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SHELLFISH GROWING WATER SANITARY SURVEY
OF
PENDER HARBOUR AND OUTLYING AREAS

EPS 5-PR-74-11

by D.B. Arney and T.J. Tevendale

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OF
PENDER HARBOUR AND OUTLYING AREAS

by

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and
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Pollution Abatement Branch
Environmental Protection Service
Pacific Region
Vancouver, B.C.

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ABSTRACT

A sanitary survey of the waters of Pender Harbour and outlying areas was conducted during July 1974 by personnel of the Environmental Protection Service, Pacific Region.

The purpose of the survey was to reassess the existing Schedule J closure of Gunboat Bay, and to determine the effect of the increase in the residential and boating populations on the water quality in the remainder of Pender Harbour and outlying areas.

The existing closure proved to be justified. In addition, the remaining waters of Pender Harbour did not meet the minimum water quality standards. All of the outlying areas proved acceptable.

A recommendation is made to extend the Gunboat Bay closure to include all the waters of Pender Harbour and to rectify the contaminating input at East Pender Bay.

RÉSUMÉ

Le personnel du Service de protection de l'environnement de la région du Pacifique a effectué en juillet 1974 une étude sanitaire des eaux le long du littoral et au large de Pender Harbour.

Cette étude avait pour but de réexaminer l'efficacité de la barrière de Gunboat Bay, installée en vertu du programme J, et de déterminer quels effets le nombre croissant de riverains et de bateaux pourrait avoir sur la qualité des eaux de Pender Harbour (en dehors de Gunboat Bay) et du large.

L'utilité de la barrière existante a été démontrée. En outre, en dehors de Gunboat Bay, la qualité des eaux de Pender Harbour est inférieure aux normes minimales. Au large, toutes les zones se sont révélées acceptables.

On a formulé les recommandations suivantes: allongement de la barrière de Gunboat Bay de façon à englober toutes les eaux de Pender Harbour, et détournement du courant de contamination de East Pender Bay.

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1. INTRODUCTION

Pender Harbour is located on the mainland coast of B.C. about 50 miles northwest of Vancouver. It is a convenient port of call for summer boaters, many being U.S. tourists proceeding to Alaska and other points north. The area is a relatively shallow and protected waterway (particularly at the northeastern end), a situation which is not conducive to adequate tidal flushing. Oyster beds are prevalent in Oyster Bay and small beds are also found around the remainder of the harbour.

Pender Harbour was surveyed in 1964 by personnel of the federal Department of Fisheries and National Health and Welfare and of the provincial Department of Health and Hospital Insurance. As a result of that survey, the commercial oyster leases in Oyster Bay were closed to shellfish harvesting. A further survey in 1967 carried out by the Department of Health and Hospital Insurance confirmed the 1964 closure. The closure area is defined as "that area of Pender Harbour, Area 16, lying east of the overhead power lines crossing the narrow entrance to Gunboat Bay".¹

During July 1974, a comprehensive sanitary and bacteriological survey of Pender Harbour and outlying waters was carried out to reassess the quality of the growing waters. This reassessment was necessary for several reasons: (1) Considerable development had taken place since the 1967 survey and the presence or absence of pollution from these sources had to be ascertained; (2) Because of the increase in recreational boating in the area, the impact of direct discharges from these sources on the receiving waters quality needed

¹ British Columbia Fisheries Regulations, Schedule J, Area 16-1.

to be assessed; and (3) Reappraisal of Area 16-1, Schedule J, was required.

Personnel of the Shellfish Water Quality Program (E.P.S., Pacific Region) carried out a sanitary and bacteriological survey of the shellfish growing waters in Pender Harbour during the period July 2-22, 1974. Growing waters of outlying areas were also surveyed, including: a) Bargain Bay and the southern waters of Beaver Island, b) a commercial oyster lease on the mainland opposite Harness Island, c) a proposed and an operating oyster lease in Hotham Sound, and d) three moorage areas in Agamemnon Channel.

2. SAMPLE STATION LOCATIONS

Pender Harbour sample station locations are shown in Figure 2. Sample station locations in outlying areas are shown in Figure 1.

The waters from two streams were tested. The stream at S1 in East Pender Bay was sampled, since it passes through grazing land, thus posing an obvious health hazard from manure deposits. The stream at S2 was tested, since its waters pass over oysters relayed from Oyster Bay.

Recreational harvesting locations in the outlying areas were identified by the local fisheries officer. Only those locations known to be popular moorages were chosen for sampling.

A complete description of sample station locations is presented in Tables 5 and 6 of Appendix I.

3. FIELD PROCEDURES AND METHODS

Sampling stations were selected and a bacteriological and physical water testing program developed to assess the shellfish growing water quality and the sources of pollutants.

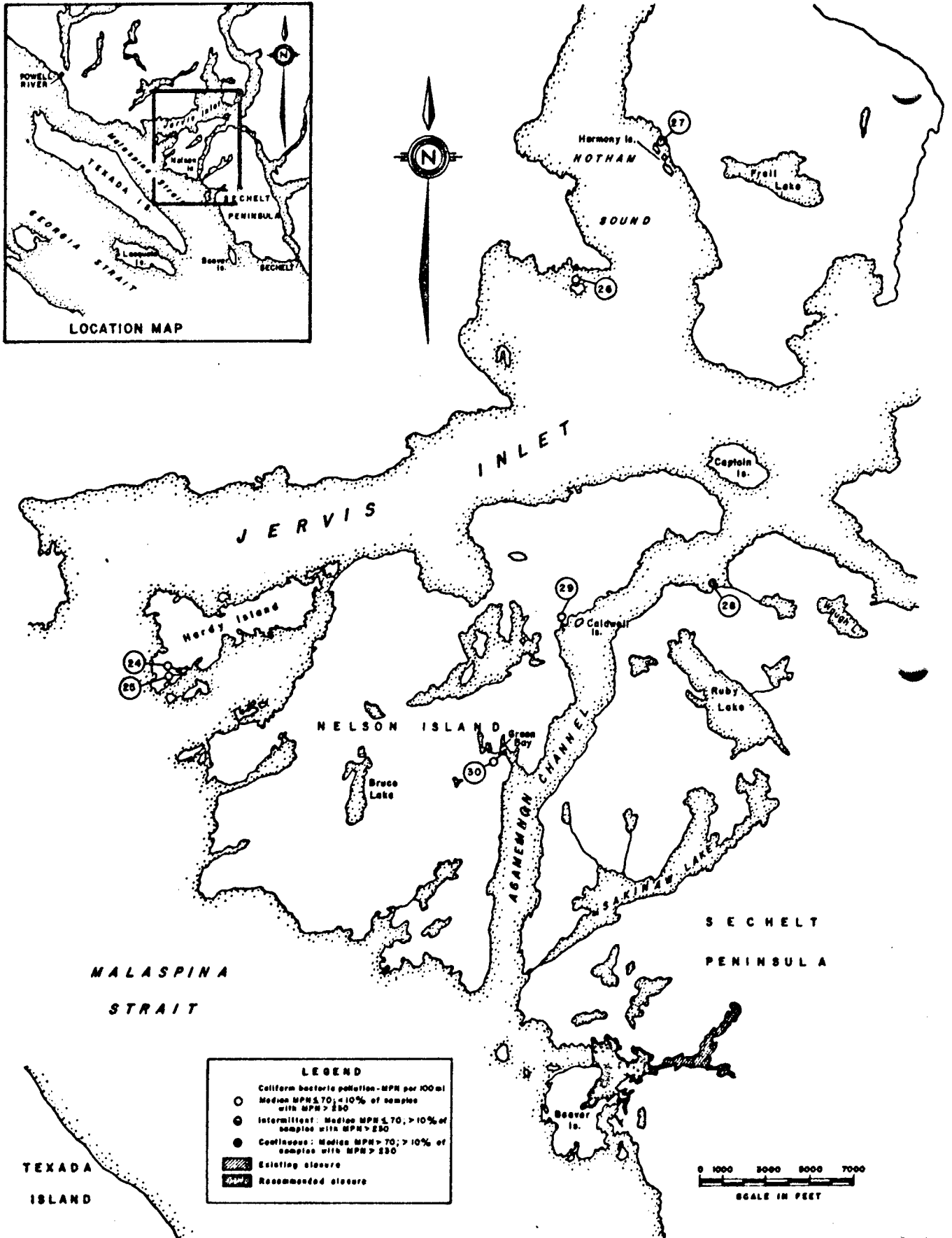


FIGURE 1 PENDER HARBOUR OUTLYING AREA SAMPLE STATIONS

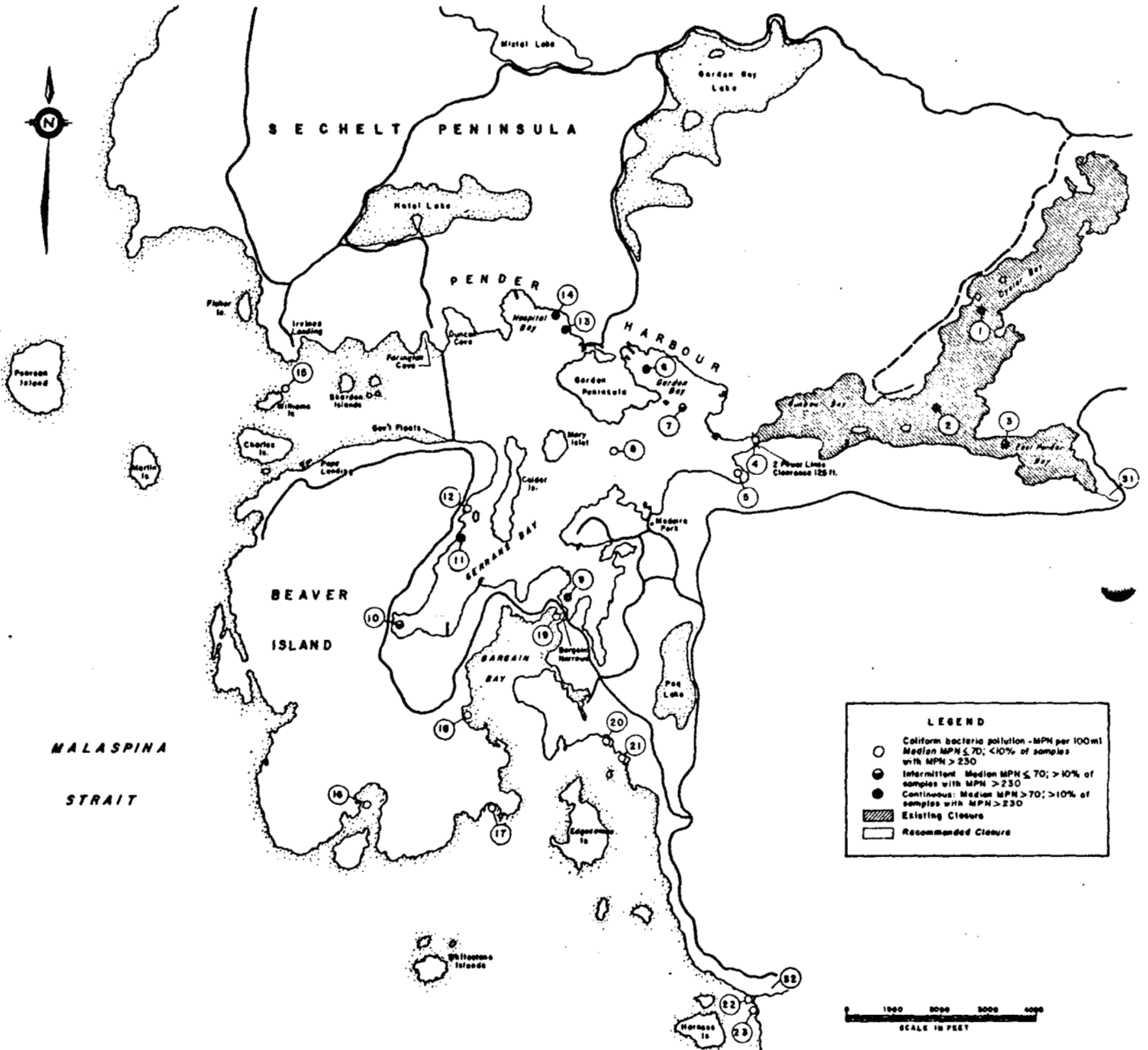


FIGURE 2 PENDER HARBOUR SAMPLE STATION LOCATIONS

3.1 Bacteriological Sampling and Analysis

All samples for bacteriological analysis were collected in sterile 6-ounce wide-mouth jars approximately six inches to one foot below the water surface. The water depth at collection points over oyster beds did not exceed four feet. Samples were collected by boat or by wading and stored in coolers at temperatures not exceeding 10°C until processed. Analyses were carried out in the Environmental Protection Service Field Laboratory located at Duncan Cove, and were performed within 2½ hours of collection.

The total confirmed coliform MPN per 100 ml was determined using the multiple tube fermentation technique (at least 3 decimal dilutions of 5 tubes each) as described in Part 407A of the 13th edition of Standard Methods for the Examination of Water and Wastewater.

The fecal coliform MPN per 100 ml was determined as described in Part 407C of Standard Methods. Incubation was for 24 ± 2 hours in a circulating water bath maintained at 44.5 ± 0.2°C.

Media used for the coliform MPN determinations was Lauryl Tryptose Broth and Brilliant Green Bile (2%) Broth for the confirmed test, and EC medium for the fecal coliform test.² The MPN/100 ml of each sample was calculated from Table II, Recommended Procedures for the Examination of Sea Water and Shellfish, Fourth edition (1970).

3.2 Chemical and Physical Sampling and Analysis

Temperature and salinity measurements were made at a depth of 6" to one foot below the water surface using

² All test media was Bacto brand, obtained from Difco Laboratories, Detroit, Michigan.

test equipment carried in the boat. The temperature and salinity were determined with a Yellow Springs Instrument Co. Model 33 Salinity, Conductance and Temperature Meter. Results are presented in Appendix II. Tides were calculated from the Canadian Hydrographic Service Tide and Current Tables using Point Atkinson as the reference port. Rainfall data was provided by the Madeira Park Forestry Station at Madeira Park.

4. DISCUSSION OF RESULTS

Sample station locations are shown in Figures 1 and 2. Descriptions of marine and fresh water sample stations are found in Tables 5 and 6 respectively in Appendix I. Daily bacteriological and elemental data for each sample station is presented in Appendix II. Total and fecal coliform MPN results for marine samples are summarized in Tables 1 and 2 respectively. Bacteriological results for fresh water samples are summarized in Tables 3 and 4.

As a point of interest and future reference, fecal coliform data is summarized (Table 6, Appendix II) in terms of the two most recently proposed fecal coliform growing water standards presently under consideration by the National Shellfish Sanitation Program (U.S. Food and Drug Administration).

The present National Shellfish Sanitation Program growing water bacteriological standard is defined as follows: "In order that an area can be considered bacteriologically safe for the harvesting of shellfish, the total confirmed coliform median MPN of the water must not exceed 70 per 100 ml, and not more than 10 percent of the samples ordinarily exceed an MPN of 230 per 100 ml for a 5-tube decimal test in those portions of the area most probably exposed to fecal contamination during the most unfavourable hydrographic and pollution conditions. The foregoing limits need not be applied if it can be shown by

TABLE 1: SUMMARY OF STANDARD TOTAL COLIFORM MPN DATA FOR SHELLFISH GROWING WATER SAMPLES

Sample Station	Number of Samples	MPN Range	Median MPN per 100 ml	90th Percentile MPN per 100 ml
1	7	33-540	130	407
2	7	31-920	79	521
3	6	70-540	295	540
4	6	22-170	68	146
5	11	13-350	46	106.9
6	15	< 1.8-920	79	350
7	15	4.5-540	33	350
8	11	2-240	33	106
9	6	33-240	110	198
10	12	7.8-920	41	460
11	14	12->1600	205	768
12	10	4.5-130	49	70
13	14	1.8->1600	104.5	692
14	14	7.8-540	135	350
15	10	< 1.8-70	7.9	33
16	11	2-130	7.8	26
17	11	< 1.8-130	23	49
18	11	4.5-170	14	120.3
19	10	4-79	15.5	49
20	10	6.8-130	15	43
21	10	4.5-79	9.5	33
22	10	< 1.8-23	14	23
23	10	2-79	6.2	17
24	6	< 1.8-130	30	94
25	6	< 1.8-6.1	1.9	3.6
26	6	< 1.8-70	2	34.6
27	6	< 1.8-46	4.9	28.6
28	6	4.5-350	210	350
29	6	4-49	26.9	47.2
30	6	11-79	28	51.4

TABLE 2: SUMMARY OF FECAL COLIFORM MPN DATA FOR SHELLFISH GROWING WATER SAMPLES

Sample Station	Number of Samples	MPN Range	Median MPN per 100 ml	90th Percentile MPN per 100 ml
1	7	13-240	49	106.3
2	7	6.8-140	46	76.3
3	6	22-540	150	426
4	6	1.8-49	13.2	39.4
5	11	< 1.8-27	4.5	7.7
6	15	< 1.8-280	11	64
7	15	2-350	6.8	71.5
8	11	< 1.8-46	4.5	12.8
9	6	2-130	56	99.4
10	12	< 1.8-920	14	206
11	14	1.8-31	4.5	23
12	10	< 1.8-17	2	17
13	14	< 1.8-1600	15	67
14	14	< 1.8-33	7.8	33
15	10	< 1.8-17	2	2
16	11	< 1.8-130	2	17.9
17	11	< 1.8-130	4.5	31
18	11	1.8-49	4.5	13
19	10	< 1.8-49	3.3	22
20	10	< 1.8-4.5	1.9	2
21	10	< 1.8-11	2	7.8
22	10	< 1.8-23	3.3	17
23	10	< 1.8-4.5	< 1.8	2
24	6	< 1.8-79	5.9	38.2
25	6	< 1.8-4	< 1.8	2.7
26	6	< 1.8-7.8	1.9	5.8
27	6	< 1.8-2	< 1.8	2
28	6	< 1.8-240	25.5	16.2
29	6	< 1.8-1.8	1.8	1.8
30	6	< 1.8-79	1.9	36.3

TABLE 3: SUMMARY OF STANDARD TOTAL COLIFORM MPN DATA FOR FRESHWATER SAMPLES

Sample Station	Number of Samples	MPN Range	Median MPN per 100 ml
S ₁	5	13-79	33
S ₂	4	700-1300	1,200

TABLE 4: SUMMARY OF FECAL COLIFORM MPN DATA FOR FRESHWATER SAMPLES

Sample Station	Number of Samples	MPN Range	Median MPN per 100 ml
S ₁	5	7.8-49	7.8
S ₂	4	230-790	595

detailed study that the coliforms are not of direct fecal origin and do not indicate a public health hazard."³ In addition, a comprehensive sanitary survey of the area is required to identify and evaluate all sources of pollution.

A total of 283 marine and 9 freshwater samples were collected for bacteriological analysis during the survey period. A minimum of six samples were collected from each marine station.

On the basis of bacteriological standards, sample stations 1, 2, 3, 6, 7, 9, 10, 11, 13, 14 and 28 do not fall within the acceptable water quality limits (Table 1). All of these stations except one were situated in Pender Harbour. The one exception was station 28 in Agamemnon Bay.

All of the remaining stations surveyed came well within the acceptable water quality limits. Surprisingly, these included station 24, which had boat counts of up to 18. This can be attributed to the good tidal flushing in this area. It may be noted by referring to Appendix II that a direct daily relationship existed between the number of boats present and the water quality at this location.

5. SOURCES OF POLLUTION

5.1 Oyster Bay, Gunboat Bay, East Pender Bay

Sample stations 1, 2, 3, 4, and S1 were located here. There are a number of permanent and part-time residences in this area. However, no obvious direct discharges were found and most of the dwellings had septic tanks and tile fields.

3 National Shellfish Sanitation Program Manual of Operations. Part 1. Sanitation of Shellfish Growing Areas. 1965 Revision. U.S. Department of Health, Education and Welfare.

Both Oyster Bay and East Pender Bay have freshwater inputs, which pass through grazing land, and are therefore susceptible to animal fecal contamination. The stream into Oyster Bay was not sampled since the tides inundated the mouth of the stream, making it difficult to obtain a sample representative of the pollution input from the grazed area. However, in East Pender Bay, the situation was more obvious. The stream passes through property belonging to the Malaspina Ranch, which maintains horses for hire. Horse manure was in evidence near the stream and water samples taken at the mouth had a total confirmed median MPN of 1,200/100 ml (4 samples), which was the highest recorded anywhere during the survey. The bacterial contribution of this stream to the receiving waters was observed at station 3, where the confirmed coliform median MPN was 295/100 ml, which was double that recorded at the head of Oyster Bay. Pigs and chickens also have access to the tidal flats from a barn located near the foreshore.

One may observe by again referring to Appendix II, Station 4, that the MPN counts were always the highest on the ebb tide and the lowest on the flood, thus indicating that there is a net outflow of polluted water to the outer harbour.

5.2 Garden Bay

The main onshore establishments at Garden Bay are the Home Oil Co. Marina and the Garden Bay Hotel. The laundromat at the former has a septic tank and tile field. The hotel has a septic tank and outfall pipe to the bay carrying the effluent of up to 100 persons. The cottages adjacent to the hotel are serviced by three tile fields which have been recently installed.

There is a good relationship between precipitation and the bacterial counts obtained at sample station 6 (figure 3), indicating the influence of landwash on the water quality of the bay. It is probable that sewage discharges from boats moored at the Home Oil Co. Marina about 200 feet from or anchored in the vicinity of sample station 6 had as much if not more influence on the bacteriological levels obtained during the survey period. The number of boats equipped with toilets varied between 23 and 60 (Sample Station 6, Table 8, Appendix II), and averaged 4 occupants per boat.

Station 7 at the entrance to Garden Bay exhibited the highest bacterial levels on the ebb tide. Boats with toilets moored at Clayton's Marina in the north-east part of the bay undoubtedly contributed to the intermittent unacceptably high coliform counts recorded for Station 7.

5.3 Hospital Bay

Water samples from Stations 13 and 14 exceeded the bacteriological standard with total confirmed median MPN's of 104.5/100 ml and 135/100 ml respectively.

One direct sewage discharge pipe into the bay from a house onshore from Station 13 was identified and three other piped discharges entering the foreshore waters were found just east of Station 13.

In the N.E. corner of the bay there is a government dock and two marinas. The number of boats equipped with toilets varied between 16 and 26 (Sample Station 13, Table 8, Appendix II) at these three facilities and were undoubtedly contributors to the high coliform counts recorded for Station 13. The store at Lloyd's Store and Marina has an outfall to the bay from a septic tank. All the other onshore facilities in this area are serviced by septic tanks and tile fields.

Several private docks are situated in the N.W. corner of the bay. The highest boat count recorded in this area was 5. It is unlikely that these boats contributed substantially to the coliform counts recorded for Station 14.

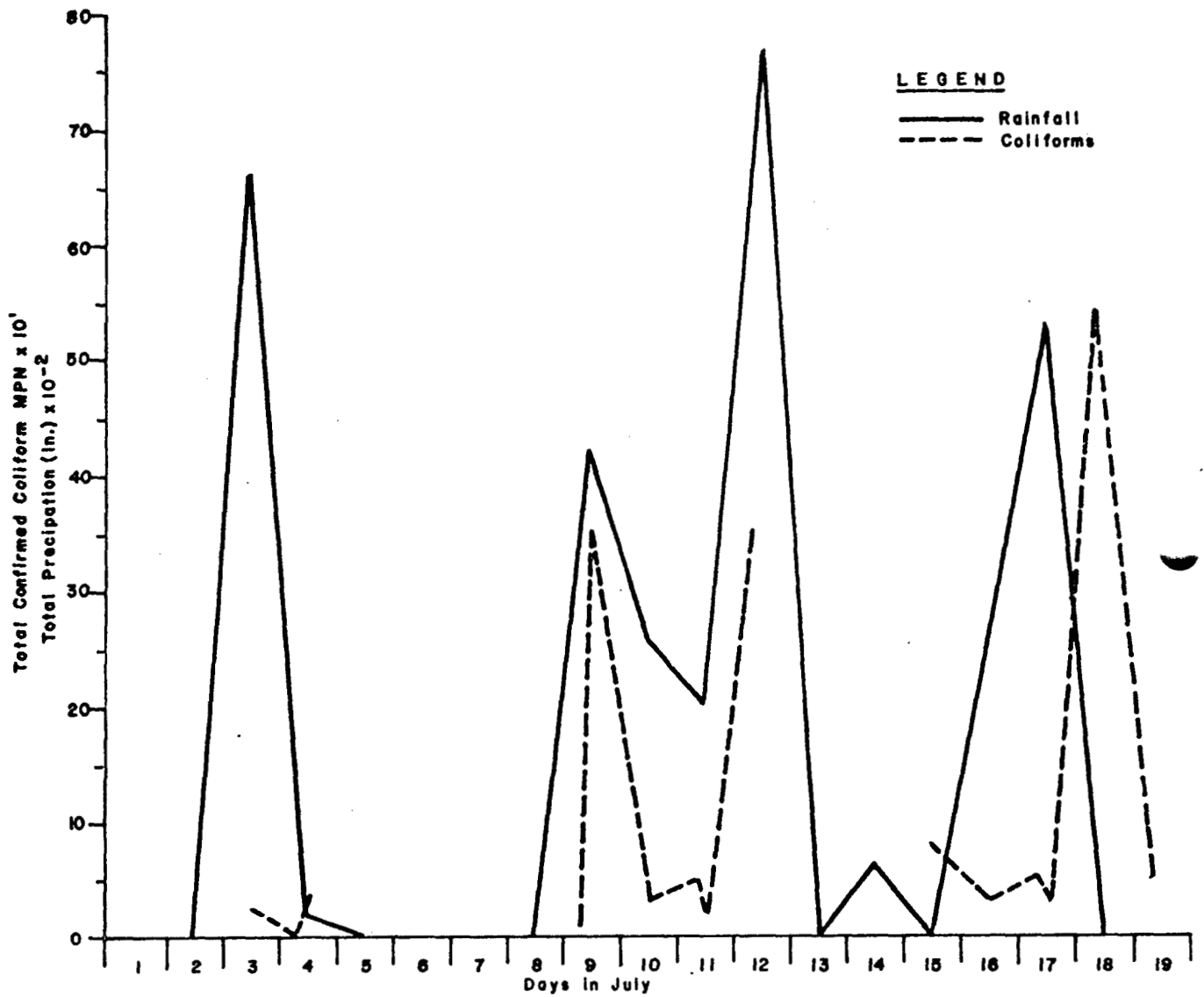


FIGURE 3 CORRELATION BETWEEN RAINFALL AND TOTAL CONFIRMED COLIFORM MPN AT GARDEN BAY

5.4 Gerrans Bay Area

The water quality was unacceptable at Stations 9, 10 and 11. At Station 10 high bacterial densities occurred coincident with heavy precipitation and/or ebbing tides. Ebb tides consistently carried away more contaminants than the flood tide returned, thus indicating the source of pollution to be onshore and most probably the result of septic tank seepage. Some horse manure was found on the land adjacent to the station. Apparently horses are grazed there periodically.

Local residents reported that all the houses in the area (approximately 15 residences) have septic tanks with tile fields. However, this area has a high angle of repose, which could be a contributing factor to the problem.

The contamination observed at Station 9 appeared to be localized as Station 19, located on the southern side of Bargain Narrows, had acceptable water quality. There is little evidence to attribute the bacterial counts to landwash, i.e. no correlation with precipitation. The most probable source of contaminants reaching this station would be from boats moored at the marina to the north. There is some tidal flushing from this area into Gerrans Bay and the main channel of Pender Harbour.

The unacceptably high counts recorded at Station 11 can be attributed to septic tank tile field seepage from the houses located on the steep banks overlooking this station.

5.5 Other Stations in Pender Harbour

Station 8, located at mid-channel near the southern tip of Garden Peninsula, minimally meets acceptable water quality standards. Generally, the poorest water quality was observed at the end of the ebb tide, but in some instances high counts were recorded on the incoming tide, thus suggesting little flushing action on these occasions. The water tested at Station 15 at the mouth of the harbour was acceptable.

5.6 Other Points

A few unacceptable counts were recored in Agamemnon Bay. Since dwellings in the area are serviced by septic tanks and tile fields, and since the boat counts were low, the problem can be justifiably attributed to seepage. The British Columbia Fishery Regulation Schedule J 400 foot foot wharf closure will apply to the marina in Agamemnon Bay and this closure embraces most of the shellfish resource observed in the area.

At Earl's Cove, the B.C. Ferry Terminal washroom facilities are sewerred by septic tank with an outfall to the cove. Sewage from the ferries is discharged directly to the sea. The shellfish resource is minimal and the main health hazard is contained by the 400 foot Schedule J closure applied to the Ferry dock.

Bacteriological results from the other sampling stations were acceptable and there was no pollution sources of significance that might pose a health hazard. Specific attention was given to the commercial oyster relay area on the mainland foreshore opposite Harness Island which is influenced by freshwater stream S₂. The bacteriological results for Stations 22 and 23 in the oyster relay area were acceptable.

6. CONCLUSIONS

- a) The present area 16-1 in Schedule J is supported by bacteriological data taken during the month of July. The main source of contamination in East Pender Bay emanates from Malaspina Ranch.
- b) Most of the remaining waters of Pender Harbour outside the present Schedule J closure are of unacceptable quality for the direct consumption of shellfish. Much of this may be attributed to raw sewage discharges from moored boats. This

factor would be lessened during the winter when there are fewer boats present. However, sewage discharges from land to the harbour continue to pose a threat, and landwash contamination will be greater in winter due to higher rainfall.

- c) With the exception of the waters at Station 28 in Agamemnon Bay, all the waters sampled in the outlying areas were of an acceptable quality for the direct consumption of shellfish.

7. RECOMMENDATIONS

- a) Contaminated area 16-1 should be extended to read: "that portion of Pender Harbour contained by a line drawn from the southermost tip of the point between Farrington Cove and Duncan Cove to the government floats at Donnelly Landing on the northern tip of Beaver Island and by the bridge at Bargain Narrows".
- b) The pollution sources from the Malaspina Ranch should be rectified. Following rectification a further survey should be conducted to determine if the present Schedule J closure respecting Oyster Bay and East Pender Bay should be rescinded.

8. REFERENCES

- 1. Recommended Procedures for the Examination of Sea Water and Shellfish, 1970, 4th ed. Amer. Public Health Assoc., New York.
- 2. Standard Methods for the Examination of Water and Wastewater, 1971, 13th ed. Amer. Public Health Assoc., New York.

3. National Shellfish Sanitation Program Manual of Operations, Part I, Sanitation of Shellfish Growing Areas, 1965. Revision, U.S. Department of Health, Education and Welfare.

ACKNOWLEDGEMENTS

B. Kay, Bacteriologist, and M. Gaertner, Bacteriological Technician, conducted the bacteriological analyses in the Environmental Protection Service mobile laboratory located at Duncan Cove. Mr. Kay compiled the bacteriological data.

D. Arney, Biological Technician, and K. Cooper, Engineering Technician conducted the sanitary survey and carried out the sampling program.

APPENDIX I

SAMPLE STATION LOCATIONS DESCRIPTION

Table 5 Description of Marine Sample Stations

Table 6 Description of Freshwater Sample Stations

TABLE 5: DESCRIPTION OF MARINE SAMPLE STATIONS

<u>Sample Station</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Location</u>
1	49°38'04"	123°59'40"	Middle of the channel off the Oyster Bay Oyster Co.
2	49°37'43.5"	123°59'55.5"	Middle of the channel at the entrance to Oyster Bay
3	49°37'35.5"	123°59'31.5"	In the neck of East Pender Bay
4	49°37'37.5"	124°00'52"	Middle of the channel under the power lines at the entrance to Gunboat Bay
5	49°37'29.5"	124°00'58"	In the small cove SE of the entrance channel to Gunboat Bay
6	49°37'51.5"	124°01'27"	Middle of Garden Bay opposite the gothic arch house on the north shore
7	49°37'43"	124°01'15.5"	Middle of the channel at the entrance to Garden Bay
8	49°37'34"	124°01'39"	Middle of the channel in line with the two B.C. Tel underwater cable markers off the southern tip of Garden Peninsula
9	49°37'03"	124°01'52"	Off the northern entrance to Bargain Narrows
10	49°36'58"	124°02'47"	Middle of the channel about 100' off the floats at the head of Gerran's Bay
11	49°37'16.5"	124°02'28"	Off the green house on pilings on Beaver Island just opposite the southern tip of Calder Island
12	49°37'22.5"	124°02'25"	Halfway between Beaver Island and the northern tip of the small island between Beaver Island and Calder Island

TABLE 5: DESCRIPTION OF MARINE SAMPLE STATIONS (CONT'D)

Sample Station	Latitude	Longitude	Location
13	49°38'00.5"	124°01'54"	Off pink house on north shore of Hospital Bay
14	49°38'03"	124°01'58"	Off the dilapidated wharf on the north shore of Hospital Bay
15	49°37'47.5"	124°03'25"	In the channel between William's Island and Henry Point
16	49°36'20.5"	124°02'56.5"	Head of tidal bay at south end of Beaver Island
17	49°36'20"	124°02'17"	Small cove at SE tip of Beaver Island
18	49°36'39.5"	124°02'26"	The larger unnamed cove in Bargain Bay next to Beaver Island
19	49°37'00"	124°01'57.5"	Just off Canoe Pass at the head of Bargain Bay
20	49°36'34"	124°01'39"	Opposite the grey house in the unnamed bay pointed to by the northern tip of Edgecombe Island
21	49°36'31"	124°01'34.5"	Opposite yellow house in the same bay as station #20
22	49°35'41"	124°00'53.5"	Off stream at Bremer's lease
23	49°35'38"	124°00'51"	Off the southern end of Bremer's lease
24	49°43'50"	124°12'43"	Head of unnamed anvil-shaped cove opposite Fox Island on Hardy Island
25	49°43'48"	124°12'35"	At the mouth of the above named cove
26	49°49'54"	124°03'05"	Cove on NW tip of Junction Island
27	49°52'08"	124°00'54"	Off the proposed Harris lease on mainland north of the northern tip of the Harmony Islands

TABLE 5: DESCRIPTION OF MARINE SAMPLE STATIONS (CONT'D)

<u>Sample Station</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Location</u>
28	49°45'11"	123°59'36"	Off yellow house in Agamemnon Bay
29	49°44'33"	124°03'22"	Off the brown house on Nelson Island just in from Caldwell Island
30	49°49'36"	124°04'46"	Off the waterfall input in Green Bay on Nelson Island

TABLE 6: DESCRIPTION OF FRESHWATER SAMPLE STATIONS

<u>Sample Station</u>	<u>Location</u>
S ₁	Stream into East Pender Bay
S ₂	Stream into the oyster relay area opposite Harness Island.

APPENDIX II

BACTERIOLOGICAL RESULTS AND SAMPLING CONDITIONS

Table 7 Summary of Fecal Coliform MPN Data for proposed
Shellfish growing water standards

Table 8 Bacteriological Analyses Results and Sampling Conditions
for Marine Samples

TABLE 7: SUMMARY OF FECAL COLIFORM MPN DATA FOR PROPOSED SHELLFISH GROWING WATER STANDARDS *

Sample Station	Number of Samples	MPN Range	Median MPN per 100 ml	% Exceeding 43 MPN/100 ml	% Exceeding 76 MPN/100 ml
1	7	13-240	44	57.1	14.3
2	7	6.8-140	46	57.1	14.3
3	6	22-540	150	66.6	66.6
4	6	1.8-49	13.2	14.3	0.0
5	11	<1.8-27	9.3	0.0	0.0
6	15	<1.8-280	11	40.0	0.0
7	15	2-350	6.8	20.0	9.9
8	11	<1.8-46	4.5	9.1	0.0
9	6	2-130	23	50.0	5.0
10	12	<1.8-920	14	25.0	16.6
11	14	1.8-31	4.5	0.0	0.0
12	10	<1.8-17	2	0.0	0.0
13	14	<1.8-1600	7.5	21.3	14.3
14	14	1.8-33	7.8	0.0	0.0
15	10	<1.8-17	2	0.0	0.0
16	11	<1.8-130	2	9.1	9.1
17	11	<1.8-130	4.5	9.1	9.1
18	11	1.8-13	4.5	0.0	0.0
19	10	<1.8-49	3.3	10.0	0.0
20	10	<1.8-4.5	1.9	0.0	0.0
21	10	<1.8-11	2	0.0	0.0
22	10	<1.8-23	3.3	0.0	0.0
23	10	<1.8-4.5	<1.8	0.0	0.0
24	6	<1.8-79	6.9	16.6	16.6
25	6	<1.8-4	<1.8	0.0	0.0
26	6	<1.8-7.8	1.9	0.0	0.0
27	6	<1.8-2	<1.8	0.0	0.0
28	6	<1.8-240	25.5	50.0	33.3
29	6	<1.8-<1.8	<1.8	0.0	0.0
30	6	<1.8-79	1.9	16.6	16.6
S ₁	5	7.8-49	7.8	40.0	0.0
S ₂	4	230-790	595	100.0	100.0

* U.S. Food and Drug Administration proposed standards per 100 ml

- (1) Proposed at Microbiology Task Force Meeting, June, 1973, median MPN of 23, 90 percentile of 76.
- (2) Proposed at 8th National Shellfish Sanitation Workshop median MPN of 14, 90 percentile of 43.

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 1

Location: North end of Oyster Bay

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		Boat Count
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal	
July 3	1635	1149	1.0	16	0.66	E @ 2	10/10	Calm	24.3	220	49	--
		1937	13.3									
July 4	0945	0452	11.8	15	0.02	SE @ 8	10/10	Calm	14.2	540	49	--
		1224	1.1									
July 4	1415	1224	1.1	16.5	0.02	W @ 8	8/10	Ripple	15.9	350	240	--
		2012	13.3									
July 5	1420	1304	1.3	20.5	Nil	SE @ 7	2/10	Ripple	15.3	49	13	--
		2037	13.4									
July 8	1315	0752	10.7	18	Nil	W @ 5	10/10	Light Wave	14.2	130	17	--
		1439	3.1									
July 9	0900	0852	10.2	19.5	0.42	N @ 1	10/10	Calm	15.9	33	13	--
		1509	4.0									
July 9	1610	1509	4.0	18	0.42	Nil	10/10	Calm	14.2	79	49	--
		2107	13.7									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 2		Location: Entrance to Oyster Bay									
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht. (Ft.)							MPN/100 ml	Boat Count
July 3	1640	1149	1.0	16	0.66	E @ 2	10/10	Calm	24.3	350	46
		1937	13.3								
July 4	0950	0452	11.8	15	0.02	S @ 2	9/10	Calm	15.9	920	140
		1224	1.1								
July 4	1420	1224	1.1	16.5	0.02	W @ 7	8/10	Ripple	15.9	49	49
		2012	13.3								
July 5	1430	1304	1.3	18	Nil	W @ 10	2/10	Light Wave	18.0	49	6.8
		2037	13.4								
July 8	1335	0752	10.7	18	Nil	W @ 7	10/10	Ripple	15.9	130	6.8
		1439	3.1								
July 9	0905	0852	10.2	19.5	0.42	Nil	10/10	Calm	15.9	31	6.8
		1509	4.0								
July 9	1615	1509	4.0	17	0.42	Nil	9/10	Calm	14.2	79	49
		2107	13.7								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 3 Location: East Pender Bay

Date (1974)	Sample Time	Tide		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		Boat Count
		Conditions Time	Ht.(Ft.)							MPN/100 ml	Total Fecal	
July 4	1000	0452	11.8	16	0.02	SSE @ 1	9/10	Calm	20.8	540	540	--
		1224	1.1									
July 4	1630	1224	1.1	17	0.02	W @ 10	5/10	Ripple	19.9	110	22	--
		2012	13.3									
July 5	1615	1304	1.3	18.5	Nil	SW @ 7	2/10	Ripple	17.3	70	23	--
		2037	13.4									
July 8	1325	0752	10.7	19	Nil	W @ 8	10/10	Light Wave	19.0	240	130	--
		1439	3.1									
July 9	0855	0852	10.2	20	Nil	Calm	10/10	Calm	16.5	540	170	--
		1509	4.0									
July 9	1620	1509	4.0	17.5	Nil	Calm	8/10	Calm	14.2	350	350	--
		2107	13.7									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 4

Location: Entrance to Gunboat Bay

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		Boat Count
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal	
July 17 1055	1039	1.1		16	0.53	Nil	9/10	Calm	13.5	170	33	--
	1817	13.1										
July 17 1545	1039	1.1		16.5	0.53	Nil	1/10	Calm	14.7	22	1.8	--
	1817	13.1										
July 18 0915	0352	13.3		16.5	Nil	Nil	10/10	Calm	13.5	110	49	--
	1129	-0.7										
July 18 1505	1129	-0.7		17.5	Nil	W @ 2	10/10	Calm	14.2	22	17	--
	1857	13.5										
July 19 0945	0452	13.4		17	Nil	S @ 15	1/10	Calm	13.5	130	9.3	--
	1259	-0.7										
July 19 1420	1259	-0.7		17.5	Nil	S @ 4	0/10	Calm	14.2	26	4.5	--
	1932	13.9										

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 5 Location: Cove SE of entrance to Gunboat Bay

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform MPN/100 ml Total Fecal	Boat Count	
		Time	Ht. (Ft.)									
July 11	1005	0534	5.8	17	0.20	Nil	6/10	Calm	15.3	46	<1.8	3
		1102	9.5									
July 11	1550	1102	9.5	18	0.20	Nil	10/10	Calm	15.3	350	6.8	--
		1624	6.4									
July 12	0955	0624	4.9	17	0.77	Nil	10/10	Calm	15.3	32	4	--
		1137	9.6									
July 15	1420	0859	0.9	17.5	Nil	Nil	10/10	Calm	16.5	23	2	--
		1647	11.8									
July 16	0900	0147	12.8	17	0.25	SW @ 1	10/10	Calm	24.3	13	<1.8	--
		0949	0.9									
July 16	1430	0949	0.9	17	0.25	SE @ 7	10/10	Calm	15.9	110	4.5	--
		1737	12.5									
July 17	1050	1039	1.1	17	0.53	Nil	10/10	Calm	15.9	79	27	--
		1817	13.1									
July 17	1545	1039	1.1	17	0.53	SE @ 5	1/10	Ripple	14.7	17	4.5	--
		1817	13.1									
July 18	0910	0352	13.3	16.5	Nil	Nil	10/10	Calm	14.2	46	7.8	--
		1129	-0.7									
July 18	1500	1129	-0.7	17.5	Nil	W @ 2	5/10	Ripple	14.2	49	2	--
		1857	13.5									
July 19	1420	1259	-0.7	17.5	Nil	NW @ 4	0/10	Ripple	14.2	17	6.8	--
		1932	13.9									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 6 Location: Head of Garden Bay

Date (1974)	Sample Time	Tide		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count	
July 3	1615	1149	1.0	16	0.66	E @ 8	10/10	Light Wave	25.7	350	4	--
		1937	13.3									
July 4	0930	0452	11.8	16	0.02	SE @ 2	10/10	Calm	20.8	7.8	<1.8	--
		1224	1.1									
July 4	1400	1224	1.1	16	0.02	S @ 1	9/10	Calm	21.9	<1.8	<1.8	23
		2012	13.3									
July 9	0910	0852	10.2	20	0.42	NE @ 1	10/10	Calm	15.3	6.8	4	38
		1509	4.0									
July 9	1450	0852	10.2	18	0.42	W @ 3	10/10	Calm	15.3	920	280	38
		1509	4.0									
July 10	1440	0947	9.8	17.5	0.27	SW @ 3	10/10	Ripple	13.5	79	49	46
		1444	5.2									
July 11	1015	0534	5.8	17.5	0.20	Nil	7/10	Calm	15.3	46	2	46
		1102	9.5									
July 11	1555	1102	9.5	18	0.20	SE @ 6	10/10	Ripple	15.9	130	33	46
		1624	6.4									
July 12	1000	0624	4.9	17	0.77	Nil	10/10	Calm	15.3	350	33	32
		1137	9.6									
July 15	1425	0859	0.9	17.5	Nil	S @ 2	10/10	Calm	16.5	130	49	31
		1647	11.8									
July 16	1435	0949	0.9	17.5	0.25	Nil	10/10	Calm	15.9	350	49	37
		1737	12.5									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 6 (Cont'd)		Location: Head of Garden Bay										
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform MPN/100 ml		Boat Count
		Time	Ht.(Ft.)							Total	Fecal	
July 17	1000	0247	13.1	16	0.53	Nil	10/10	Calm	14.7	33	11	60
		1039	1.1									
July 17	1540	1039	1.1	17	0.53	E @ 5	1/10	Ripple	15.3	46	2	49
		1817	13.1									
July 18	0905	0352	13.3	16.5	Nil	NW @ 1	10/10	Nil	15.3	23	2	43
		1129	-0.7									
July 19	0935	1452	13.4	17	Nil	SW @ 7	1/10	Ripple	13.5	240	79	44
		1259	-0.7									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 7		Location: Entrance to Garden Bay										
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform MPN/100 ml	Boat Count	
		Time	Ht.(Ft.)									Total Fecal Count
July 3	1620	1149	1.0	15	0.66	E @ 8	10/10	Light Wave	25.7	23	4.5	--
		1937	13.3									
July 4	0935	0452	11.8	15	0.02	S @ 2	10/10	Calm	19.9	4.5	2	--
		1224	1.1									
July 4	1405	1224	1.1	16	0.02	S @ 7	8/10	Ripple	21.9	33	4.5	--
		2012	13.3									
July 9	0915	0852	10.2	18	0.42	Nil	10/10	Calm	15.3	11	4.5	11
		1509	4.0									
July 9	1455	0852	10.2	18	0.42	Nil	10/10	Ripple	15.3	350	110	11
		1509	4.0									
July 10	1445	1444	5.2	17.5	0.27	SE @ 8	10/10	Ripple	13.5	33	7.8	9
		2237	13.5									
July 11	1010	0534	5.8	18	0.20	Nil	7/10	Calm	15.3	49	4.5	13
		1102	9.5									
July 11	1555	1102	9.5	18	0.20	SE @ 4	10/10	Ripple	15.9	23	2	--
		1624	6.4									
July 12	0955	0624	4.9	17	0.77	Nil	10/10	Calm	15.3	350	14	12
		1137	9.6									
July 15	1420	0859	0.9	18	Nil	SW @ 4	10/10	Ripple	15.9	79	11	7
		1647	11.8									
July 16	1435	0949	0.9	17	0.25	SW @ 4	10/10	Ripple	15.9	31	4.5	--
		1737	12.5									

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TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 7 (Cont'd)		Location: Entrance to Garden Bay										
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Boat Count	
July 17	0955	0247	13.1	16	0.53	W @ 4	10/10	Calm	14.7	49	6.8	21
		1039	1.1									
July 17	1535	1039	1.1	17	0.53	E @ 15	1/10	Ripple	14.7	33	33	17
		1817	13.1									
July 18	0910	0352	13.3	16.5	Nil	W @ 1	10/10	Calm	13.0	540	350	--
		1129	-0.7									
July 19	0930	0452	13.4	17	Nil	SW @ 8	1/10	Ripple	13.0	46	23	13
		1259	-0.7									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES
Over B.C. Tel cable south of
Sample Station: 8 Location: Garden Peninsula

Date (1974)	Sample Time	Tide		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Boat Count	
July 11	1000	0534	5.8	17	0.20	Nil	6/10	Calm	15.3	240	<1.8	--
		1102	9.5									
July 11	1545	1102	9.5	17.5	0.20	SW @ 4	10/10	Ripple	14.7	110	2	--
		1624	6.4									
July 12	0950	0624	4.9	17	0.77	Nil	10/10	Calm	14.7	49	7.8	--
		1137	9.6									
July 15	1415	0859	0.9	18	Nil	E @ 2	10/10	Calm	15.9	13	4.5	--
		1647	11.8									
July 16	1430	0949	0.9	16.5	0.25	E @ 10	10/10	Ripple	15.9	11	4.5	--
		1737	12.5									
July 17	1025	0247	13.1	16	0.53	N @ 4	10/10	Ripple	14.7	33	11	--
		1039	1.1									
July 17	1530	1039	1.1	16.5	0.53	E @ 8	1/10	Ripple	14.2	2	<1.8	--
		1817	13.1									
July 18	0920	0352	13.3	16.5	Nil	S @ 4	10/10	Ripple	13.5	70	46	--
		1129	-0.7									
July 18	1500	1129	-0.7	17.5	Nil	S @ 6	5/10	Ripple	14.2	33	<1.8	--
		1857	13.5									
July 19	1010	0452	13.4	17	Nil	SW @ 7	1/10	Ripple	14.2	33	4.5	--
		1259	-0.7									
July 19	1425	1259	-0.7	17.5	Nil	W @ 2	0/10	Ripple	14.2	46	13	--
		1932	13.9									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 9 Location: Northern entrance to Bargain Narrows

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count
July 17	1020	0247	13.1	16	0.53	NW @ 1	10/10	Calm	14.7	240	79
		1039	1.1								
July 17	1355	1039	1.1	17	0.53	E @ 7	4/10	Calm	14.7	33	2
		1817	13.1								
July 18	0925	0352	13.3	16.5	Nil	S @ 3	10/10	Ripple	13.5	170	130
		1129	-0.7								
July 18	1450	1129	-0.7	19	Nil	S @ 4	5/10	Calm	13.5	79	13
		1857	13.5								
July 19	0950	0452	13.4	18	Nil	SE @ 3	1/10	Calm	13.5	110	33
		1259	-0.7								
July 19	1445	1259	-0.7	19	Nil	SE @ 5	0/10	Calm	14.2	110	79
		1932	13.9								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 10		Location: Head of Gerran's Bay										
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count	
July 11	0940	0534	5.8	17.5	0.20	E @ 2	7/10	Ripple	14.7	140	21	--
		1102	9.5									
July 11	1425	1102	9.5	18	0.20	Nil	10/10	Calm	14.7	49	14	1
		1624	6.4									
July 12	0940	0624	4.9	17	0.77	Nil	10/10	Calm	14.2	920	920	1
		1137	9.6									
July 15	1400	0859	0.9	18	Nil	Nil	10/10	Calm	17.3	17	<1.8	--
		1647	11.8									
July 16	0905	0147	12.8	17	0.25	Nil	10/10	Calm	14.7	31	13	--
		0949	0.9									
July 16	1335	0949	0.9	17.5	0.25	W @ 2	10/10	Calm	15.9	7.8	7.8	--
		1737	12.5									
July 17	1015	0247	13.1	16.5	0.53	Nil	10/10	Calm	14.2	540	240	--
		1039	1.1									
July 17	1350	1039	1.1	17	0.53	N @ 3	5/10	Calm	14.7	7.8	7.8	--
		1817	13.1									
July 18	0935	0352	13.3	17	Nil	SW @ 2	10/10	Calm	13.5	14	14	--
		1129	-0.7									
July 18	1435	1129	-0.7	18	Nil	Nil	5/10	Calm	13.5	49	13	--
		1857	13.5									
July 19	1000	0452	13.4	17.5	Nil	E @ 1	1/10	Calm	14.2	110	70	--
		1259	-0.7									
July 19	1430	1259	-0.7	17.5	Nil	S @ 2	0/10	Calm	14.7	33	33	--
		1932	13.9									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 11 Location: tip of Calder Island Green house on Beaver Island opposite southern

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Boat Count	
July 4	1445	1224	1.1	17	0.02	S @ 2	7/10	Calm	20.8	170	2	--
		2012	13.3									
July 9	0925	0852	10.2	18	Nil	Nil	10/10	Calm	15.3	12	2	--
		1509	4.0									
July 9	1445	0852	10.2	18	0.42	NE @ 3	10/10	Ripple	15.9	540	1.8	--
		1509	4.0									
July 10	1435	0947	9.8	18	0.27	SW @ 6	10/10	Ripple	13.5	920	4.5	--
		1444	5.2									
July 11	0945	0534	5.8	17.5	0.20	N @ 2	5/10	Calm	15.3	79	6.8	--
		1102	9.5									
July 11	1420	1102	9.5	18	0.20	SW @ 4	9/10	Ripple	14.7	540	2	--
		1624	6.4									
July 12	0945	0624	4.9	17.5	0.77	Nil	10/10	Calm	14.7	240	23	--
		1137	9.6									
July 15	1405	0859	0.9	18	Nil	Nil	10/10	Calm	18.0	170	6.8	--
		1647	11.8									
July 16	1330	0949	0.9	17	0.25	Nil	10/10	Calm	15.3	540	<1.8	--
		1737	12.5									
July 17	1010	0247	13.1	16	0.53	Nil	10/10	Calm	14.7	540	23	--
		1039	1.1									
July 17	1345	1039	1.1	17.5	0.53	S @ 3	5/10	Calm	14.7	110	31	--
		1817	13.1									

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TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 11 (Cont'd) Location: tip of Calder Island Green house on Beaver Island opposite southern

Date (1974)	Sample Time	Tide		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Conditions Time	Ht.(Ft.)							MPN/100 ml	Total Fecal Count	
July 18	0935	0352	13.3	16.5	Nil	SW @ 5	10/10	Ripple	13.5	23	4.5	--
		1129	-0.7									
July 18	1430	1129	-0.7	18	Nil	S @ 10	5/10	Ripple	13.5	>1600	4.5	--
		1857	13.5									
July 19	0955	0452	13.4	17	Nil	E @ 5	1/10	Ripple	14.2	41	17	--
		1259	-0.7									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 12 Location: Between Beaver Island and the N tip of small island between Beaver Island and Calder Island

Date (1974)	Sample Time	Tide		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht. (Ft.)							MPN/100 ml	Boat Count
July 4	1445	1224	1.1	16.5	0.02	SW @ 6	6/10	Calm	21.9	4.5	< 1.8
		2012	13.3								
July 9	0925	0852	10.2	20	0.42	Nil	10/10	Calm	14.7	23	2
		1509	4.0								
July 9	1445	0852	10.2	18	0.42	N @ 2	10/10	Ripple	15.3	130	17
		1509	4.0								
July 11	0955	0534	5.8	17	0.20	Nil	6/10	Calm	15.3	23	2
		1102	9.5								
July 11	1420	1102	9.5	18	0.20	SW @ 15	9/10	Ripple	14.7	49	4.5
		1624	6.4								
July 12	0945	0624	4.9	17	0.77	Nil	10/10	Calm	14.7	33	4.5
		1137	9.6								
July 15	1410	0859	0.9	18	Nil	Nil	10/10	Calm	16.5	70	2
		1647	11.8								
July 17	1005	0247	13.1	16	0.53	Nil	10/10	Calm	14.7	49	17
		1039	1.1								
July 17	1340	1039	1.1	17	0.53	SE @ 10	6/10	Ripple	14.2	49	2
		1817	13.1								
July 18	1430	1129	-0.7	18	Nil	S @ 10	6/10	Calm	14.2	49	< 1.8
		1857	13.5								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 13		Location: Off pink house on N shore Hospital Bay										
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count	
July 3	1715	1149	1.0	15	0.66	SW @ 2	8/10	Calm	25.7	14	2	--
		1937	13.3									
July 4	0920	0452	11.8	15	0.02	SW @ 4	10/10	Calm	19.9	1.8	< 1.8	25
		1224	1.1									
July 4	1345	1224	1.1	17	0.02	SSE @ 4	10/10	Ripple	20.8	49	7.8	25
		2012	13.3									
July 9	0850	0409	7.5	18	0.42	Nil	10/10	Calm	15.3	49	13	17
		0852	10.2									
July 9	1505	0852	10.2	18	0.42	Nil	10/10	Ripple	15.3	240	4.5	17
		1509	4.0									
July 11	1030	0534	5.8	17	0.20	Nil	9/10	Calm	15.3	49	2	--
		1102	9.5									
July 11	1605	1102	9.5	18	0.20	Nil	10/10	Ripple	15.3	79	79	26
		1624	6.4									
July 12	1010	0624	4.9	17	0.77	Nil	10/10	Calm	15.3	920	33	22
		1137	9.6									
July 15	1435	0859	0.9	17.5	Nil	Nil	10/10	Calm	16.5	130	33	16
		1647	11.8									
July 16	1455	0949	0.9	17.5	0.25	Nil	10/10	Light Swell	15.9	79	7.8	26
		1737	12.5									
July 17	0945	0247	13.1	16	0.53	Nil	10/10	Calm	14.2	240	23	26
		1039	1.1									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 13 (Cont'd)		Location: Off pink house on N shore Hospital Bay									
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht. (Ft.)							MPN/100 ml	Boat Count
July 17	1330	1039	1.1	16.5	0.53	W @ 4	6/10	Calm	13.5	350	49
		1817	13.1								
July 18	1000	0352	13.3	16.5	Nil	SW @ 3	9/10	Ripple	13.5	>1600	1600
		1129	-0.7								
July 19	1015	0452	13.4	17	Nil	W @ 5	1/10	Ripple	14.2	240	17
		1259	-0.7								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 14 Location: Off dilapidated wharf on N shore Hospital Bay

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform MPN/100 ml Total Fecal	Boat Count
		Time	Ht. (Ft.)								
July 3	1710	1149	1.0	15	0.66	SW @ 2	8/10	Calm	25.7	9.3	4
		1937	13.3								
July 4	0925	0452	11.8	15	0.02	SW @ 2	10/10	Calm	19.9	27	1.8
		1224	1.1								
July 4	1345	1224	1.1	16	0.02	SE @ 4	10/10	Ripple	21.9	7.8	<1.8
		2012	13.3								
July 9	0845	0409	7.5	18	0.42	NE @ 1	10/10	Calm	15.3	540	7.8
		0852	10.2								
July 9	1505	0852	10.2	18	0.42	Nil	10/10	Ripple	15.3	240	4
		1509	4.0								
July 11	1025	0534	5.8	17	0.20	Nil	9/10	Light Swell	15.3	350	33
		1102	9.5								
July 11	1605	1102	9.5	17.5	0.20	Nil	10/10	Calm	15.3	17	7.8
		1624	6.4								
July 12	1005	0624	4.9	17	0.77	Nil	10/10	Calm	15.3	49	7.8
		1137	9.6								
July 15	1430	0859	0.9	18	Nil	Nil	10/10	Calm	16.5	140	4.5
		1647	11.8								
July 16	1445	0949	0.9	17.5	0.25	NE @ 2	10/10	Ripple	15.9	170	11
		1737	12.5								
July 17	0945	0247	13.1	15.5	0.53	Nil	10/10	Calm	26.5	130	33
		1039	1.1								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 14 (Cont'd) Location: Off dilapidated wharf on N shore Hospital Bay

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Boat Count	
July 17	1335	1039	1.1	16.5	0.53	E @ 4	6/10	Ripple	13.5	33	4.5	--
		1817	13.1									
July 18	0955	0352	13.3	16.5	Nil	S @ 3	9/10	Ripple	13.5	350	17	--
		1129	-0.7									
July 19	1015	0452	13.4	17	Nil	NW @ 5	1/10	Ripple	14.2	140	33	--
		1259	-0.7									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 15 Location: Channel between Williams Island and Henry Point

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		Boat Count
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal	
July 4	1605	1224	1.1	15.5	0.02	S @ 5	4/10	Ripple	20.8	< 1.8	< 1.8	--
		2012	13.3									
July 9	0930	0852	10.2	19.5	0.42	Nil	10/10	Light Swell	14.2	< 1.8	< 1.8	--
		1509	4.0									
July 9	1440	0852	10.2	18	0.42	Nil	10/10	Ripple	15.3	7.8	2	--
		1509	4.0									
July 11	1035	0534	5.8	17	0.20	SW @ 3	9/10	Light Swell	15.3	17	2	--
		1102	9.5									
July 11	1405	1102	9.5	18	0.20	SE @ 2	7/10	Ripple	14.2	< 1.8	< 1.8	--
		1624	6.4									
July 12	1020	0624	4.9	17	0.77	Nil	10/10	Calm	15.3	22	2	--
		1137	9.6									
July 15	1445	0859	0.9	17	Nil	S @ 2	10/10	Calm	16.5	33	2	--
		1647	11.8									
July 17	0940	0247	13.1	15.5	0.53	Nil	10/10	Calm	24.3	4.5	2	--
		1039	1.1									
July 17	1615	1039	1.1	16.5	0.53	E @ 3	3/10	Light Wave	14.2	7.8	< 1.8	--
		1817	13.1									
July 19	1020	0452	13.4	17	Nil	NW @ 7	1/10	Light Swell	14.2	70	17	--
		1259	-0.7									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 16		Location: The tidal bay at S end of Beaver Island									
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht. (Ft.)							MPN/100 ml	Boat Count
July 3	1520	1149	1.0	15	0.66	S @ 15	8/10	Ripple	21.9	9.2	<1.8
		1937	13.3								
July 4	1545	1224	1.1	16	0.02	S @ 3	4/10	Ripple	20.8	7.8	2
		2012	13.3								
July 9	0940	0852	10.2	19.5	0.42	S @ 4	10/10	Ripple	13.5	17	13
		1509	4.0								
July 9	1420	0852	10.2	17.5	0.42	S @ 7	10/10	Ripple	14.2	7.8	4.5
		1509	4.0								
July 11	0925	0534	5.8	16	0.20	Nil	9/10	Calm	14.7	27	17
		1102	9.5								
July 11	1510	1102	9.5	17	0.20	SW @ 2	10/10	Ripple	15.3	6.8	<1.8
		1624	6.4								
July 12	0905	0624	4.9	16	0.77	Nil	10/10	Calm	14.2	130	130
		1137	9.6								
July 15	1340	0859	0.9	17.5	Nil	NE @ 2	10/10	Calm	14.7	2	<1.8
		1647	11.8								
July 16	1400	0949	0.9	16.5	0.25	Nil	10/10	Calm	15.3	2	<1.8
		1737	12.5								
July 17	1420	1039	1.1	17	0.53	S @ 15	1/10	Ripple	13.5	4.5	<1.8
		1817	13.1								
July 18	1405	1129	-0.7	18	Nil	SW @ 4	6/10	Calm	12.5	4.5	2
		1857	13.5								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 17 Location: Small cove at SE tip of Beaver Island

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht.(Ft.)							MPN/100 ml	Total Fecal Count
July 3	1510	1149	1.0	15	0.66	SE @ 10	8/10	Light Wave	21.9	49	11
		1937	13.3								
July 4	1115	0452	11.8	15	0.02	SE @ 2	10/10	Small Wave	21.9	23	2
		1224	1.1								
July 4	1540	1224	1.1	19.5	0.02	S @ 6	4/10	Light Chop	21.9	27	4.5
		2012	13.3								
July 9	0955	0852	10.2	19.5	0.42	E @ 8	10/10	Light Swell	13.5	11	<1.8
		1509	4.0								
July 9	1345	0852	10.2	17.5	0.42	SE @ 2	10/10	Light Chop	14.2	130	130
		1509	4.0								
July 11	0930	0534	5.8	16.5	0.20	Nil	9/10	Calm	14.7	6.8	1.8
		1102	9.5								
July 11	1520	1102	9.5	17	0.20	SE @ 10	9/10	Light Swell	15.3	33	13
		1624	6.4								
July 12	0915	0624	4.9	16.5	0.77	Nil	10/10	Calm	14.7	23	7.8
		1137	9.6								
July 15	1345	0859	0.9	17	Nil	SE @ 5	10/10	Ripple	15.3	<1.8	<1.8
		1647	11.8								
July 16	1355	0949	0.9	17	0.25	W @ 1	10/10	Light Swell	15.3	49	33
		1737	12.5								
July 18	1415	1129	-0.7	19	Nil	SE @ 7	6/10	Light Wave	13.0	23	4.5
		1857	13.5								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 18
 Location: next to Beaver Island
 Larger unnamed cove in Bargain Bay

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count
July 3	1440	1149	1.0	15	0.66	E @ 1	10/10	Calm	20.8	33	13
		1937	13.3								
July 4	1045	0452	11.8	15	0.02	ESE @ 1	10/10	Calm	20.8	14	4.5
		1224	1.1								
July 4	1510	1224	1.1	17	0.02	SE @ 1	5/10	Calm	21.9	7.8	4.5
		2012	13.3								
July 9	1010	0852	10.2	17.5	0.42	Nil	10/10	Calm	14.7	4.5	4.5
		1509	4.0								
July 9	1350	0852	10.2	18	0.42	Nil	10/10	Calm	14.2	23	13
		1509	4.0								
July 11	0850	0534	5.8	16.5	0.20	Nil	9/10	Calm	13.5	130	4.5
		1102	9.5								
July 11	1445	1102	9.5	18	0.20	NW @ 2	10/10	Ripple	14.7	17	4
		1624	6.4								
July 12	0920	0624	4.9	16.5	0.77	Nil	10/10	Calm	14.2	170	49
		1137	9.6								
July 15	1350	0859	0.9	18	Nil	Nil	10/10	Calm	16.5	11	11
		1647	11.8								
July 16	1350	0949	0.9	17.5	0.25	N @ 2	10/10	Ripple	15.3	11	1.8
		1737	12.5								
July 17	1410	1039	1.1	17	0.53	N @ 10	2/10	Calm	13.0	9.3	2
		1817	13.1								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 19 Location: Off Canoe Pass at head of Bargain Bay

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		Boat Count
		Time	Ht.(Ft.)							MPN/100 ml	Total Fecal	
July 3	1435	1149	1.0	15	0.66	E @ 1	10/10	Calm	20.8	4	<1.8	---
		1937	13.3									
July 4	1040	0452	11.8	15	0.02	S @ 3	9/10	Calm	20.8	17	2	---
		1224	1.1									
July 4	1505	1224	1.1	17	0.02	SE @ 6	6/10	Ripple	21.9	7.8	2	---
		2012	13.3									
July 9	1000	0852	10.2	18	0.42	S @ 3	10/10	Calm	14.7	6.8	<1.8	---
		1509	4.0									
July 9	1350	0852	10.2	18	0.42	E @ 2	10/10	Calm	13.5	79	22	---
		1509	4.0									
July 11	0845	0534	5.8	17	0.20	Nil	9/10	Calm	13.5	49	7.8	---
		1102	9.5									
July 11	1445	1102	9.5	18	0.20	SE @ 17	10/10	Calm	14.7	33	11	---
		1624	6.4									
July 12	0925	0624	4.9	17	0.77	Nil	10/10	Calm	14.7	14	2	---
		1137	9.6									
July 15	1355	0859	0.9	18	Nil	Nil	10/10	Calm	17.3	49	49	---
		1647	11.8									
July 16	1345	0949	0.9	17	0.25	NE @ 2	10/10	Ripple	15.3	7.8	4.5	---
		1737	12.5									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 20 Off grey house in unnamed bay
 Location: north of Edgecombe Island

Date (1974)	Sample Time	Tide		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Conditions Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count
July 3	1450	1149	1.0	15.5	0.66	E @ 1	9/10	Calm	20.8	17	4.5
		1937	13.3								
July 4	1055	0452	11.8	15	0.02	SE @ 1	10/10	Ripple	20.8	6.8	2
		1224	1.1								
July 4	1515	1224	1.1	16.5	0.02	SE @ 5	4/10	Ripple	19.9	11	<1.8
		2012	13.3								
July 5	1330	1304	1.3	17.5	Nil	Nil	2/10	Calm	18.0	13	<1.8
		2037	13.4								
July 8	1400	0752	10.7	18	Nil	S @ 2	10/10	Ripple	14.2	130	<1.8
		1439	3.1								
July 9	1015	0852	10.2	18	0.42	SE @ 2	10/10	Light Swell	14.2	11	<1.8
		1509	4.0								
July 9	1400	0852	10.2	18	0.42	SE @ 1	10/10	Ripple	14.2	33	2
		1509	4.0								
July 10	1355	0947	9.8	17	0.27	SW @ 4	10/10	Ripple	13.5	43	2
		1444	5.2								
July 11	0855	0534	5.8	16.5	0.20	Nil	9/10	Calm	14.2	23	2
		1102	9.5								
July 11	1450	1102	9.5	17	0.20	SE @ 15	10/10	Light Wave	14.7	7.8	<1.8
		1624	6.4								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 21 Location: Off yellow house in same bay as 20

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		Boat Count
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal	
July 3	1445	1149	1.0	15	0.66	E @ 1	9/10	Calm	20.8	33	4.5	---
		1937	13.3									
July 4	1055	0452	11.8	15	0.02	S @ 2	10/10	Ripple	20.8	11	2	---
		1224	1.1									
July 4	1520	1224	1.1	17	0.02	SE @ 7	4/10	Ripple	20.8	4.5	2	---
		2012	13.3									
July 5	1335	1304	1.3	17.5	Nil	SW @ 1	2/10	Calm	18.0	13	<1.8	---
		2037	13.4									
July 8	1405	0752	10.7	18	Nil	SW @ 2	10/10	Calm	14.2	7.9	1.8	---
		1439	3.1									
July 9	1015	0852	10.2	20	0.42	NW @ 2	10/10	Light Swell	13.5	4.5	<1.8	---
		1509	4.0									
July 9	1400	0852	10.2	18	0.42	Nil	10/10	Ripple	14.2	4.5	2	---
		1509	4.0									
July 10	1400	0947	9.8	17	0.27	SE @ 1	10/10	Ripple	13.5	33	11	---
		1444	5.2									
July 11	0900	0534	5.8	16.5	0.20	Nil	9/10	Calm	14.7	7.8	2	---
		1102	9.5									
July 11	1455	1102	9.5	17.5	0.20	SE @ 10	10/10	Light Wave	14.7	46	7.8	---
		1624	6.4									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 22 Location: Off stream at Bremer's Lease

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform MPN/100 ml		Boat Count
		Time	Ht. (Ft.)							Total	Fecal	
July 3	1500	1149	1.0	15	0.66	SE @ 15	9/10	Calm	20.8	17	4.5	--
		1937	13.3									
July 4	1105	0452	11.8	15	0.02	S @ 3	10/10	Ripple	20.8	17	17	--
		1224	1.1									
July 4	1530	1224	1.1	16.5	0.02	SSE @ 4	4/10	Ripple	19.9	23	<1.8	--
		2012	13.3									
July 5	1345	1304	1.3	17.5	Nil	SW @ 7	2/10	Ripple	18.0	<1.8	<1.8	--
		2037	13.4									
July 8	1415	0752	10.7	18	Nil	SW @ 1	9/10	Calm	13.5	7.8	2	--
		1439	3.1									
July 9	1020	0852	10.2	19.5	0.42	Nil	10/10	Light Swell	13.5	11	6.8	--
		1509	4.0									
July 9	1405	0852	10.2	17.5	0.42	SE @ 1	10/10	Ripple	14.2	4.5	<1.8	--
		1509	4.0									
July 10	1410	0947	9.8	17	0.27	S @ 1	10/10	Ripple	13.5	11	1.8	--
		1444	5.2									
July 11	0905	0534	5.8	16.5	0.20	Nil	8/10	Calm	14.7	23	23	--
		1102	9.5									
July 11	1500	1102	9.5	17	0.20	Nil	10/10	Calm	15.3	23	4.5	--
		1624	6.4									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 23 Location: Southern end of Bremer's Lease

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform MPN/100 ml	Boat Count
		Time	Ht. (Ft.)								
July 3	1500	1149	1.0	15	0.66	SE @ 15	9/10	Calm	20.8	4	2
		1937	13.3								
July 4	1110	0452	11.8	15	0.02	S @ 6	10/10	Ripple	20.8	17	2
		1224	1.1								
July 4	1530	1224	1.1	15.5	0.02	S @ 10	4/10	Ripple	19.0	11	<1.8
		2012	13.3								
July 5	1350	1304	1.3	17.5	Nil	SW @ 7	1/10	Ripple	17.3	4.5	2
		2037	13.4								
July 8	1415	0752	10.7	18	Nil	Nil	9/10	Calm	13.0	7.8	<1.8
		1439	3.1								
July 9	1025	0852	10.2	18	0.42	Nil	10/10	Light Swell	14.2	2	<1.8
		1509	4.0								
July 9	1410	0852	10.2	17.5	0.42	SE @ 2	10/10	Light Swell	14.2	13	4.5
		1509	4.0								
July 10	1410	0947	9.8	17	0.27	SE @ 3	10/10	Ripple	14.2	4.5	<1.8
		1444	5.2								
July 11	0910	0534	5.8	16.5	0.20	Nil	8/10	Light Swell	14.7	2	<1.8
		1102	9.5								
July 11	1505	1102	9.5	17	0.20	Nil	10/10	Calm	15.3	79	<1.8
		1624	6.4								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 24 Location: Cove opposite Fox Island on Hardy Island

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count	
July 3	0850	0422	11.9	15	0.66	E @ 1	10/10	Calm	--	130	79	12
		1149	1.0									
July 5	0935	0547	11.9	15.5	Nil	Nil	1/10	Calm	20.8	< 1.8	< 1.8	3
		1304	1.3									
July 8	0910	0752	10.7	17	Nil	Nil	7/10	Calm	21.9	< 1.8	< 1.8	7
		1439	3.1									
July 10	0940	0454	6.7	17.5	0.27	Nil	10/10	Calm	14.7	11	4	13
		0947	9.8									
July 15	0950	0859	0.9	18	Nil	Nil	10/10	Ripple	15.3	49	7.8	18
		1647	11.8									
July 16	0955	0949	0.9	17	0.25	Nil	10/10	Calm	15.3	70	11	14
		1737	12.5									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 25		Location: Mouth of cove off Fox Island on Hardy Island										
Date (1974)	Sample Time	Tide		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Conditions Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count	
July 3	0855	0422	11.9	16	0.66	E @ 1	10/10	Calm	---	6.1	4	--
		1149	1.0									
July 5	0940	0547	11.9	15	Nil	S @ 0-6	1/10	Ripple	20.8	<1.8	<1.8	--
		1304	1.3									
July 8	0910	0752	10.7	17	Nil	SE @ 2	7/10	Ripple	21.9	<1.8	<1.8	--
		1439	3.1									
July 10	0950	0947	9.8	17.5	0.27	Nil	10/10	Calm	15.3	1.8	<1.8	--
		1444	5.2									
July 15	0955	0859	0.9	18	Nil	SE @ 4	10/10	Ripple	15.3	2	<1.8	--
		1647	11.8									
July 16	1055	0949	0.9	17	0.25	Nil	10/10	Calm	15.3	2	<1.8	--
		1737	12.5									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 26		Location: Cove off NW tip of Junction Island										
Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count	
July 3	1055	0422	11.9	17	0.66	E @ 2	10/10	Calm	---	70	4.5	1
		1149	1.0									
July 5	1010	0547	11.9	16.5	Nil	Nil	3/10	Ripple	18.0	2	<1.8	--
		1304	1.3									
July 8	0940	0752	10.7	18	Nil	Nil	5/10	Calm	18.0	<1.8	<1.8	--
		1439	3.1									
July 10	1015	0947	9.8	17	0.27	Nil	10/10	Calm	15.9	11	7.8	--
		1444	5.2									
July 15	1025	0859	0.9	17	Nil	Nil	10/10	Calm	14.7	2	2	--
		1647	11.8									
July 16	1035	0949	0.9	17.5	0.25	Nil	10/10	Calm	15.3	<1.8	<1.8	--
		1737	12.5									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 27

Location: Off Harris Lease

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		Boat Count
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal	
July 3	1030	0422	11.9	17	0.66	NE @ 3	10/10	Light Chop	---	46	<1.8	--
		1149	1.0									
July 5	1020	0547	11.9	16.5	Nil	SSE @ 4	4/10	Ripple	18.0	17	2	1
		1304	1.3									
July 8	0955	0752	10.7	18.5	Nil	Nil	5/10	Calm	16.5	<1.8	<1.8	4
		1439	3.1									
July 10	1030	0947	9.8	16.5	0.27	Nil	10/10	Calm	15.3	2	2	--
		1444	5.2									
July 15	1045	0859	0.9	18	Nil	NE @ 4	10/10	Calm	14.2	<1.8	<1.8	--
		1647	11.8									
July 16	1145	0949	0.9	17.5	0.25	Nil	10/10	Calm	14.7	7.8	<1.8	--
		1737	12.5									

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TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 28

Location: Off yellow house in Agamemnon Bay

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform		Boat Count
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal	
July 3	1005	0422	11.9	16	0.66	Nil	10/10	Calm	---	350	240	2
		1149	1.0									
July 5	1050	0547	11.9	16	Nil	NNE @ 3	2/10	Ripple	21.9	23	2	2
		1304	1.3									
July 8	1025	0752	10.7	17	Nil	N @ 7	8/10	Ripple	19.9	70	2	--
		1439	3.1									
July 10	1055	0947	9.8	17	0.27	Nil	10/10	Calm	15.3	4.5	<1.8	--
		1444	5.2									
July 15	1110	0859	0.9	17	Nil	NE @ 1	10/10	Light Swell	15.3	350	49	--
		1647	11.8									
July 16	1125	0949	0.9	16	0.25	Nil	10/10	Ripple	15.9	350	110	--
		1737	12.5									

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES
 Off brown house on Nelson Island
 Location: in from Caldwell Island

Sample Station: 29

Date (1974)	Sample Time	Tide		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht.(Ft.)							MPN/100 ml	Total Fecal Count
July 3	0950	0422	11.9	15	0.66	Nil	10/10	Calm	---	46	<1.8
		1149	1.0								
July 5	1100	0547	11.9	16	Nil	N @ 6	1/10	Light Swell	21.9	46	<1.8
		1304	1.3								
July 8	1035	0752	10.7	17	Nil	NE @ 2	9/10	Light Swell	19.9	4	<1.8
		1439	3.1								
July 10	1110	0947	9.8	17.5	0.27	Nil	10/10	Calm	15.3	4	<1.8
		1444	5.2								
July 15	1130	0859	0.9	17	Nil	Nil	10/10	Calm	15.3	49	<1.8
		1647	11.8								
July 16	1140	0949	0.9	16	0.25	Nil	10/10	Calm	15.9	7.8	<1.8
		1737	12.5								

TABLE 8: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES

Sample Station: 30 Location: Green Bay on Nelson Island
 Off the waterfall input in

Date (1974)	Sample Time	Tide Conditions		Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Sky Cond.	Local Sea Cond.	Salinity (ppt)	Coliform	
		Time	Ht. (Ft.)							MPN/100 ml	Total Fecal Count
July 3	0930	0422	11.9	15	0.66	Nil	10/10	Calm	---	33	2
		1149	1.0								
July 5	1115	0547	11.9	17	Nil	NNE @ 4	3/10	Ripple	19.9	79	79
		1304	1.3								
July 8	1045	0752	10.7	18	Nil	NE @ 4	9/10	Ripple	16.5	23	<1.8
		1439	3.1								
July 10	1130	0947	9.8	19.5	0.27	Nil	10/10	Calm	13.5	33	<1.8
		1444	5.2								
July 12	1145	1137	9.6	17.5	Nil	Nil	9/10	Calm	16.5	23	7.8
		1714	7.7								
July 16	1150	0949	0.9	17	0.25	Nil	10/10	Calm	16.5	11	<1.8
		1737	12.5								

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TABLE 9: BACTERIOLOGICAL ANALYSES RESULTS FOR FRESHWATER SAMPLES

Sample Station: S₁ Location: Stream into East Pender Bay

Date (1974)	Sample Time	Total Precip. (in.)	Coliform MPN/100 ml	
			Total	Fecal
July 17	1730	0.53	1300	490
July 18	1600	Nil	700	700
July 19	1200	Nil	1300	790
July 19	1530	Nil	1100	230

Sample Station: S₂ Location: Stream into oyster relay area
opposite Harness Island.

Date (1974)	Sample Time	Total Precip. (in.)	Coliform MPN/100 ml	
			Total	Fecal
July 16	1415	0.25	46	46
July 17	0915	0.53	79	49
July 17	1430	0.53	33	7.8
July 19	1200	Nil	17	7.8
July 19	1530	Nil	13	7.8