post-larval fish	-	4.6	4.8	-	**2.35**	2.72
Chromis punctipinnis	1.2	1.0	1.1	0.7	**0.98**	0.22
Paralabrax clathratus	1.0	0.5	0.5	1.2	**0.79**	0.34
Hermosilla azurea	0.9	-	-	-	**0.23**	0.46
Girella nigricans	0.7	-	0.2	-	**0.21**	0.32
Medialuna californiensis	0.2	0.3	-	-	**0.12**	0.16
Hypsypops rubicundus	0.3	-	<0.1	-	**0.10**	0.16
Embiotoca jacksoni	0.2	-	-	0.2	**0.08**	0.10
Semicossyphus pulcher	0.2	-	-	-	**0.06**	0.12
Myliobatis californica	-	<0.1	-	-	**0.02**	0.04
Oxyjulis californica	-	<0.1	-	-	**0.02**	0.04
Paralabrax clathratus (juv.)	<0.1	-	-	-	**0.02**	0.04
Sebastes chrysomelas/S. carnatus (yoy)	-	<0.1	-	-	**0.02**	0.04
Sebastes serranoides	<0.1	-	-	-	**0.02**	0.04
Benthic						
Rhinogobiops nicholsii	4.3	2.9	4.2	5.8	**4.29**	1.16
Paralabrax clathratus	5.2	2.9	2.5	5.8	**4.10**	1.64
Oxylebius pictus	2.8	1.5	2.6	6.8	**3.42**	2.30
Hermosilla azurea	10.2	<0.1	-	-	**2.56**	5.07
Hypsypops rubicundus	2.5	1.7	1.3	3.1	**2.15**	0.79
Gibbonsia spp.	-	0.9	1.0	1.0	**0.73**	0.49
Sebastes chrysomelas	0.9	0.8	0.2	0.9	**0.73**	0.32
Embiotoca jacksoni	0.5	0.4	1.0	0.8	**0.67**	0.26
Chromis punctipinnis	0.4	0.5	1.2	0.2	**0.56**	0.43
Semicossyphus pulcher	1.5	0.4	0.2	-	**0.54**	0.66
Paralabrax clathratus (juv.)	1.3	0.2	<0.1	-	**0.40**	0.63
Girella nigricans	1.0	<0.1	<0.1	0.2	**0.33**	0.45
Oxylebius pictus (juv.)	-	-	-	1.1	**0.27**	0.54
Paralabrax clathratus	-	0.9	-	-	**0.23**	0.46
Neoclinus stephensae	0.2	-	0.3	0.3	**0.23**	0.16
Gibbonsia spp. (juv.)	-	-	0.2	0.6	**0.21**	0.28
Scorpaenichthys marmoratus	<0.1	0.2	0.2	0.2	**0.17**	0.07
Artedius spp.	<0.1	-	0.2	0.2	**0.12**	0.11
Rhinogobiops nicholsii (juv.)	-	-	0.2	0.3	**0.12**	0.16
Medialuna californiensis	0.3	-	-	-	**0.08**	0.17
Sebastes chrysomelas (juv.)	0.3	-	-	-	**0.08**	0.17
Sebastes chrysomelas/S. carnatus (yoy)	-	0.3	-	-	**0.08**	0.17
Urobatis halleri	<0.1	<0.1	0.2	-	**0.08**	0.07
Embiotoca lateralis	0.2	-	-	-	**0.04**	0.08
Embiotoca lateralis (juv.)	<0.1	-	<0.1	-	**0.04**	0.05
Ophiodon elongatus	-	-	<0.1	<0.1	**0.04**	0.05
Oxyjulis californica	0.2	-	-	-	**0.04**	0.08
Paralichthys californicus	-	0.2	-	-	**0.04**	0.08

(table continued)

Table H2 (continued). Subtidal fishes 2020 survey means (abundance per 50 x 4 x 2 m transect), standard deviations and annual means, North Diablo Cove Stations (NDC FO-1 (5), NDC FO-2 (6), NDC FO-3 (7)).

Survey / Survey Date / Taxon	186 7-Apr-20 Mean	187 13-Jul-20 Mean	188 1-Sep-20 Mean	189 31-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Benthic (continued)						
Artedius spp. (juv.)	-	-	<0.1	-	**0.02**	0.04
Gobiesox maeandricus	-	-	-	<0.1	**0.02**	0.04
Oligocottus/Clinocottus spp.	-	<0.1	-	-	**0.02**	0.04
Rhacochilus vacca	-	-	<0.1	-	**0.02**	0.04
Sebastes serranoides	-	-	<0.1	-	**0.02**	0.04

Table H3. Subtidal fishes 2020 survey means (abundance per 50 x 4 x 2 m transect), standard deviations and annual means, South Diablo Cove Stations (SDC FO-1 (8), SDC FO-2 (9), SDC FO-3 (10)).

Survey Survey Date Taxon	186 7-Apr-20 Mean	187 13-Jul-20 Mean	188 1-Sep-20 Mean	189 31-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Midwater						
larval/post-larval fish	-	60.8	49.6	-	**27.60**	32.20
Paralabrax clathratus	1.4	0.9	0.3	0.5	**0.79**	0.48
Oxyjulis californica	2.4	0.2	-	-	**0.67**	1.17
Chromis punctipinnis	0.2	0.7	-	1.0	**0.48**	0.44
Rhacochilus vacca	0.8	-	-	-	**0.19**	0.38
Embiotoca jacksoni	-	-	-	0.2	**0.04**	0.08
Triakis semifasciata	-	0.2	-	-	**0.04**	0.08
Girella nigricans	<0.1	-	-	-	**0.02**	0.04
Hermosilla azurea	<0.1	-	-	-	**0.02**	0.04
Paralabrax clathratus (juv.)	<0.1	-	-	-	**0.02**	0.04
Sebastes chrysomelas/S. carnatus (yoy)	<0.1	-	-	-	**0.02**	0.04
Semicossyphus pulcher	<0.1	-	-	-	**0.02**	0.04
Benthic						
Rhinogobiops nicholsii	3.2	4.6	3.4	5.0	**4.04**	0.89
Chromis punctipinnis	0.3	0.5	-	5.9	**1.69**	2.83
Paralabrax clathratus	3.0	1.1	0.4	2.1	**1.65**	1.13
Oxylebius pictus	0.6	1.3	1.7	2.6	**1.54**	0.83
Oxyjulis californica	4.1	-	0.5	-	**1.15**	1.97
Gibbonsia spp.	<0.1	0.2	0.8	0.3	**0.38**	0.32
Sebastes chrysomelas	0.5	0.6	0.2	0.2	**0.35**	0.22
Hermosilla azurea	1.3	-	-	-	**0.33**	0.67
Artedius spp.	-	0.4	0.8	<0.1	**0.31**	0.34
Rhinogobiops nicholsii (juv.)	-	-	0.2	0.9	**0.27**	0.44
Rhacochilus vacca	0.9	-	<0.1	-	**0.25**	0.45
Neoclinus stephensae	0.2	0.3	0.3	-	**0.21**	0.16
Triakis semifasciata	0.7	<0.1	<0.1	-	**0.21**	0.31
Urobatis halleri	0.3	-	-	0.2	**0.12**	0.16
Gibbonsia spp. (juv.)	-	0.2	0.2	-	**0.10**	0.12
Sebastes rastrelliger	0.2	<0.1	-	0.2	**0.10**	0.08
Artedius spp. (juv.)	-	0.2	-	-	**0.06**	0.12
Girella nigricans	0.2	<0.1	-	-	**0.06**	0.08
Orthonopias triacis	-	-	0.2	-	**0.06**	0.12
Citharichthys stigmaeus	-	<0.1	<0.1	-	**0.04**	0.05
Sebastes atrovirens	<0.1	<0.1	-	-	**0.04**	0.05
Sebastes chrysomelas (juv.)	0.2	-	-	-	**0.04**	0.08
Anarrhichthys ocellatus	-	-	-	<0.1	**0.02**	0.04
Citharichthys spp.	<0.1	-	-	-	**0.02**	0.04
Citharichthys spp. (juv.)	-	-	<0.1	-	**0.02**	0.04
Embiotoca jacksoni	<0.1	-	-	-	**0.02**	0.04
Gobiesox maeandricus	-	-	<0.1	-	**0.02**	0.04
Hypsurus caryi	-	-	-	<0.1	**0.02**	0.04
Oligocottus spp. (juv.)	-	-	<0.1	-	**0.02**	0.04
Scorpaenichthys marmoratus	-	<0.1	-	-	**0.02**	0.04
Sebastes miniatus (yoy)	-	-	<0.1	-	**0.02**	0.04

Table H4. Subtidal fishes 2020 survey means (abundance per 50 x 4 x 2 m transect), standard deviations and annual means, Patton Cove Stations (SC FO-1 (12), SC FO-2 (13), SC FO-3 (14)).

Survey Survey Date Taxon	186 7-Apr-20 Mean	187 13-Jul-20 Mean	188 1-Sep-20 Mean	189 31-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Midwater						
Aulorhynchus flavidus	5.3	-	1.0	0.3	**1.67**	2.48
larval/post-larval fish	-	3.8	2.5	-	**1.56**	1.88
Rhacochilus vacca	0.4	0.2	<0.1	0.2	**0.21**	0.14
Oxyjulis californica	<0.1	0.3	-	0.2	**0.17**	0.15
Sebastes chrysomelas/S. carnatus (yoy)	-	0.2	0.2	-	**0.12**	0.14
Sebastes mystinus (juv.)	<0.1	<0.1	<0.1	0.2	**0.12**	0.08
Embiotoca lateralis	<0.1	<0.1	<0.1	<0.1	**0.08**	<0.01
Sebastes serranoides/S. flavidus (yoy)	-	0.3	-	-	**0.08**	0.17
Sebastes serranoides	-	-	-	0.2	**0.06**	0.12
Sebastes atrovirens	-	0.2	-	-	**0.04**	0.08
Sebastes mystinus	-	-	0.2	-	**0.04**	0.08
Oxyjulis californica (juv.)	-	-	<0.1	-	**0.02**	0.04
Rhacochilus toxotes	-	-	-	<0.1	**0.02**	0.04
Rhacochilus vacca (juv.)	-	<0.1	-	-	**0.02**	0.04
Scorpaenichthys marmoratus	-	<0.1	-	-	**0.02**	0.04
Sebastes mystinus (yoy)	-	-	-	<0.1	**0.02**	0.04
Sebastes serranoides (juv.)	-	-	-	<0.1	**0.02**	0.04
Benthic						
Oxylebius pictus	4.2	3.3	4.9	8.5	**5.25**	2.26
Sebastes mystinus (yoy)	0.2	2.4	4.2	6.2	**3.25**	2.56
Sebastes chrysomelas	2.1	1.9	1.5	1.8	**1.81**	0.25
Rhinogobiops nicholsii	0.9	0.3	0.5	2.3	**1.02**	0.91
Gibbonsia spp.	0.8	0.7	0.6	1.6	**0.92**	0.46
Sebastes mystinus (juv.)	0.5	-	0.4	2.2	**0.77**	0.96
Embiotoca lateralis	1.1	<0.1	0.2	0.8	**0.54**	0.49
Embiotoca jacksoni	0.8	0.2	0.3	0.7	**0.50**	0.25
Artedius spp.	0.5	0.2	0.6	0.6	**0.48**	0.16
Sebastes rastrelliger	0.8	0.5	0.4	-	**0.44**	0.34
Rhacochilus vacca	0.9	<0.1	-	0.7	**0.42**	0.45
Oxylebius pictus (juv.)	-	-	0.2	1.4	**0.40**	0.69
Sebastes miniatus (yoy)	0.4	-	0.8	-	**0.29**	0.36
Orthonopias triacis	0.4	<0.1	0.2	0.4	**0.27**	0.17
Sebastes atrovirens	0.2	0.2	0.2	0.4	**0.23**	0.13
Sebastes serranoides/S. flavidus (yoy)	-	0.3	0.2	0.4	**0.23**	0.18
Embiotoca lateralis (juv.)	0.2	0.2	-	0.4	**0.21**	0.17
Scorpaenichthys marmoratus	0.2	<0.1	0.2	0.2	**0.21**	0.08
Rhinogobiops nicholsii (juv.)	-	-	0.2	0.5	**0.17**	0.24
Sebastes chrysomelas (juv.)	0.5	-	<0.1	<0.1	**0.17**	0.23
Oxyjulis californica	0.2	-	-	0.4	**0.15**	0.20
Sebastes serranoides	0.2	0.2	0.2	-	**0.15**	0.10
Semicossyphus pulcher	<0.1	0.2	<0.1	<0.1	**0.12**	0.08
Cebidichthys violaceus	-	-	-	0.4	**0.10**	0.21
Embiotoca jacksoni (juv.)	-	-	0.2	0.2	**0.10**	0.12
Ophiodon elongatus	<0.1	-	0.2	<0.1	**0.10**	0.10
Rhacochilus toxotes	0.2	-	0.2	<0.1	**0.10**	0.08
Sebastes serranoides (juv.)	-	-	<0.1	0.3	**0.10**	0.16

(table continued)

Table H4 (continued). Subtidal fishes 2020 survey means (abundance per 50 x 4 x 2 m transect), standard deviations and annual means, Patton Cove Stations (SC FO-1 (12), SC FO-2 (13), SC FO-3 (14)).

Survey Survey Date Taxon	186 7-Apr-20 Mean	187 13-Jul-20 Mean	188 1-Sep-20 Mean	189 31-Oct-20 Mean	Annual Mean	Annual Std. Dev.
Benthic (continued)						
Gibbonsia spp. (juv.)	-	-	<0.1	0.2	**0.06**	0.08
Cephaloscyllium ventriosum	0.2	-	-	-	**0.04**	0.08
Cottidae	0.2	-	-	-	**0.04**	0.08
Hexagrammos decagrammus	-	<0.1	-	<0.1	**0.04**	0.05
Hypsurus caryi (juv.)	-	-	0.2	-	**0.04**	0.08
Raja binoculata	0.2	-	-	-	**0.04**	0.08
Aulorhynchus flavidus	-	<0.1	-	-	**0.02**	0.04
Brachyistius frenatus	-	-	-	<0.1	**0.02**	0.04
Cottidae (juv.)	-	-	-	<0.1	**0.02**	0.04
Oligocottus spp. (juv.)	-	-	<0.1	-	**0.02**	0.04
Oxyjulis californica (juv.)	<0.1	-	-	-	**0.02**	0.04
Sebastes carnatus	-	-	-	<0.1	**0.02**	0.04
Sebastes caurinus (yoy)	<0.1	-	-	-	**0.02**	0.04
Sebastes chrysomelas/S. carnatus (yoy)	-	-	-	<0.1	**0.02**	0.04
Sebastes miniatus (juv.)	-	-	-	<0.1	**0.02**	0.04
Sebastes mystinus	-	-	-	<0.1	**0.02**	0.04
Sebastes rastrelliger (yoy)	-	-	<0.1	-	**0.02**	0.04