

Core Area Stormwater Quality Program

2022 Report

Capital Regional District | Parks & Environmental Services, Environmental Protection

Including the jurisdictions of:

City of Colwood
Township of Esquimalt
City of Langford
District of Oak Bay
District of Saanich
City of Victoria
Town of View Royal
Esquimalt First Nation
Songhees First Nation
Department of National Defence

Prepared by
Stormwater Quality Program

Capital Regional District
625 Fisgard Street, Victoria, BC V8W 2S6
T: 250.360.3000 | F: 250.360.3079
www.crd.bc.ca

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CORE AREA STORMWATER QUALITY PROGRAM 2022 REPORT

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Terms & Abbreviations

Ag	silver
As	arsenic
CaCO ₃	calcium carbonate
Cd	cadmium
CCME	Canadian Council of Ministers of the Environment
CFU	colony-forming unit
Cn	contaminant concentration
Cr	chromium
CRD	Capital Regional District
Cu	copper
d/s	downstream
DIS	dissolved state
DND	Department of National Defence
ENV	BC Ministry of Environment and Climate Change Strategy
EPT	Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies)
FC	fecal coliform
HBI	Hilsenhoff Biotic Index
Hg	mercury
HPAH	high molecular weight polycyclic aromatic hydrocarbons
ISQG	Interim Sediment Quality Guidelines
LPAH	low molecular weight polycyclic aromatic hydrocarbons
LWMP	Liquid Waste Management Program
MSQG	Marine Sediment Quality Guidelines
NH ₃	ammonia
NO ₂	nitrite
NO ₃	nitrate
PAH	polycyclic aromatic hydrocarbon
Pb	lead
PEL	probable effects level
QA/QC	quality assessment/quality control
SPSO	sewage pump station overflow
SQG	sediment quality guidelines
TOC	total organic carbon
TOT	total state
TEU	toxic equivalent unit
u/s	upstream
WQG	water quality guidelines
Zn	zinc

CORE AREA STORMWATER QUALITY PROGRAM 2022 REPORT

1.0 INTRODUCTION

The Capital Regional District (CRD) Stormwater Quality Program (Program) works to identify and reduce contamination in stormwater, creeks and the ocean through monitoring, assessment, collaboration and education. In the core area, this work fulfills commitments in the Core Area Liquid Waste Management Plan (LWMP) and is done in partnership with participating municipalities and First Nations, with the goal of protecting human health and the environment. Program results are communicated to the participating partners and reports are available on the CRD website (www.crd.bc.ca).

The program assesses stormwater discharges in the core area and assigns priority ratings for mitigative action for municipalities to consider. CRD staff identify contamination and impacts from stormwater through bacterial and chemical sampling. Where contamination is found, CRD staff work with municipal staff to find and eliminate the source. The storm drain systems are owned and operated by the municipalities and the municipalities have the responsibility to carry out remedial measures where possible. In addition, CRD staff also conduct sampling in twelve major watercourses and the near-shore marine environment.

This report summarizes the results of work completed in 2022 (early 2023 data is considered when possible). Water and sediment quality data, including details about sampling locations and how discharges are rated for public health and environmental concern, are available in the Appendices.

2.0 RESULTS AND DISCUSSION

2.1 Stormwater Discharge Evaluations

The Program evaluates water and/or sediment quality in approximately 550 core area stormwater discharges from the coastline between the Colwood-Metchosin border in the west and the Saanich-Central Saanich border in the east, including Esquimalt Lagoon, Esquimalt and Victoria harbours, the Gorge, Portage Inlet and the City of Langford coastline along Saanich Inlet (see Appendix A for locations).

2.1.1 Public Health Ratings

Each year, CRD staff sample a selection of stormwater discharges for analysis of bacterial levels. *E.coli* is measured as an indicator of fecal contamination and possible presence of pathogens. Staff assign a “public health concern rating” to each discharge based on the level of *E.coli* contamination in the discharge flow and potential for the public to contact the flow. While the CRD does not actually evaluate public health risk, this method is used to prioritize the discharges. This service allows appropriate jurisdictions to prioritize remedial measures where they will have the most benefit. Appendix G describes the CRD public health concern rating system.

In 2022, CRD staff sampled 180 stormwater discharges twice for *E.coli* concentrations (in winter and summer). These discharges included those previously rated as high- and moderate-priority, with a subset of low-priority discharges (to monitor for change).

Forty-three percent of the discharges had one or more *E.coli* counts greater than 400 colony forming units (CFU)/100 mL, a level that indicates sources of sewage or animal waste with potential to cause adverse effects for public members engaging in primary recreational activities (e.g., swimming, diving). However, many of these discharges have low flows or are located where there is little risk of public contact. Considering the likelihood for contact, staff assigned the following public health concern ratings to allow prioritization:

- 104 low ratings
- 54 moderate ratings
- 22 high ratings (Table A, Figure B, Figure C)

The number of high-rated discharges continued to decrease in 2022 (Figure A and Table A). The decrease highlights the ongoing efforts by the municipalities to replace, repair and reline old conveyance infrastructure, and work with residents and property owners to repair cross-connections. This decline continued despite aging wastewater and stormwater conveyance infrastructure, and continuing building development and renovations (which create the potential for stormwater-sewage cross-connections).

While the total number of high-rated discharges has decreased by three, nine of the previously high-rated discharges were assigned a lower rating, due to lower bacterial count. Conversely, six discharges were added to the high-rated list, due to newly identified contaminant sources or fluctuation that resulted in higher counts.

Of the 22 high-rated discharges in the core area, 14 have remained high-rated for at least five years. The sources of contamination in these discharges are challenging or costly to repair or remediate, and some discharges have multiple sources of contamination in a single catchment, adding difficulty to finding the sources.

The public health concern ratings for each discharge and bacterial stormwater data, can be found in appendices B and C.

Figure A. Number of Discharges Assigned a High Public Health Concern Rating Over Time

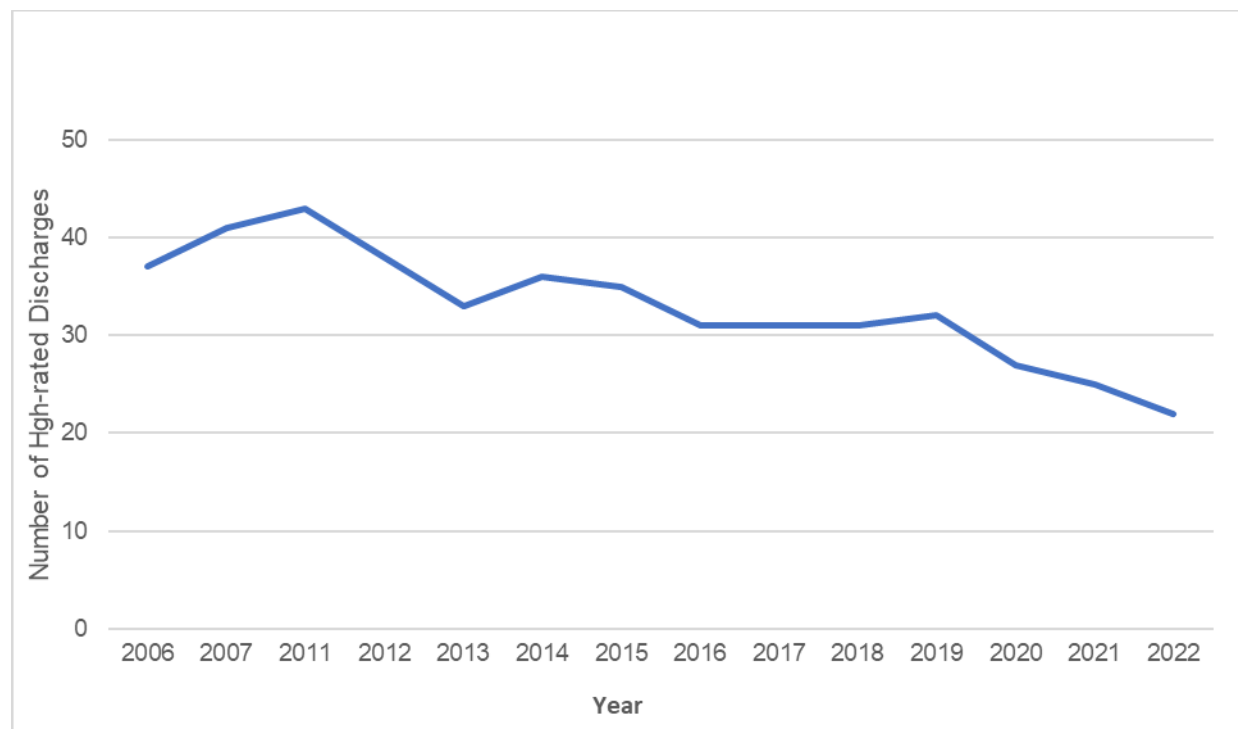


Table A. Number of Discharges with a High Public Health Concern Rating from 2011 to 2022

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of Discharges Assessed	(186)	(114)	(150)	(142)	(152)	(164)	(167)	(168)	(175)	(180)	(175)	(183)
	Number of Discharges Assigned a High Public Health Concern Rating											
Colwood	1	0	0	1	0	0	0	1	0	0	0	0
View Royal	1	1	0	0	0	0	0	0	1	0	0	0
Esquimalt	7	7	8	7	5	6	6	7	5	4	3	4
Esquimalt private ¹	*	*	0	0	1	0	2	1	1	0	0	0
DND	0	0	0	0	0	0	0	0	0	0	0	0
Saanich	2	3	4	5	5	6	4	1	3	4	4	2
Saanich private ¹	*	0	0	0	0	0	0	0	0	0	0	0
Victoria	20	17	13	12	14	11	11	15	14	13	12	13
Victoria private ¹	3	1	1	2	2	2	2	1	1	1	0	0
Oak Bay	9	9	7	9	8	6	6	5	6	5	6	3
Langford	0	0	0	0	0	0	0	0	0	0	0	0
Total	43	38	33	36	35	31	31	31	31	27	25	22

Notes:

¹ Discharges that are not part of the municipal infrastructure are not under municipal jurisdiction and are separated out from the municipal totals.

*Private discharges included in the municipal totals.

Table B. Stormwater Discharges Assigned a High Public Health Concern Rating in 2021 and 2022

Jurisdiction	Stormwater Discharges Rated High for Public Health Concern	
	2021	2022
City of Colwood	-	-
Township of Esquimalt	744B, 805, 806	744B, 780, 805, 806
Township of Esquimalt – private ¹	-	-
City of Langford	-	-
District of Oak Bay	245, 249, 318, 320, 322, 323	245, 318, 322
District of Saanich	503, 505, 580, 581	503, 567
City of Victoria	214, 216, 222, 229, 230, 603, 607, 611, 614, 619, 650, 777A	209, 216, 222, 230, 603, 607, 611, 614, 636, 650, 758A, 775, 777A
City of Victoria – private ¹	-	-
Town of View Royal	-	-
Esquimalt First Nation	-	-
Songhees First Nation	-	-
DND	-	-

Notes:

¹ Discharges that are not part of the municipal infrastructure are not under municipal jurisdiction. Refer to Figure B and Figure C for stormwater discharge locations.

2.1.2 Environmental Concern

Through monitoring and ratings, CRD staff also prioritize stormwater discharges based on their potential for environmental impact. While CRD staff prioritize stormwater discharges based on environmental concern ratings, local governments are responsible for addressing high-rated discharges based on their own priorities.

Environmental concern ratings are based on concentrations of metals and organic contaminants [polycyclic aromatic hydrocarbons (PAH)] relative to sediment quality guidelines (for the protection of marine aquatic life). Contaminants are measured in sediment within the stormwater collection system (e.g., manholes, ditches and creeks). Discharges are sampled for consecutive years until the rating and contaminant(s) are confirmed. Once confirmed, the discharge is targeted for corrective action starting with an investigation to locate the contaminant source(s). Appendix G contains detailed information about the CRD environmental concern rating system. Stormwater sediment data and ratings can be found in Appendix E.

In 2022, CRD staff collected 13 stormwater sediment samples. Based on the concentrations of metals and PAHs, this data resulted in environmental concern ratings, as follows:

- Five were assigned a low rating.
- Six were assigned a moderate rating.
- Two were assigned a high rating.

The discharges assigned high ratings (discharges 655 and 687) have not had high ratings in recent years, therefore, the results will be confirmed in 2023.

CORRECTIVE ACTION LIST

CRD staff make recommendations for corrective action to find and eliminate sources of chemical contamination in a catchment when a rating remains high for two consecutive years and the specific parameter(s) of concern are confirmed. Based on data up to 2022, the CRD recommends 19 discharges for corrective action in the core area (shown in Table C). In 2022, staff removed discharge 874 from the corrective action list as it had lower ratings in 2021 and 2022.

Locations of high-rated discharges in 2022, and those identified for corrective action, are shown in Figure B and Figure C.

The number of discharges recommended for action has fluctuated between 18 to 22 for the past seven years. Many discharges recommended for action have been a concern for more than ten years. Several of the discharges with elevated metals are in large catchments with industrial land use, and along shorelines where historical practices or contaminated fill may have resulted in contamination (e.g., discharges 614, 620, 627, 629, 634, 636). Spills are more common in these areas as well. In addition, sources of contaminants in stormwater sediment can be complex to find and eliminate for the following reasons:

- Sediment is not always present when sampling.
- Contaminant levels fluctuate over time.
- Sources of contamination can occur as non-point sources (e.g., from roadways, parking lots) and transient point sources (e.g., spills).
- Sediment can reflect past practices that are no longer occurring.

In 2019, CRD staff started collecting water samples for contaminant analysis to complement the sediment data and to enable staff to detect more recent practices. Contaminants dissolved in water are often more likely to cause toxicity in aquatic organisms (more bioavailable).

The CRD Source Control education program increases awareness of products used on commercial and private sites that have the potential to leach into surrounding waterways. As well, the use and maintenance of stormwater rehabilitation units (that capture the sediments before they reach the environment) has

increased. The CRD and municipalities will continue to work together to identify and eliminate potential sources of contamination for these discharges.

2.1.3 Aqueous Contaminants in Stormwater Discharges

CRD staff started routinely measuring contaminants in water to provide more information about contaminant concentrations, sources, bioavailability, loadings, and to determine if a source is ongoing or dependent on precipitation. Recent data collected from 2021 and 2022 are provided in Appendix E.

Data from 117 discharges indicated that approximately 30% of stormwater discharges sampled in the core area do not have elevated metals based on comparisons to BC water quality guidelines for protection of aquatic life. Copper was the metal of most concern in CRD discharges—70% of stormwater discharges in the core area had total copper concentrations that were elevated above the BC marine guideline for protection of aquatic life (3 µg/L). Other metals that exceeded BC approved freshwater and/or marine guidelines were iron (15% of samples), zinc (10%), silver (4%), arsenic (3%) and lead (0.5%). Stormwater discharges along Victoria Harbour had the highest concentrations of metals.

CRD staff measured aqueous PAHs in 131 stormwater discharges in the core area. 91% of the discharges did not have an exceedance of a PAH guideline for protection of aquatic life. The majority of discharges that exceeded PAH guidelines were along Victoria Harbour. Pyrene and benzo(a)pyrene were the PAHs with the most exceedances.

While the impact of these storm drain discharges on the marine environment is unknown, CRD staff have measured elevated zinc and copper in three locations in the ocean adjacent to storm drains along Victoria Harbour (between Belleville Street and Jutland Road) that have some of the highest levels of contamination.

The highest concentrations occurred in stormwater discharge 629 along the Victoria shoreline at Rock Bay. An upstream copper measurement at this location was more than 10,000 times greater than the marine water quality guideline. Exceedances for aluminum, cadmium, chromium, iron, lead and zinc were 10 to 100 times greater than guidelines. CRD staff have narrowed down one source of contamination to a block on John Street and City of Victoria staff are investigating further.

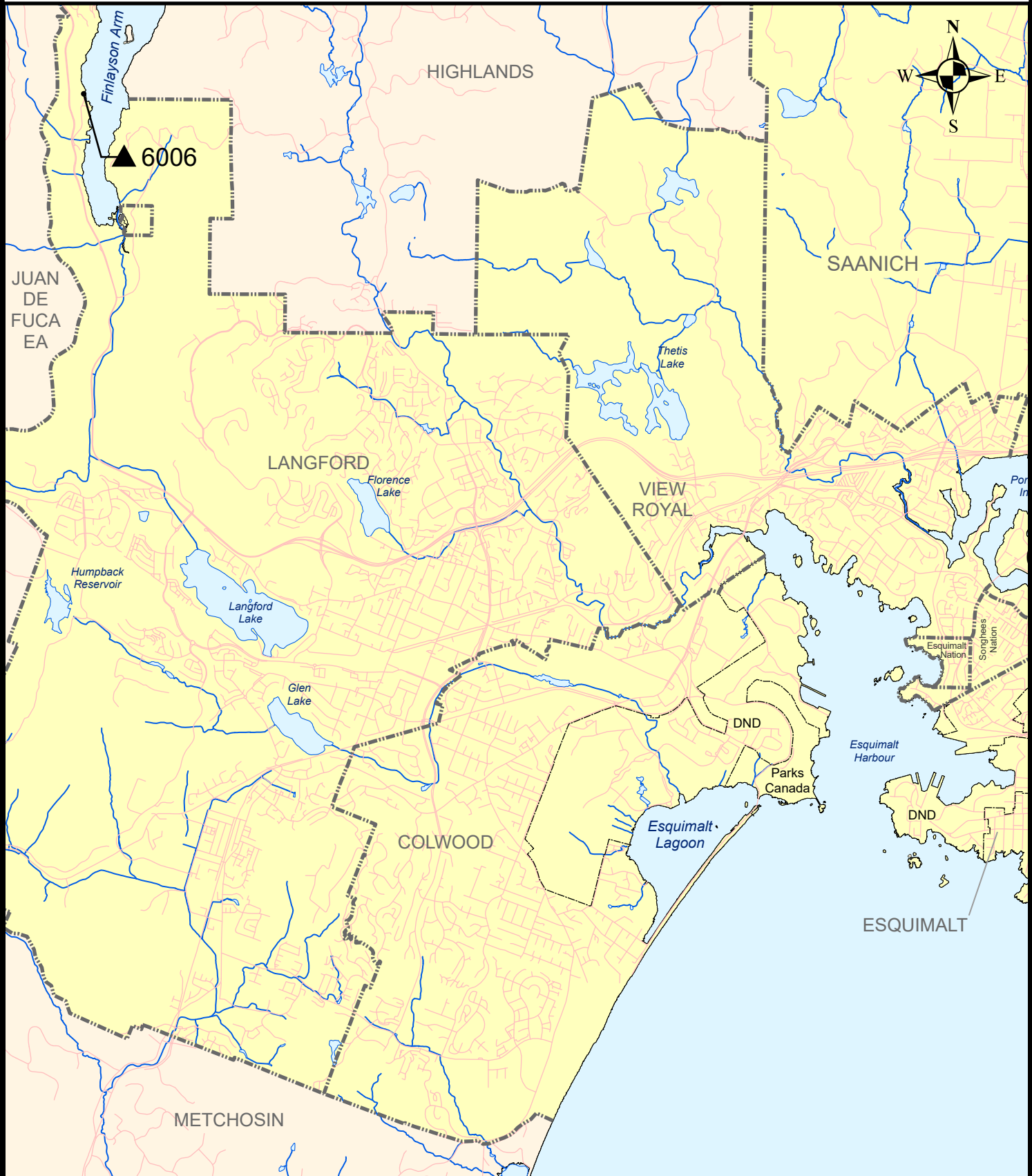
Table C. Discharges Recommended for Action Due to Elevated Sediment Chemical Contaminant Concentrations

Jurisdiction	Discharges Recommended for Corrective Action	Total
City of Colwood	-	0
Township of Esquimalt	737, 742, 749, 806	4
Township of Esquimalt – private ¹	-	0
City of Langford	6006	1
District of Oak Bay	250, 306, 307, 310	4
District of Saanich	505	1
District of Saanich – private ¹	-	-
City of Victoria	603, 614, 620, 627, 629, 633, 634, 636	8
City of Victoria – private ¹	649	1
Town of View Royal	-	0
DND	-	0
Total		19

Notes:

¹ Discharges that drain from private property do not fall under municipal jurisdiction.

Figure B - Core Area 2022
 Stormwater Discharges Requiring Action for Public Health and Environmental Concerns
 (Metchosin to Esquimalt Border)



CRD
 Making a difference...together

Kilometres

0 0.5 1

Projection: UTM ZONE 10N NAD 83

Discharges Requiring Action

- High Public Health Rating
- ▲ High Environmental Rating and/or Recommended for Action

--- Municipal Boundaries

--- DND Boundaries

~ Streams and Rivers

— Roads

■ Stormwater Monitoring Area

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Figure C - Core Area 2022
Stormwater Discharges Requiring Action for Public Health and Environmental Concerns
(Esquimalt to Central Saanich Border)



Kilometres
0 1 2
Projection: UTM ZONE 10N NAD 83

Discharges Requiring Action

- High Public Health Rating
- ▲ High Environmental Rating and/or Recommended for Action

- Municipal Boundaries
- DND Boundaries
- ~ Streams and Rivers
- Roads
- Stormwater Monitoring Area

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2.2 Contaminant Source Investigations

In 2022, CRD staff conducted bacterial source investigations in the catchment areas of seven stormwater discharges. The results of these investigations are presented in Table D.

Six of the seven investigations are ongoing due to the presence of multiple sources, lower bacteria counts or lack of flows available to sample in 2022.

A lot of effort by CRD and Esquimalt staff was dedicated to eliminating sources of sewage entering Gorge Creek through discharge 744B. Esquimalt staff fixed a cross-connection, replaced and relined sections of the sewage infrastructure and installed inspection chambers throughout the catchment. Investigations show improvement in bacterial counts, but a source still exists. In 2023, Esquimalt staff plan to reline more stormwater and sewage pipes in the catchment.

Table D. 2022 Summary of CRD Stormwater Bacterial Source Investigations in the Core Area

Discharge #	Municipality	# of Sampling Events	Investigation Status
230	Oak Bay	1	Ongoing; source intermittent.
567A	Saanich	1	Complete; bacterial counts low and don't account for nearby odours.
607	Victoria	1	Ongoing.
736A	Esquimalt	2	Ongoing; counts low, confirm source.
744	Esquimalt	1	Ongoing.
744B	Esquimalt	10	Ongoing; Esquimalt fixed a source, replaced and relined sections of pipe; another source exists.
777	Victoria/Esquimalt	2	Ongoing; source narrowed; confirm results.

No investigations for sources of metals or other contaminants were conducted in 2022. Many of the discharges with elevated metals are in large catchments with industrial land use and along shorelines where historical practices or contaminated fill may have resulted in contamination (e.g., discharges 614, 620, 627, 629, 634, and 636). Spills are more common in these areas. These sources are challenging to narrow down and remediate.

Overall, CRD staff have narrowed down sources in 11 of the 20 stormwater catchments on the action list and continue to work with municipal staff on eliminating or lessening these sources (see previous reports for detail).

2.3 Major Watercourse Monitoring

CRD staff monitor watercourses to provide information about watershed health to internal CRD, provincial and municipal staff, community groups and the public. In 2022, CRD staff continued to monitor Bee, Bowker, Cecelia, Colquitz, Colwood, Craigflower, Douglas, Hospital, Noble, Selleck and Tod creeks, Goldstream River and Mill Stream. See Appendix F for the watercourse data.

Each year, staff collect water quality data twice at the discharge of each creek, providing a snapshot of creek health conditions in the wet and dry seasons. In addition, staff conduct more comprehensive watershed health assessments in two to three core area watercourses each year, with the goal to assess each watercourse in this manner every five years.

In 2022, CRD staff assessed the health of Colquitz Creek and Colwood Creek watersheds more thoroughly through the following activities:

- measuring water quality at least 5 times in 30 days in both summer and fall at various locations in the watersheds,
- measuring additional water quality parameters, including metals, and
- collecting benthic invertebrate animals for assessment of biological community health.

CRD watercourse data are compared to the British Columbia Ministry of Environment and Climate Change (BC ENV), Water Quality Guidelines (WQG) for protection of freshwater aquatic life. These data were also compared to data from the previous 5-in-30 assessment data. Benthic invertebrate data are submitted to the Canadian Aquatic Biomonitoring Network (CABIN).

2.3.1 Watershed Monitoring Data

CRD data indicate that the water quality parameters of most concern in core area creeks are bacteria, phosphorus, turbidity and metals. Some sites also experience low dissolved oxygen and elevated temperature in the summer. This is consistent with what is seen throughout the region and elsewhere wherever there is increased human presence. The BC ENV Vancouver Island phosphorus objective was exceeded in all CRD creeks, due to human and animal presence in these watersheds.

COLQUITZ CREEK WATERSHED

Water Quality and Benthic Invertebrate Data

Weekly data collected over the summer and fall in Colquitz Creek indicated that land use activities continue to impact water quality and that the parameters of concern were consistent with those measured in 2017 (when the creek was last sampled in this manner).

In 2022, aluminum, copper, iron, zinc, oxygen, phosphorus, suspended solids, temperature, turbidity, and zinc were at concentrations that could result in adverse effects on aquatic life. Bacteria (*E. coli*) were also elevated, indicating sewage presence in the creek. Water quality was particularly poor when samples were taken while it was raining.

The 2022 benthic invertebrate community data collected at the mouth of Colquitz Creek and just downstream of Elk/Beaver Lake had higher population numbers (abundance), but similar representation of sensitive species compared to previous data. However, increases in pollution tolerant species resulted in a higher Hilsenhoff Biotic Index (HBI) in 2022, indicating that organic pollution or nutrients are potentially increasing in the creek.

COLWOOD CREEK WATERSHED

Water Quality and Benthic Invertebrate Data

Water quality in Colwood Creek was poor in 2022 and showed a decline since 2017. Summer drought conditions that extended into the fall resulted in low flows. As a result, no summer water quality data and only four fall data points were collected at the location downstream of Sooke Road (916-1A).

Water quality guideline exceedances were measured for aluminum, copper, dissolved oxygen, *E. coli*, iron, phosphorus, temperature, suspended solids, turbidity and zinc. While most of these parameters also exceeded in 2017, the exceedances occurred upstream, and some were related to improper management of water at a construction site.

The 2017 data indicated that the mouth of the creek was relatively healthy (only *E.coli* and phosphorus were above guidelines). However, the 2022 measurements resulted in exceedances of all the previously mentioned water quality parameters at the mouth.

As well, the average summer water temperatures were higher in 2022 with the biggest change downstream of Glen Lake (the average summer temperatures were 17.4°C in 2017 and 21.3°C in 2022).

The benthic invertebrate community did not exhibit apparent negative changes over the same period except for increases in groups tolerant of reduced oxygen, indicative of organic pollution. Compared to the 2012 and 2017 data, the 2022 benthic invertebrate community data collected at the discharge of Colwood Creek showed increases in population (abundance) and the number of all species (richness) including sensitive taxonomic groups. However, staff measured slight increases in the HBI since 2012 which indicates the amount of organic and nutrient pollution in the stream may have increased, based on species distribution and their tolerance to such pollution.

HYDROMETRIC DATA

Water quality is important in creeks, but hydrological changes and physical alteration are also important. Therefore, flow data are also collected continuously at fixed hydrometric stations in Cecelia, Colquitz (two sites), Colwood, Bowker, Douglas and Hospital creeks. Hydrological data is stored in FlowWorks. For access to this data contact brudolph@crd.bc.ca.

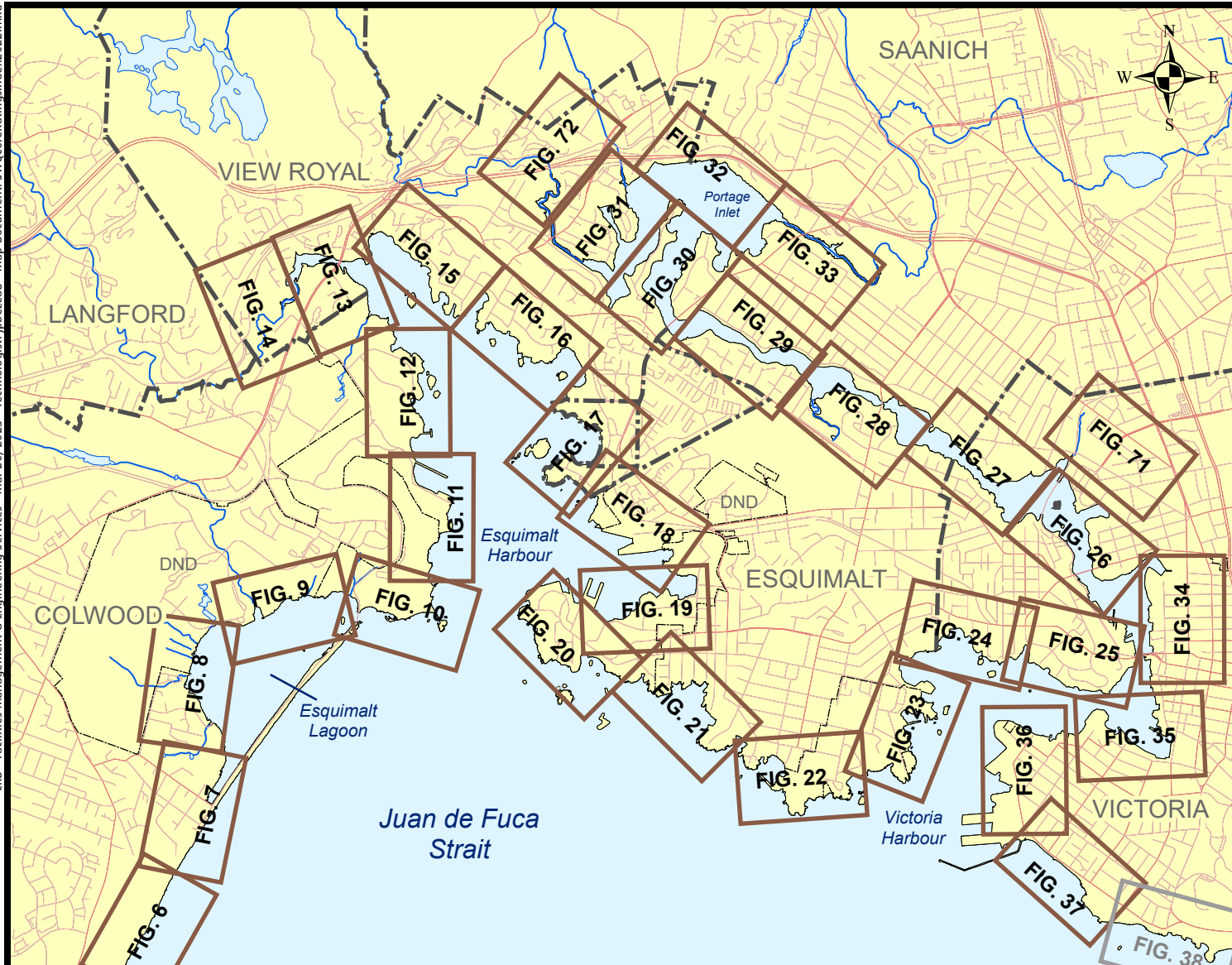
In the spring of 2022, CRD staff hired SLR Consulting to conduct in-stream discharge measurements at the flow monitoring locations with the goal to refine or develop (where necessary) stage-discharge curves to ensure they are adequately predicting discharge. The consultants are aiming to collect in-stream discharge measurements in a variety of flow conditions and the project is set to be completed in the spring of 2024.

3.0 2023 PROGRAM

The Program will continue to work with municipal partners, First Nations and the community to achieve LWMP goals to identify stormwater discharges of public health and environmental concern and investigate the sources of contamination. CRD staff will continue to work with our partners to reduce bacteria and contaminant concentrations in stormwater discharges, creeks and the marine receiving environment. Focused water quality and benthic invertebrate sampling will be undertaken in Cecelia Creek and Mill Stream in 2023.

APPENDIX A

LOCATION OF STORMWATER DISCHARGES



LEVEL OF CONCERN

Sediment Chemical Contaminant Rating*

- HIGH - Mitigative Measures Required
- MODERATE - Surveillance Required
- LOW - No Action Required

0521 Site ID number
(2004) (Year Sampled)

Public Health Rating*

- HIGH - Mitigative Measures Required
- MODERATE - Surveillance Required
- LOW - No Action Required
- NOT RATED - Insufficient Data
- NOT VISITED

* Only the most recent ratings are displayed in the figures.
See Appendix G for CRD Rating System.

Public Use of Shoreline

- High
- Moderate
- Low



Shoreline Segment Number

- Stream/Ditch*
- Lake/Pond/Reservoir*
- Culvert*
- Wetland*
- Storm Drain Pipe*
- Stormwater Catchment*

- Core Stormwater Monitoring Area
- Unsewered Areas

* Based on best known data. May contain errors and omissions.

Colour orthophoto-2021
Lots based on 2023 data.



Kilometres

0 0.5 1

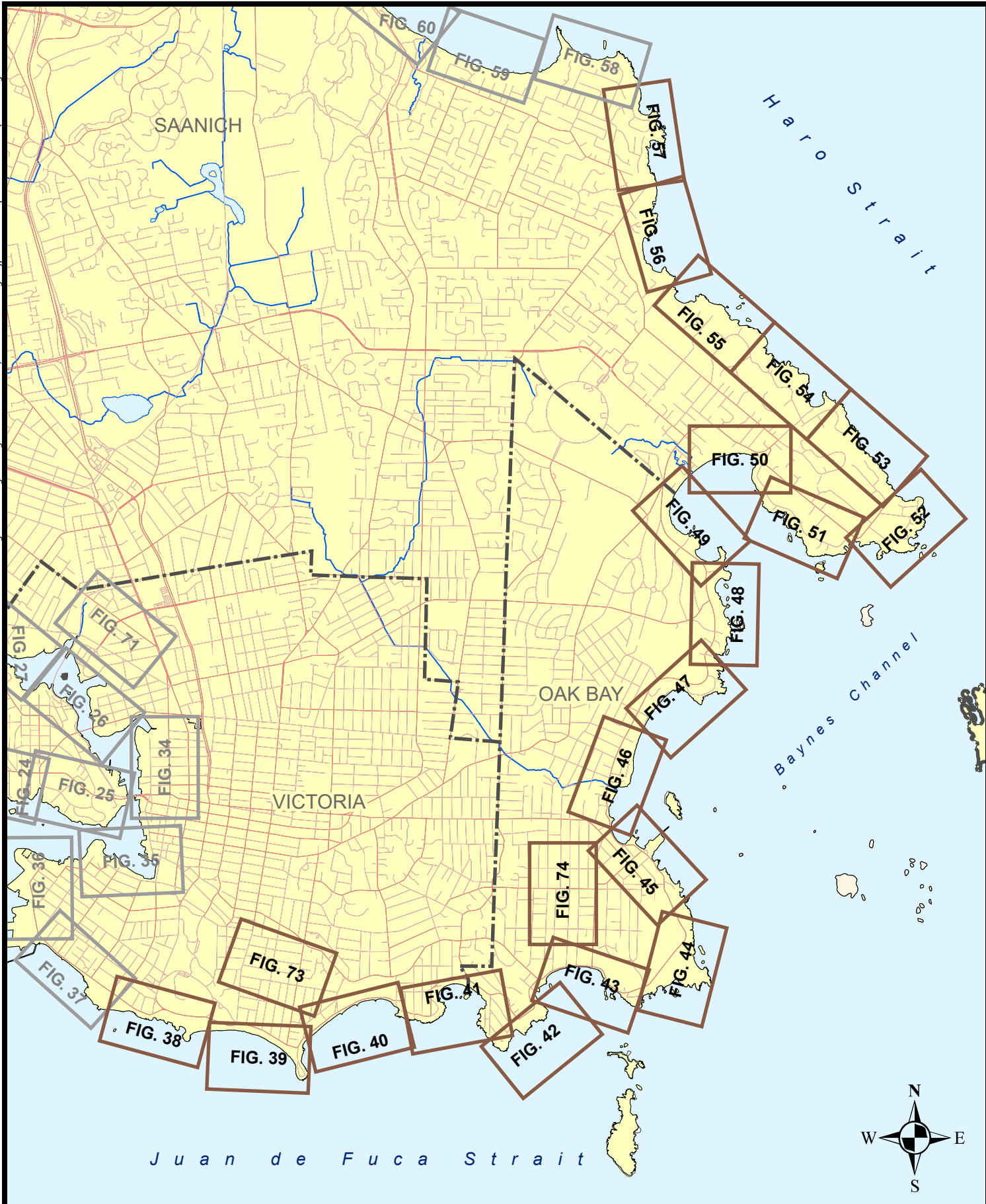
Projection: UTM ZONE 10N NAD 83

Figure 1 - Core Area 2022

Key Index for Figures 5 - 37, 71, 72 and Legend

- Municipal Boundaries
- Minor Roads
- Streams and Rivers
- DND Boundaries
- Major Roads
- Map Tiles (see adjacent index page)
- Map Tiles (this index page)
- Core Stormwater Monitoring Area

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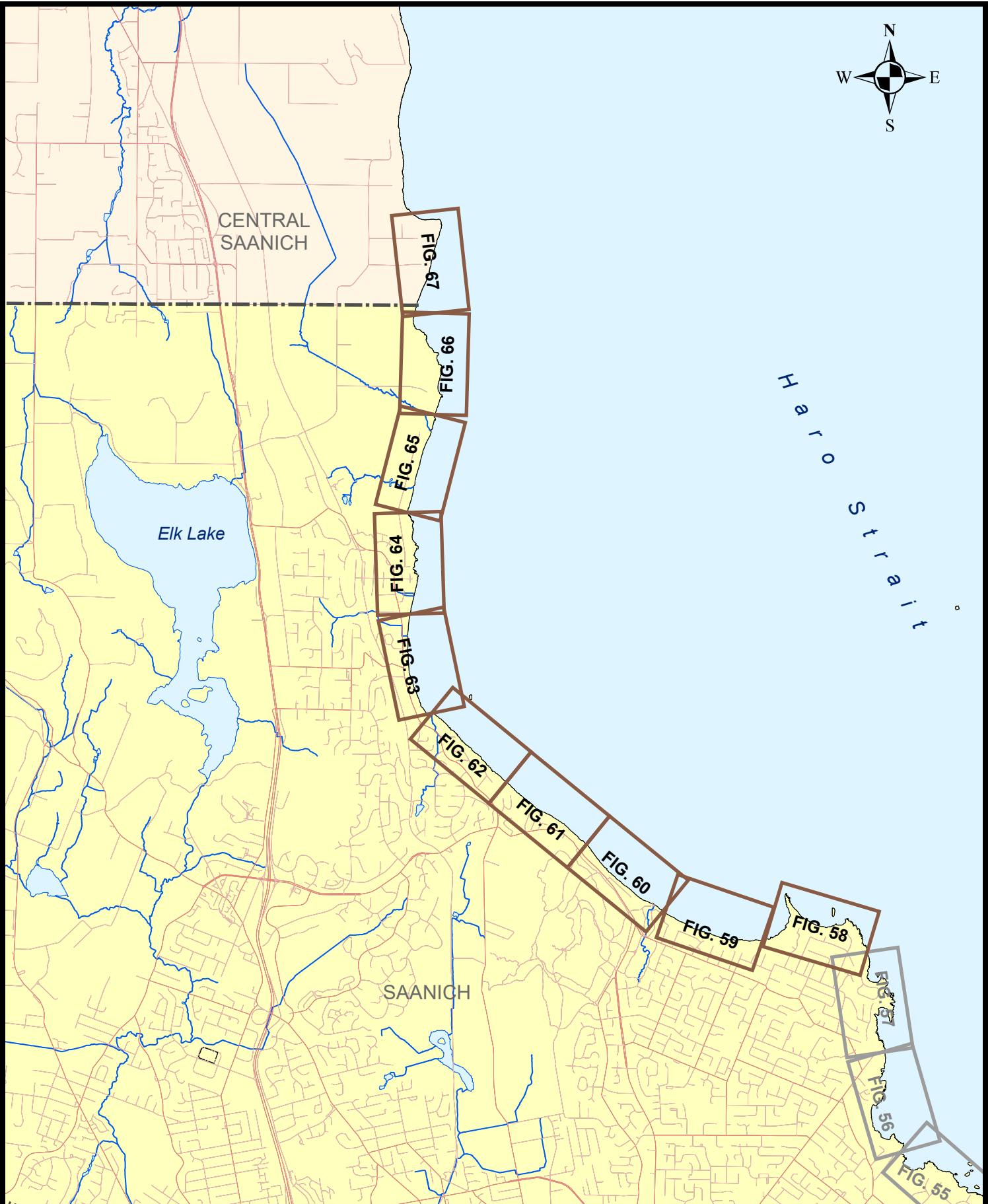
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Projection: UTM ZONE 10N NAD 83

Figure 2 - Core Area 2022
Key Index for Figures 38 - 57, 73, 74

- Municipal Boundaries
- DND Boundaries
- Major Roads
- Minor Roads
- Streams and Rivers
- Map Tiles (see adjacent index page)
- Map Tiles (this index page)
- Core Stormwater Monitoring Area

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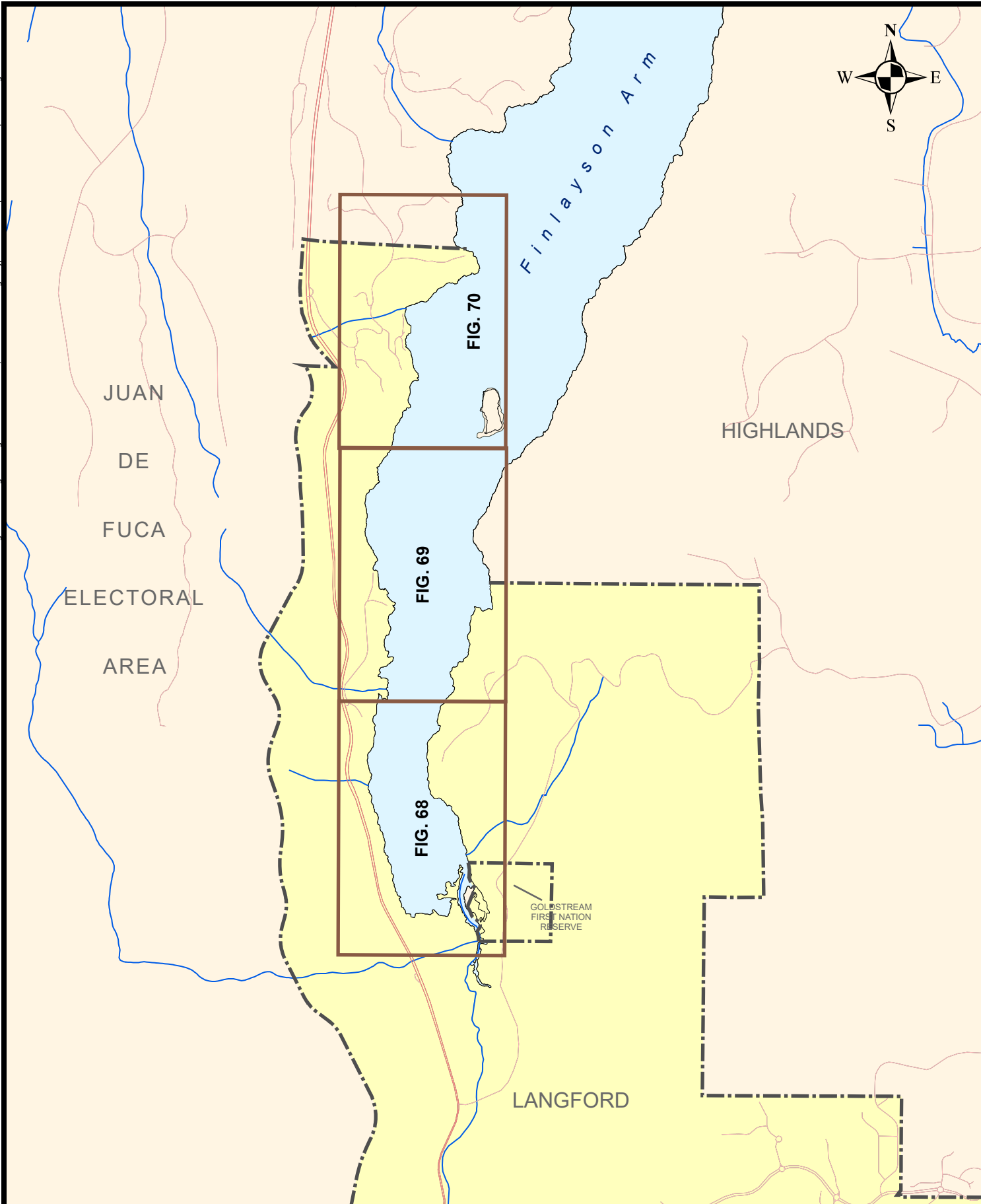
0 0.5 1 Kilometres

Projection: UTM ZONE 10N NAD 83

Figure 3 - Core Area 2022
Key Index for Figures 58 - 67

- | | | |
|------------------------|---|---------------------------------|
| ■ Municipal Boundaries | Minor Roads | Streams and Rivers |
| --- DND Boundaries | FIG. 56 Map Tiles (see adjacent index page) | Core Stormwater Monitoring Area |
| Major Roads | FIG. 60 Map Tiles (this index page) | |

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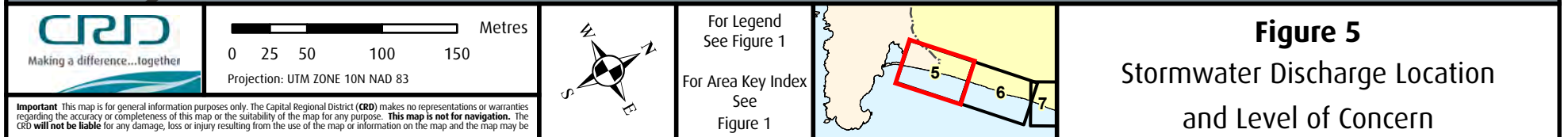


0 0.25 0.5 Kilometres
Projection: UTM ZONE 10N NAD 83

Figure 4 - Core Area 2022
Key Index for Figures 68 - 70

- Municipal Boundaries
- Minor Roads
- Major Roads
- FIG. 68 Map Tiles (this index page)
- Streams and Rivers
- Core Stormwater Monitoring Area

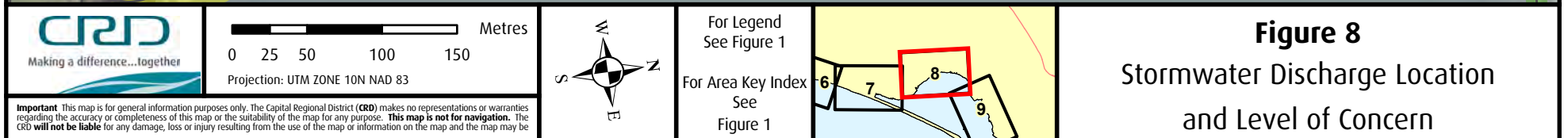
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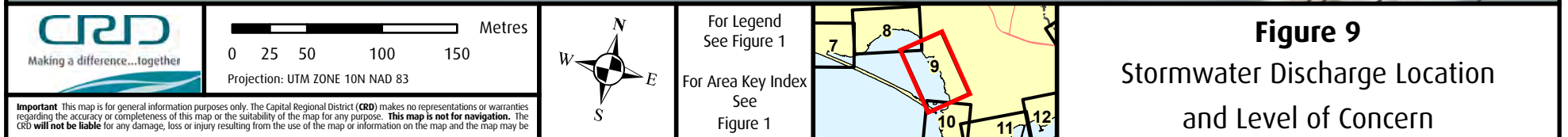
Important This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD will not be liable for any damage, loss or injury resulting from the use of the map or information on the map and the map may be



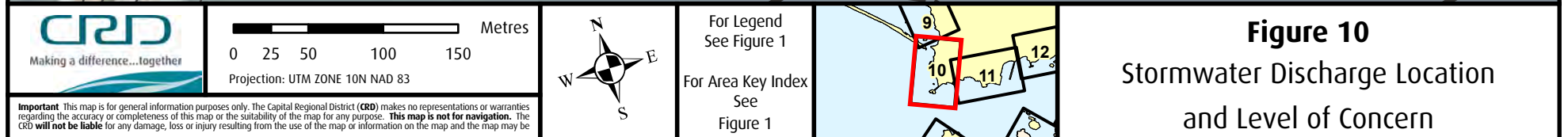
	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 1		Figure 6 Stormwater Discharge Location and Level of Concern
Important This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. This map is not for navigation. The CRD will not be liable for any damage, loss or injury resulting from the use of the map or information on the map and the map may be					



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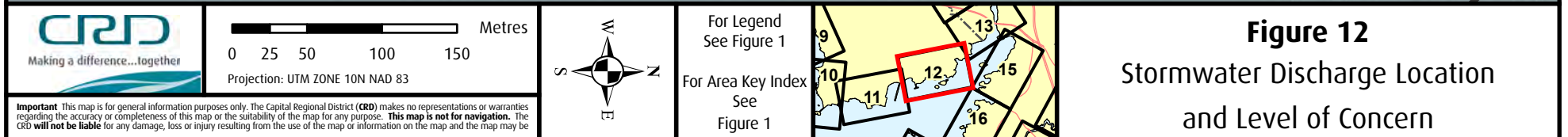
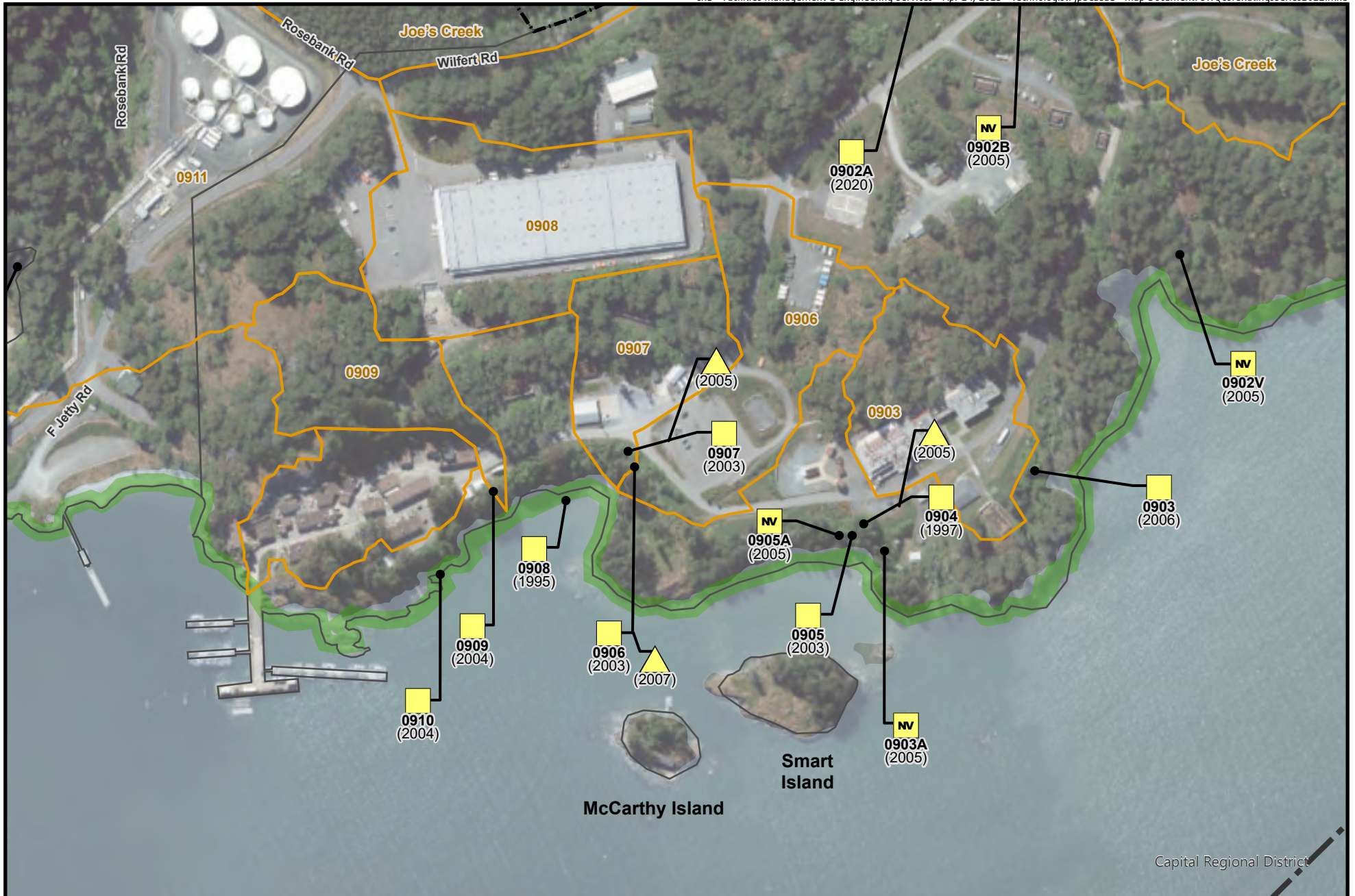


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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



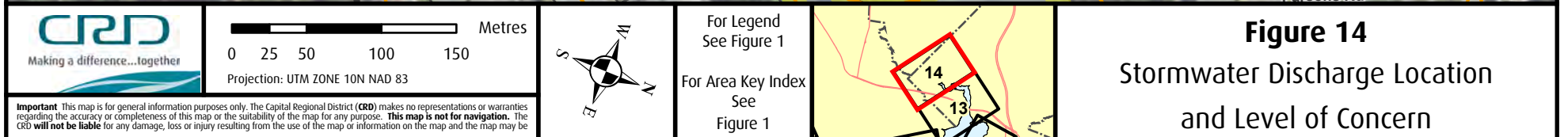
For Legend
See Figure 1

For Area Key Index
See
Figure 1

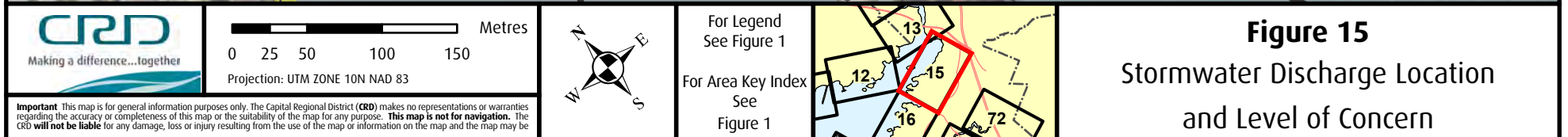
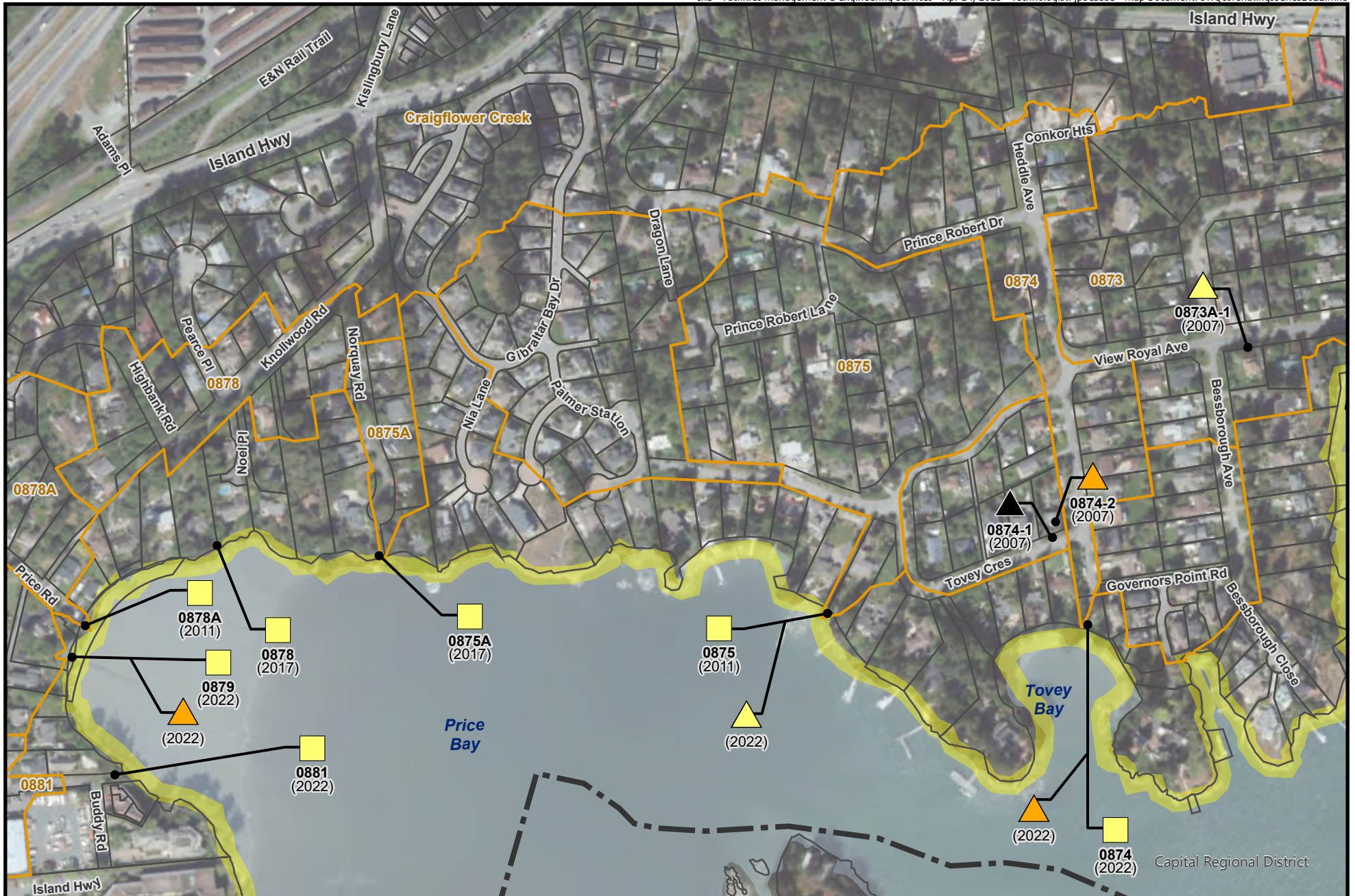


Figure 13
Stormwater Discharge Location
and Level of Concern

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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 1

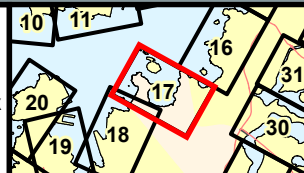


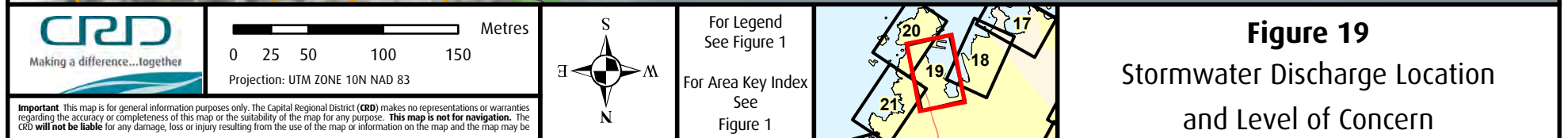
Figure 17
Stormwater Discharge Location
and Level of Concern

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	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 1		Figure 18 Stormwater Discharge Location and Level of Concern
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Capital Regional District



0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 1

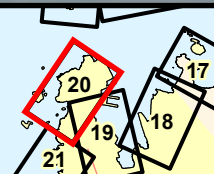


Figure 20
Stormwater Discharge Location
and Level of Concern

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Capital Regional District



0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 1

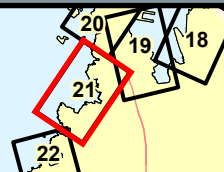
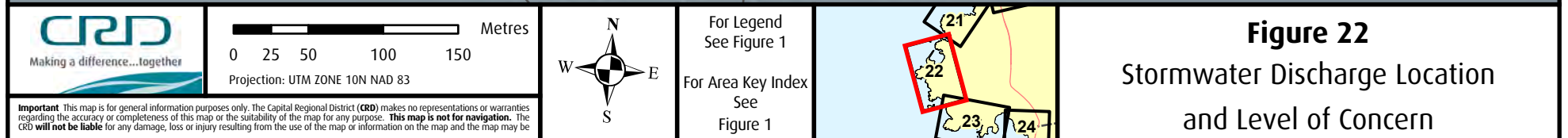


Figure 21
Stormwater Discharge Location
and Level of Concern

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Capital Regional District



0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 1



Figure 23
Stormwater Discharge Location
and Level of Concern

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	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 1		Figure 24 Stormwater Discharge Location and Level of Concern
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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 1

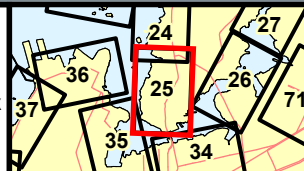
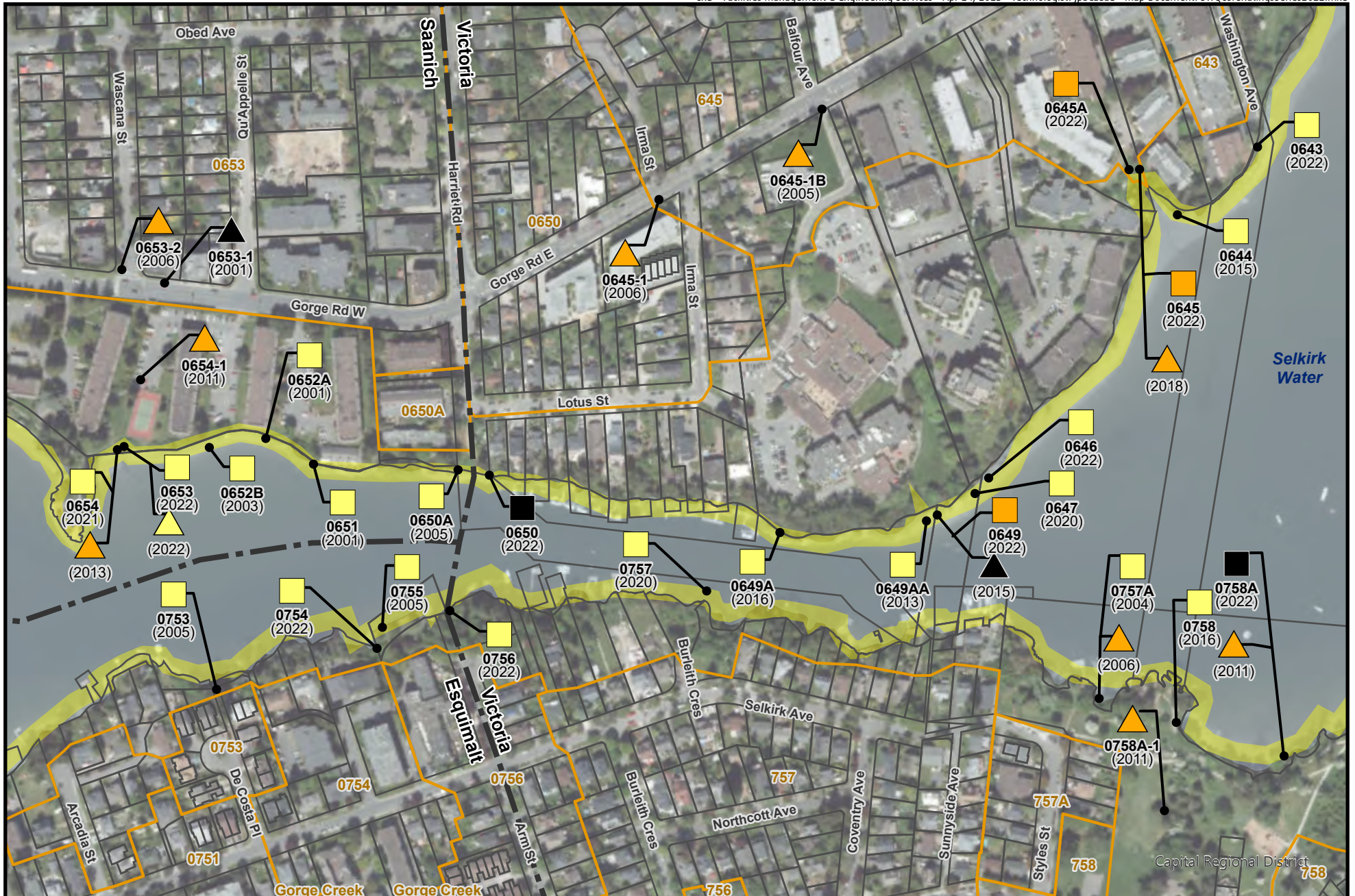


Figure 25
Stormwater Discharge Location
and Level of Concern

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	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 1		Figure 27 Stormwater Discharge Location and Level of Concern
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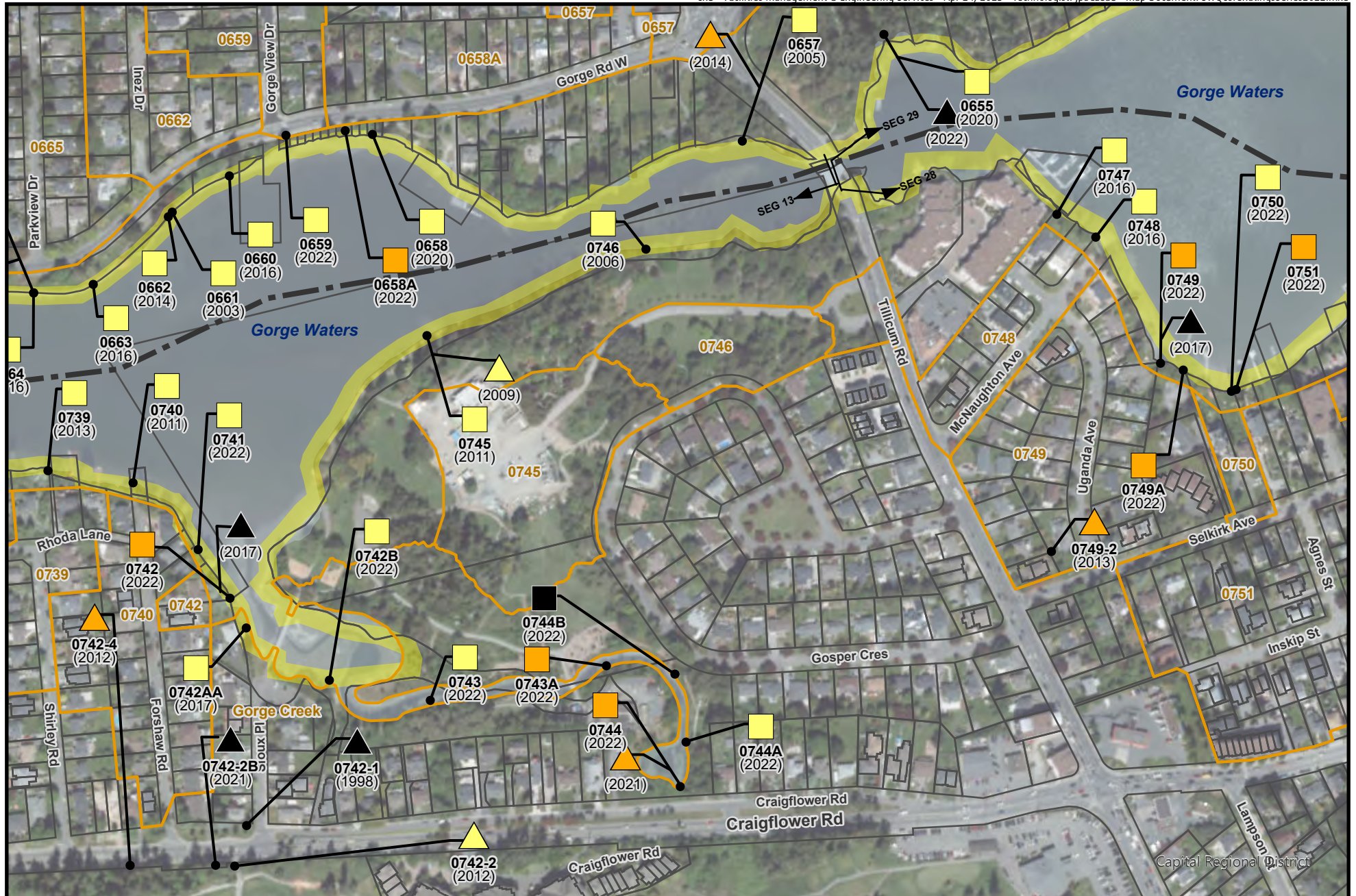


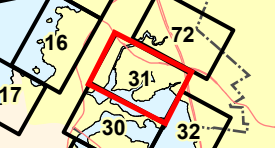
Figure 28
Stormwater Discharge Location
and Level of Concern



	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 1		Figure 29 Stormwater Discharge Location and Level of Concern
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	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 1		Figure 31 Stormwater Discharge Location and Level of Concern
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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 1

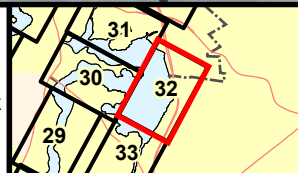
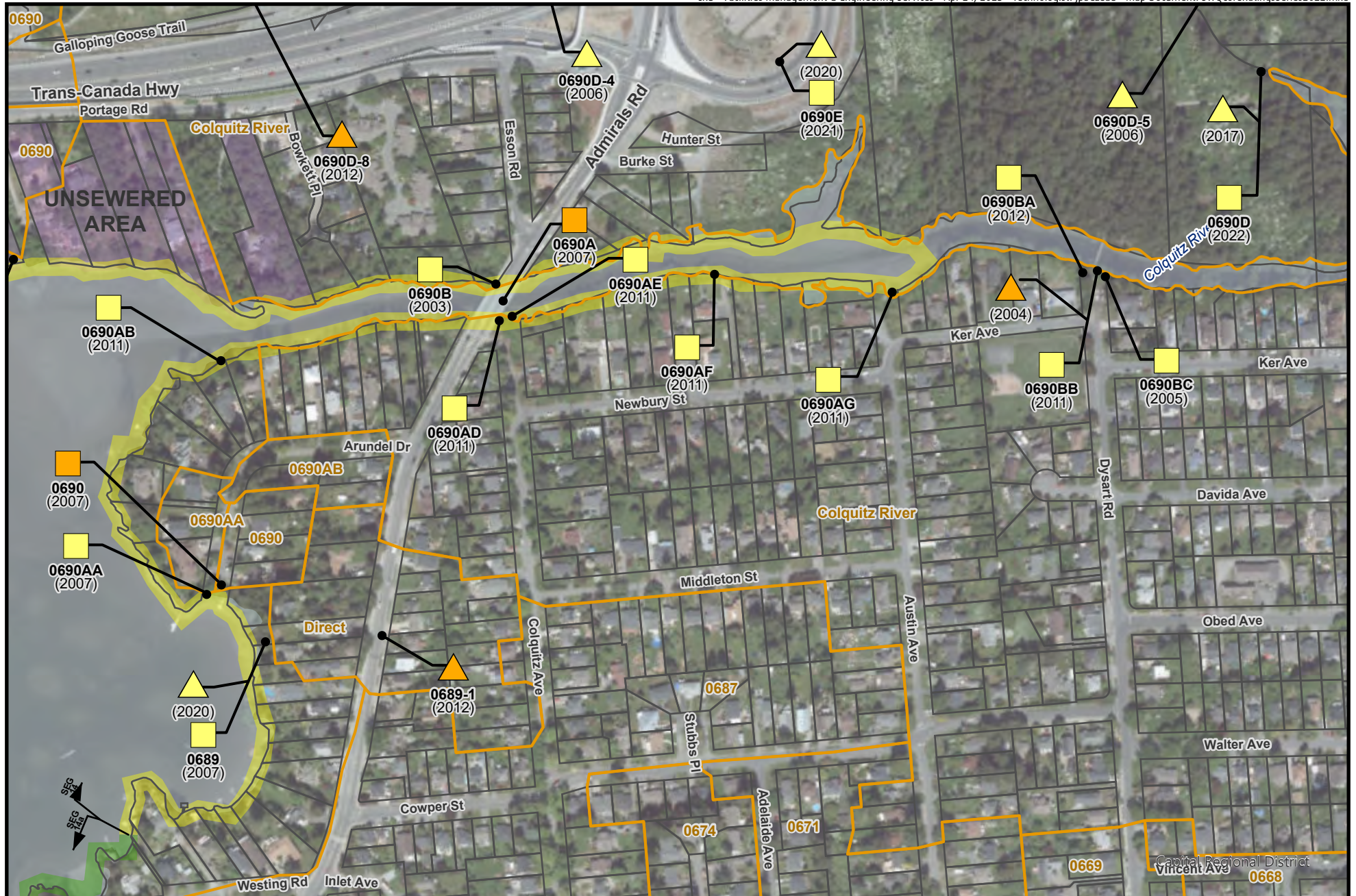


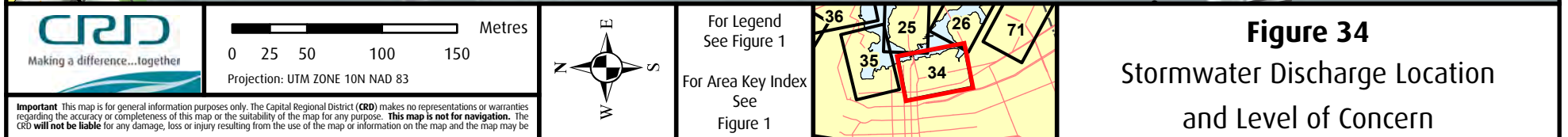
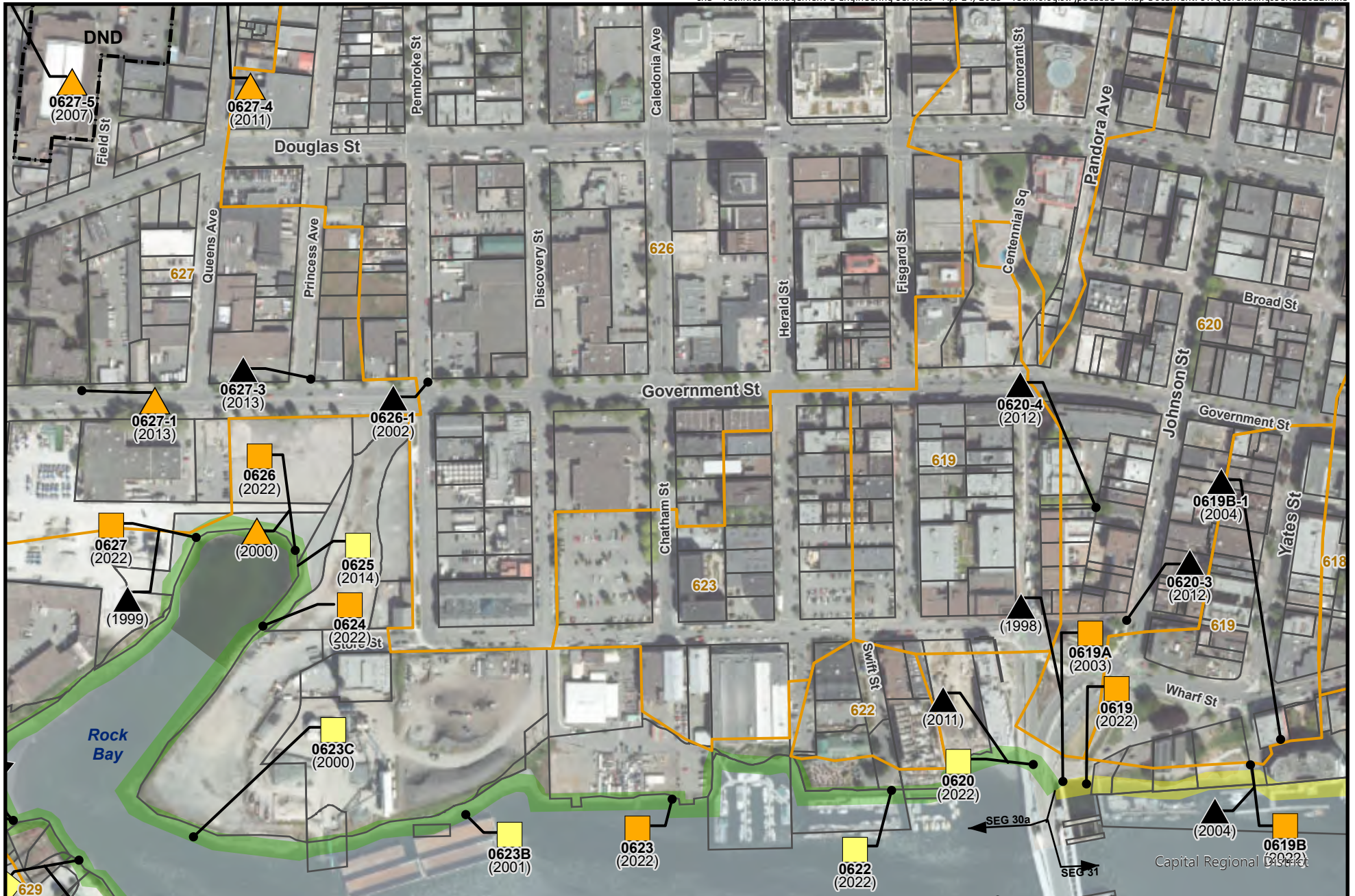
Figure 32
Stormwater Discharge Location
and Level of Concern

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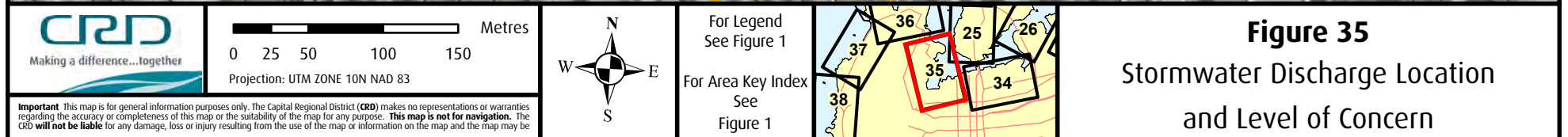
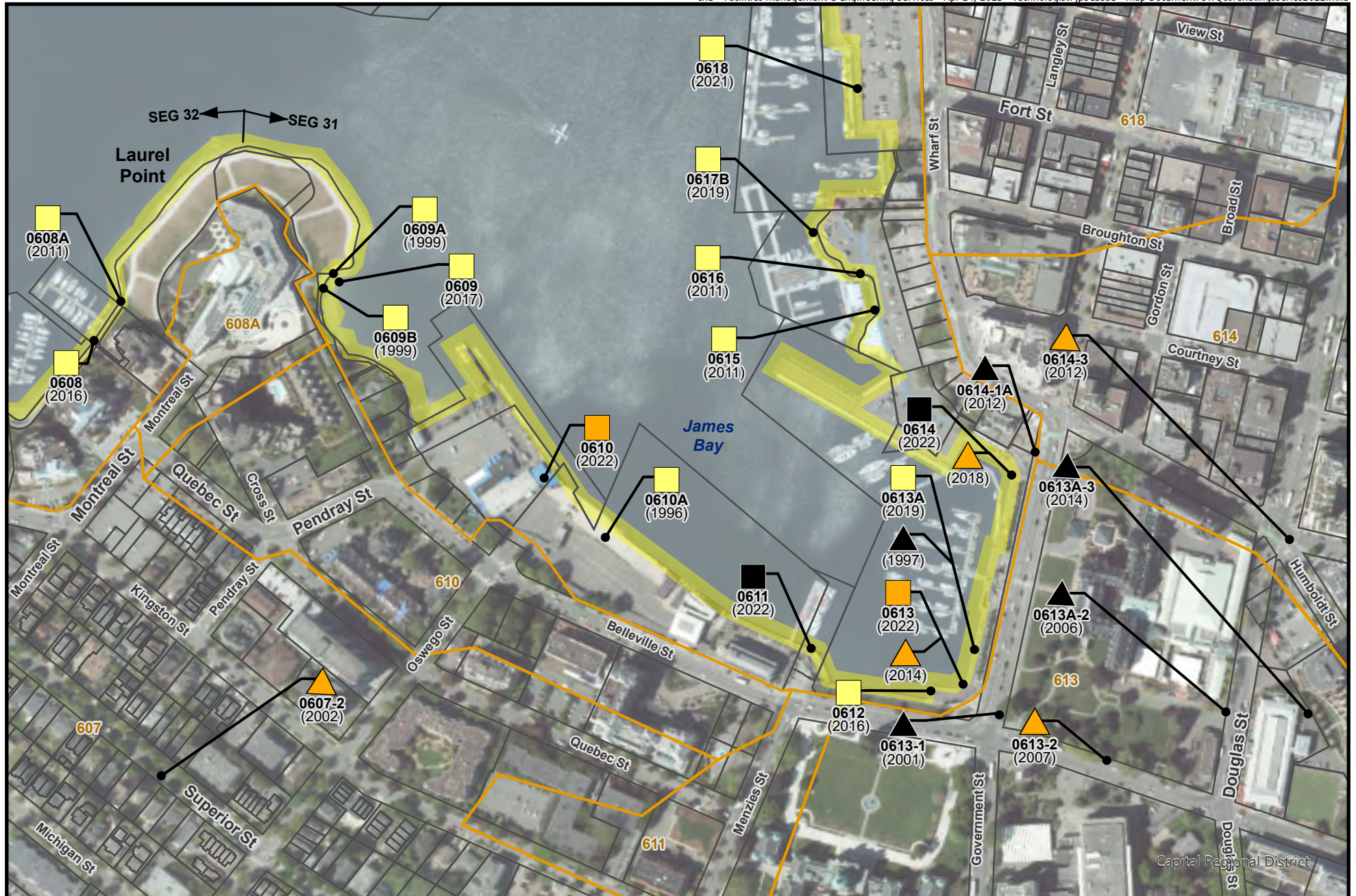


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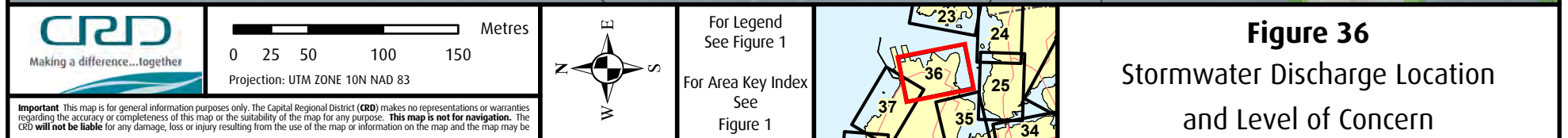
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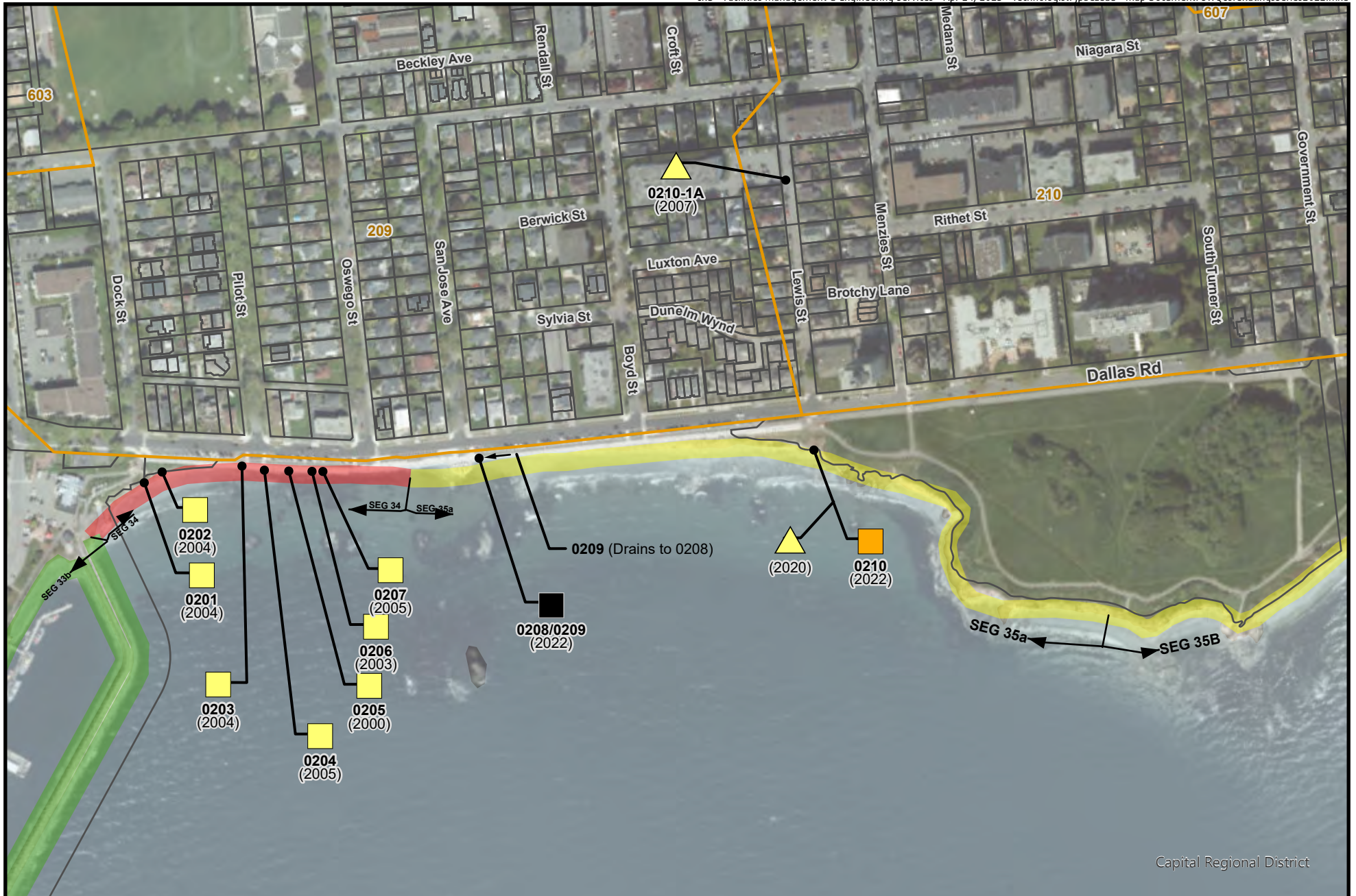
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Capital Regional District



0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 1

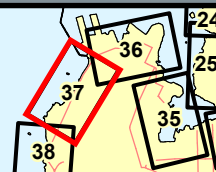
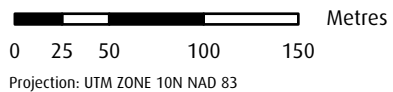


Figure 37
Stormwater Discharge Location
and Level of Concern

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For Legend
See Figure 1

For Area Key Index
See
Figure 2

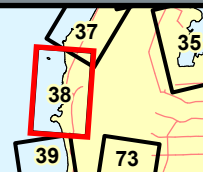


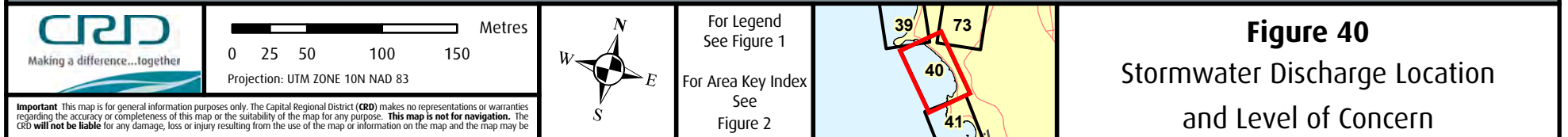
Figure 38
Stormwater Discharge Location
and Level of Concern

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	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 2		Figure 39 Stormwater Discharge Location and Level of Concern
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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1
For Area Key Index
See
Figure 2

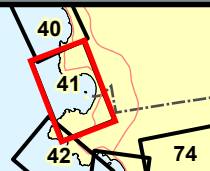
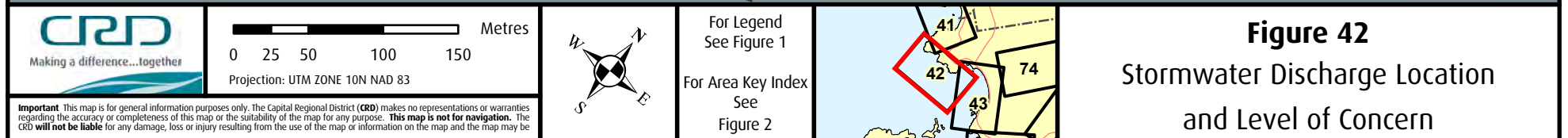


Figure 41
Stormwater Discharge Location
and Level of Concern

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CRD Making a difference...together	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 2		Figure 43 Stormwater Discharge Location and Level of Concern
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0 25 50 100 150 Metres

Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 2

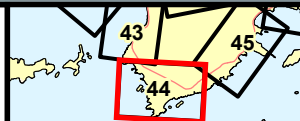


Figure 44
Stormwater Discharge Location
and Level of Concern

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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 2

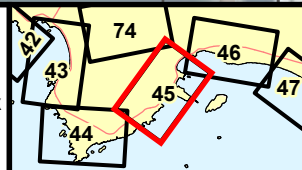


Figure 45
Stormwater Discharge Location
and Level of Concern

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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1
For Area Key Index
See
Figure 2

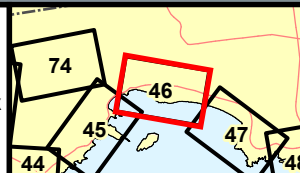


Figure 46
Stormwater Discharge Location
and Level of Concern

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Capital Regional District



0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 2



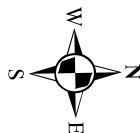
Figure 47
Stormwater Discharge Location
and Level of Concern

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0 25 50 100 150 Metres

Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

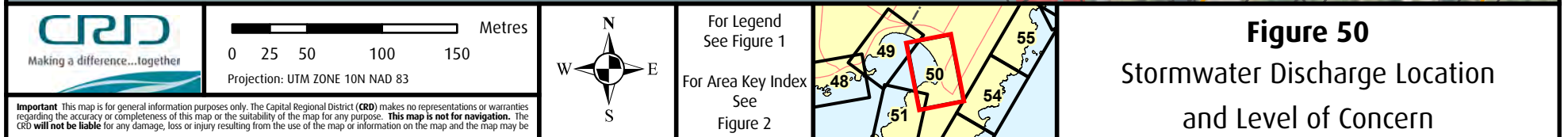
For Area Key Index
See
Figure 2



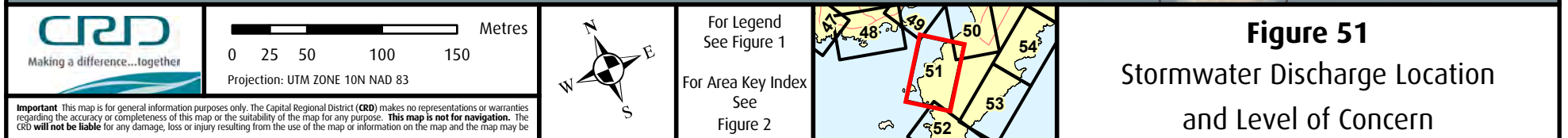
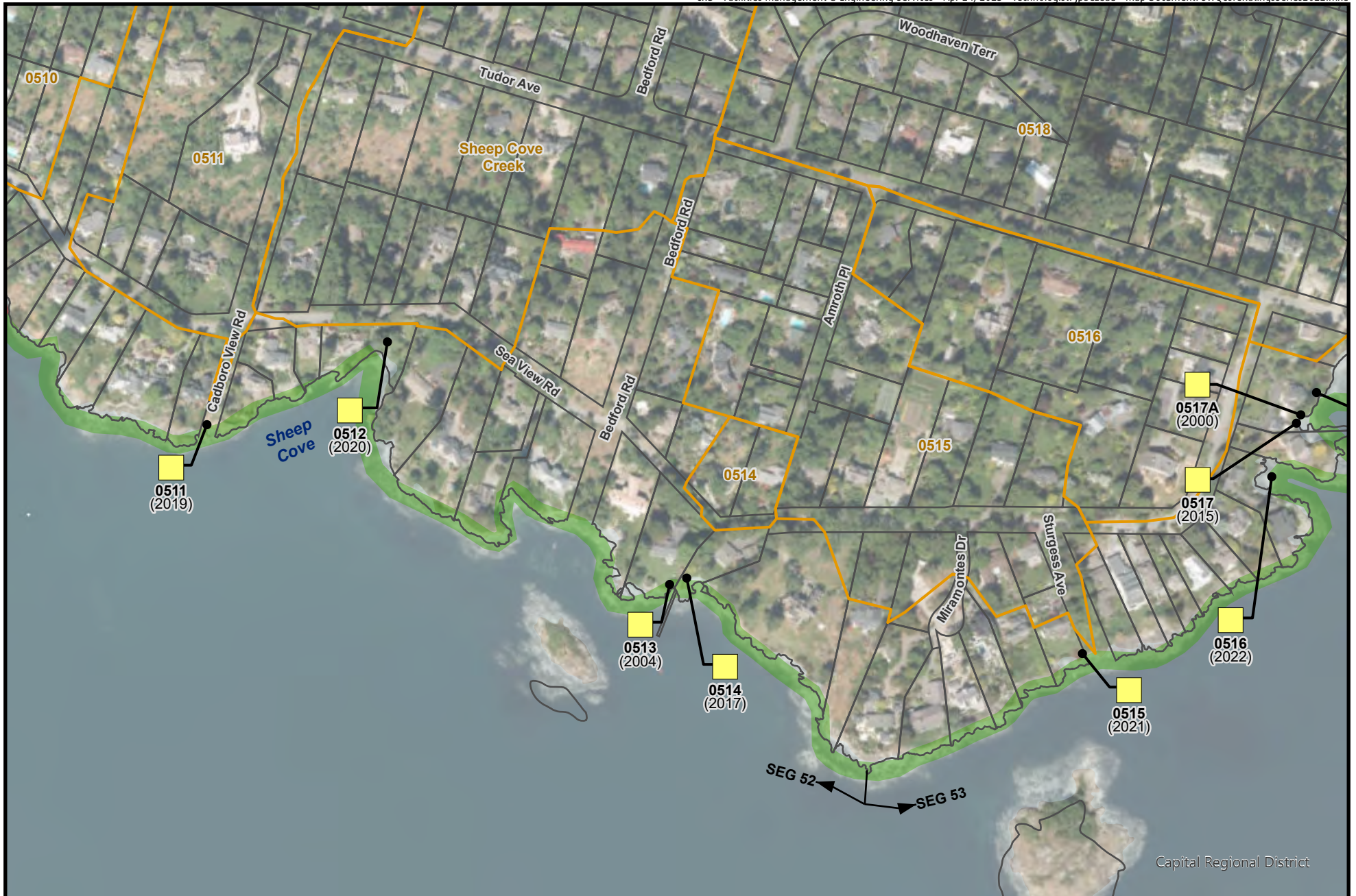
Figure 48
Stormwater Discharge Location
and Level of Concern

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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

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Figure 2

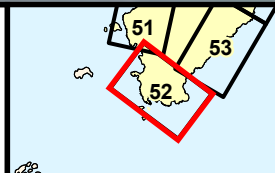
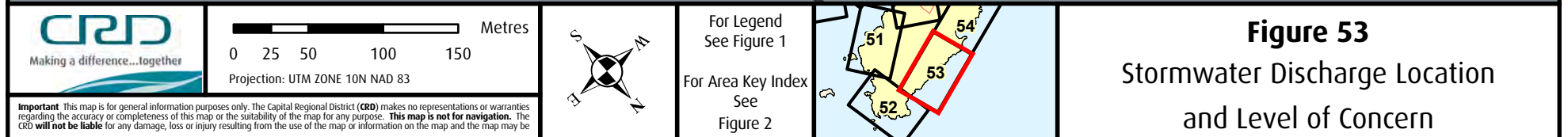
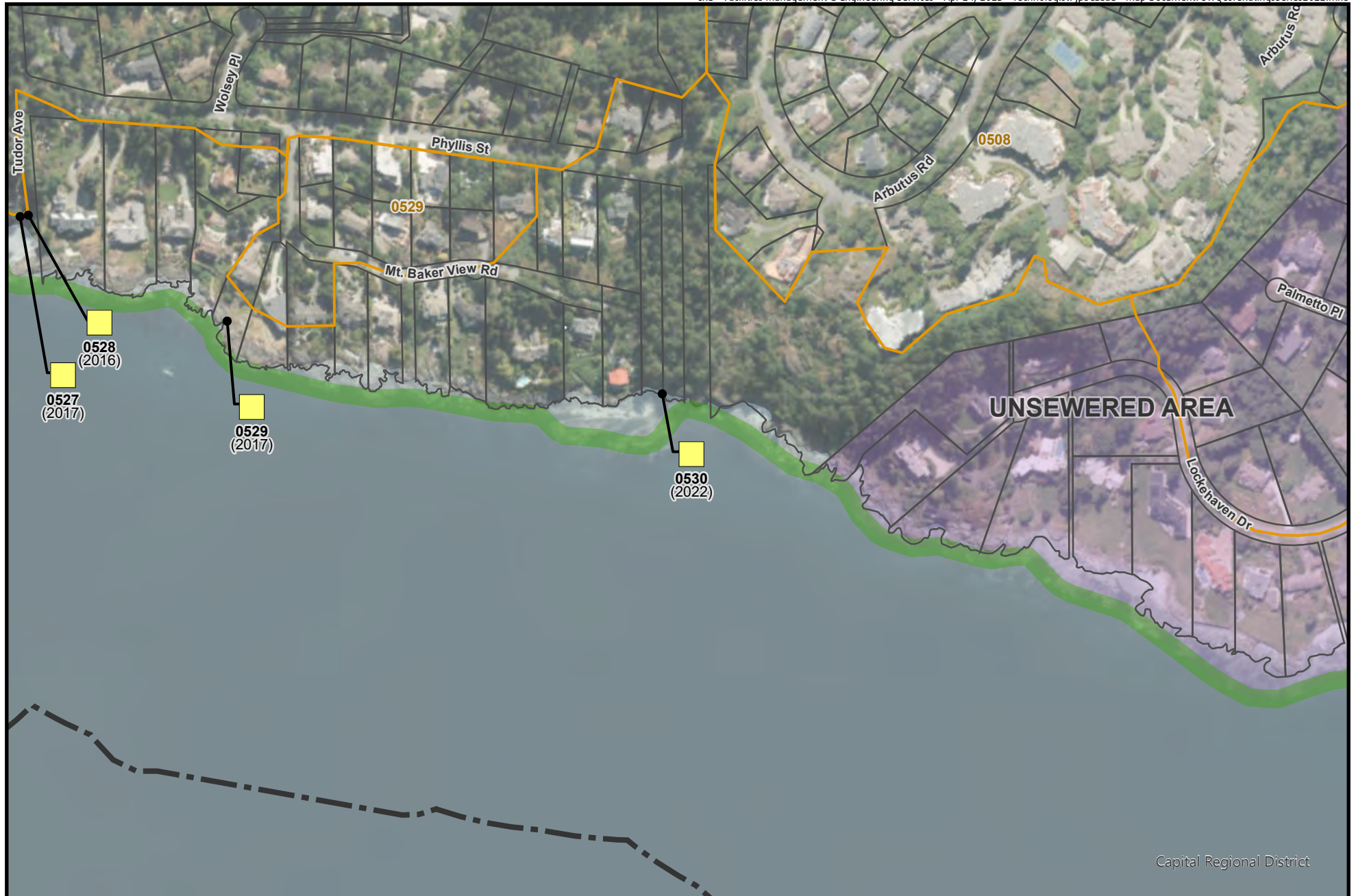


Figure 52
Stormwater Discharge Location
and Level of Concern

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	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 2		Figure 54 Stormwater Discharge Location and Level of Concern
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0 25 50 100 150 Metres
Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1

For Area Key Index
See
Figure 2

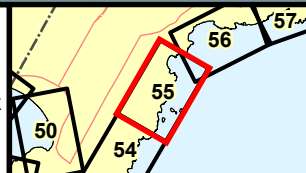
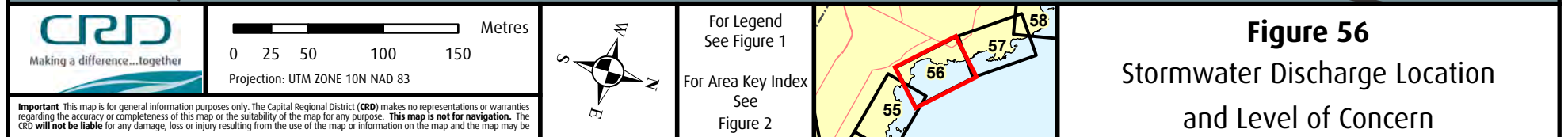


Figure 55
Stormwater Discharge Location
and Level of Concern

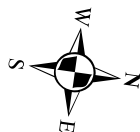
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Projection: UTM ZONE 10N NAD 83



For Legend
See Figure 1
For Area Key Index
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Figure 2

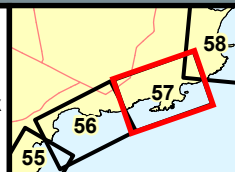
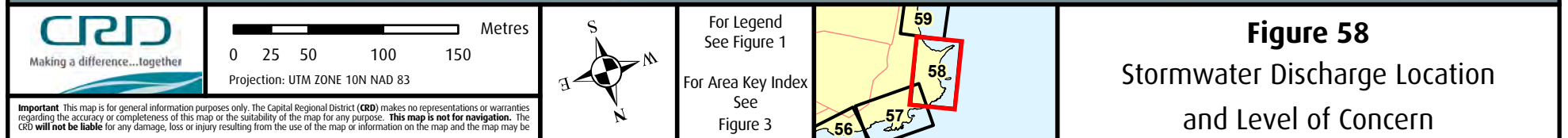


Figure 57
Stormwater Discharge Location
and Level of Concern

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Projection: UTM ZONE 10N NAD 83



For Legend
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For Area Key Index
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Figure 3

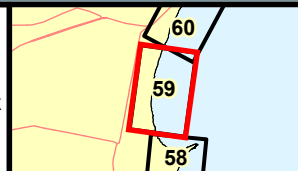
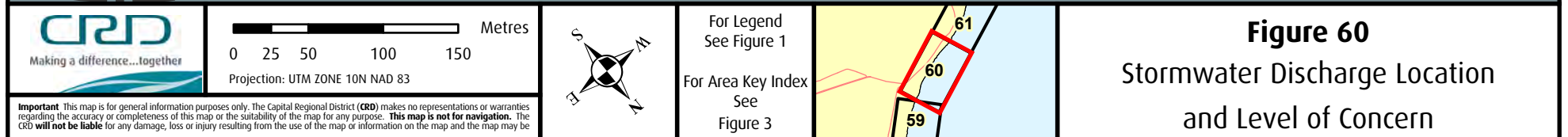
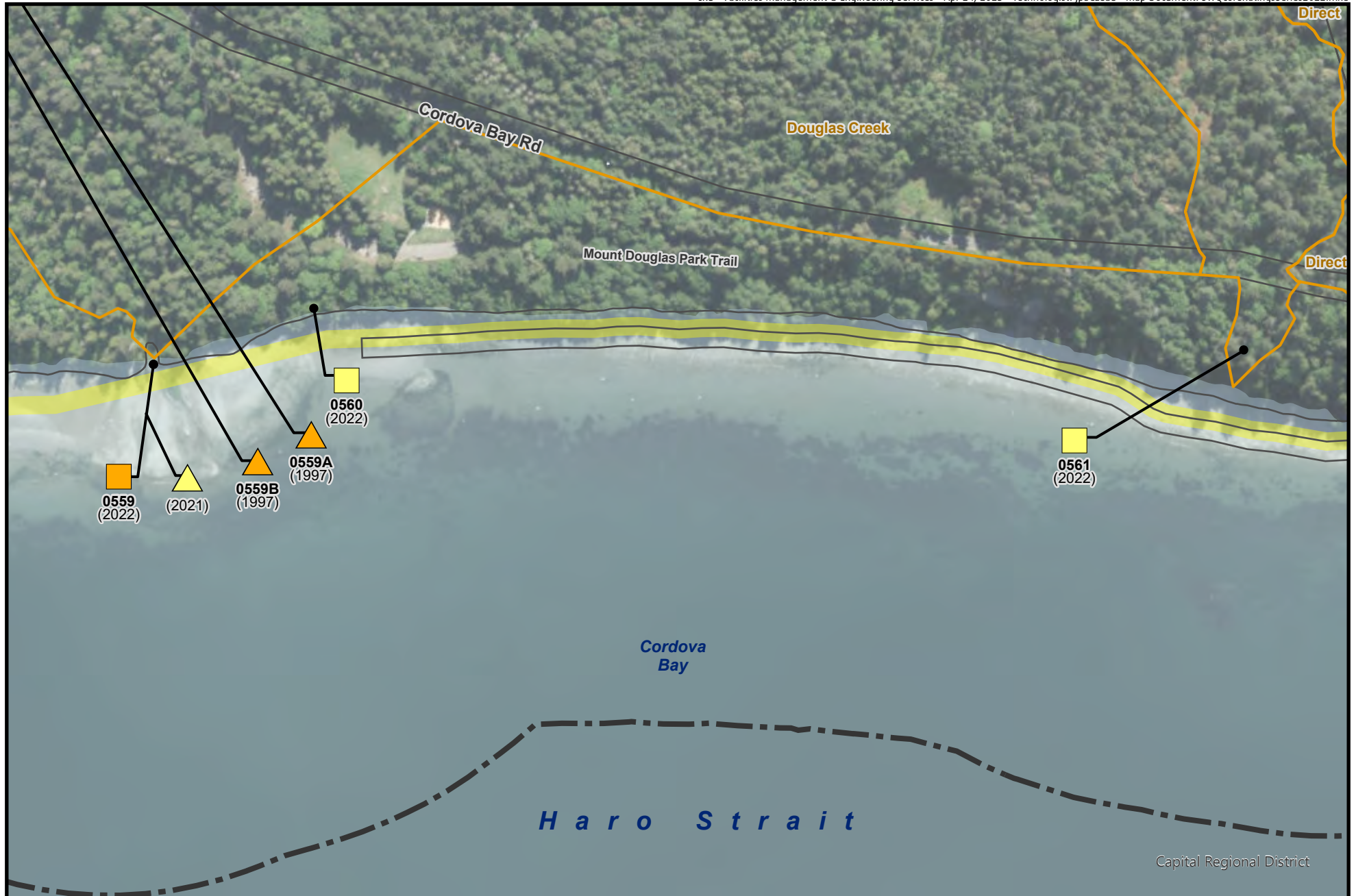


Figure 59
Stormwater Discharge Location
and Level of Concern

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0 25 50 100 150 Metres

Projection: UTM ZONE 10N NAD 83



For Legend
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Figure 3

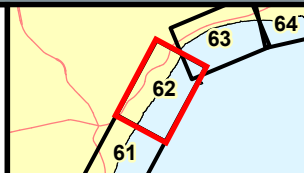
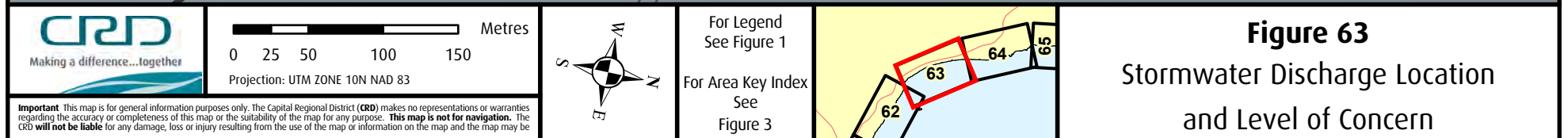
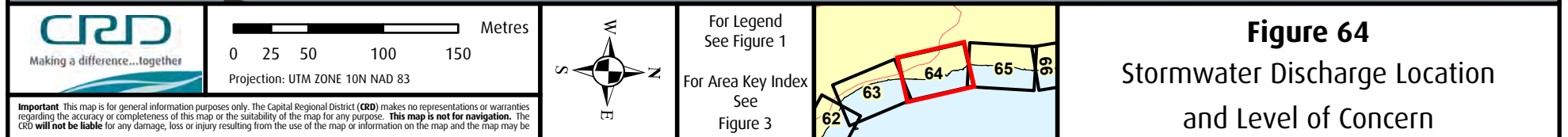


Figure 62
Stormwater Discharge Location
and Level of Concern

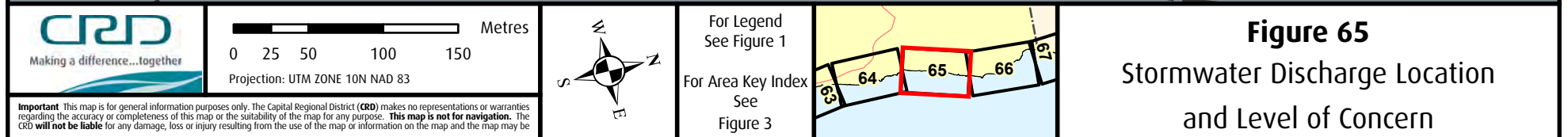
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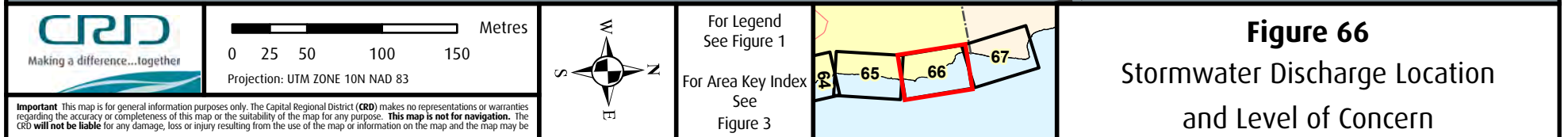


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Projection: UTM ZONE 10N NAD 83



For Legend
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Figure 3

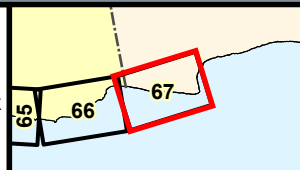
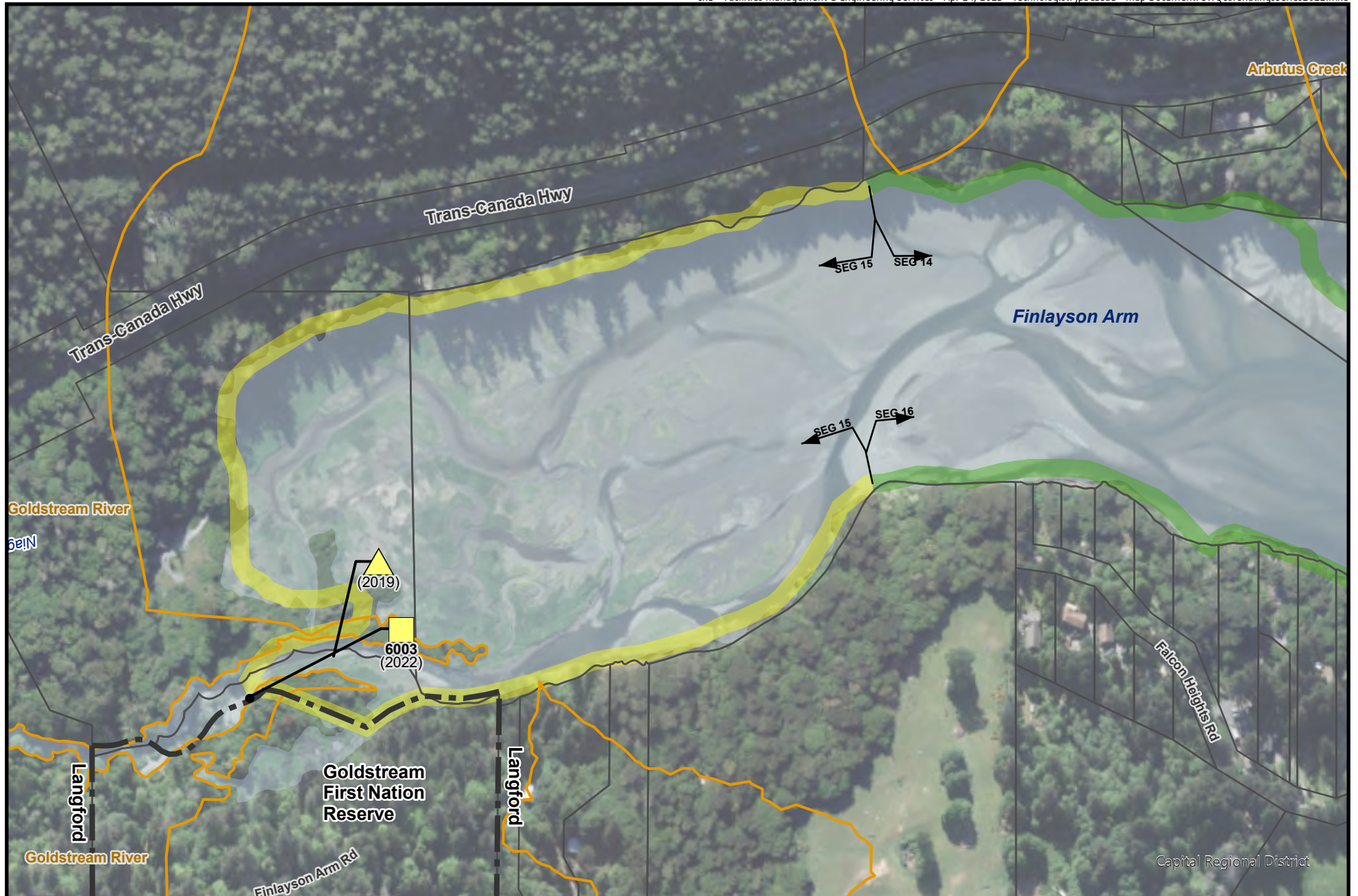
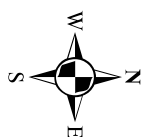


Figure 67
Stormwater Discharge Location
and Level of Concern

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Projection: UTM ZONE 10N NAD 83



For Legend
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Figure 4

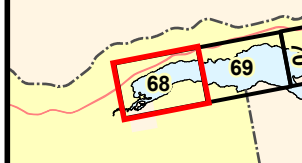
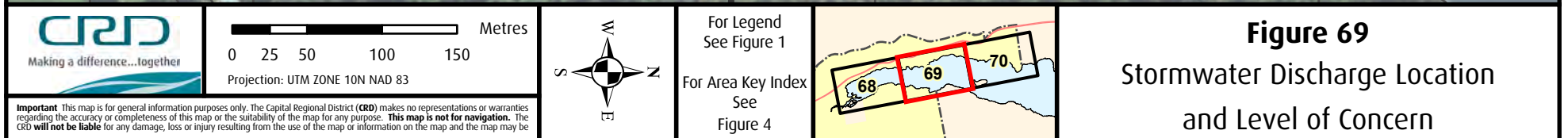
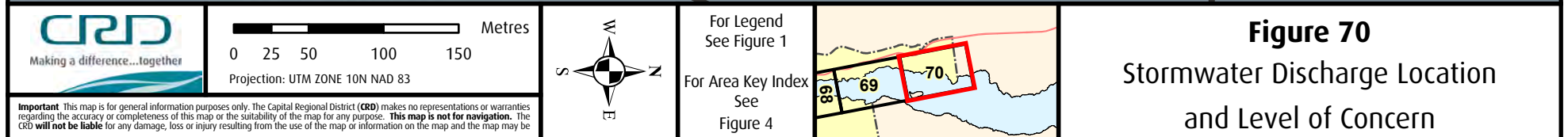


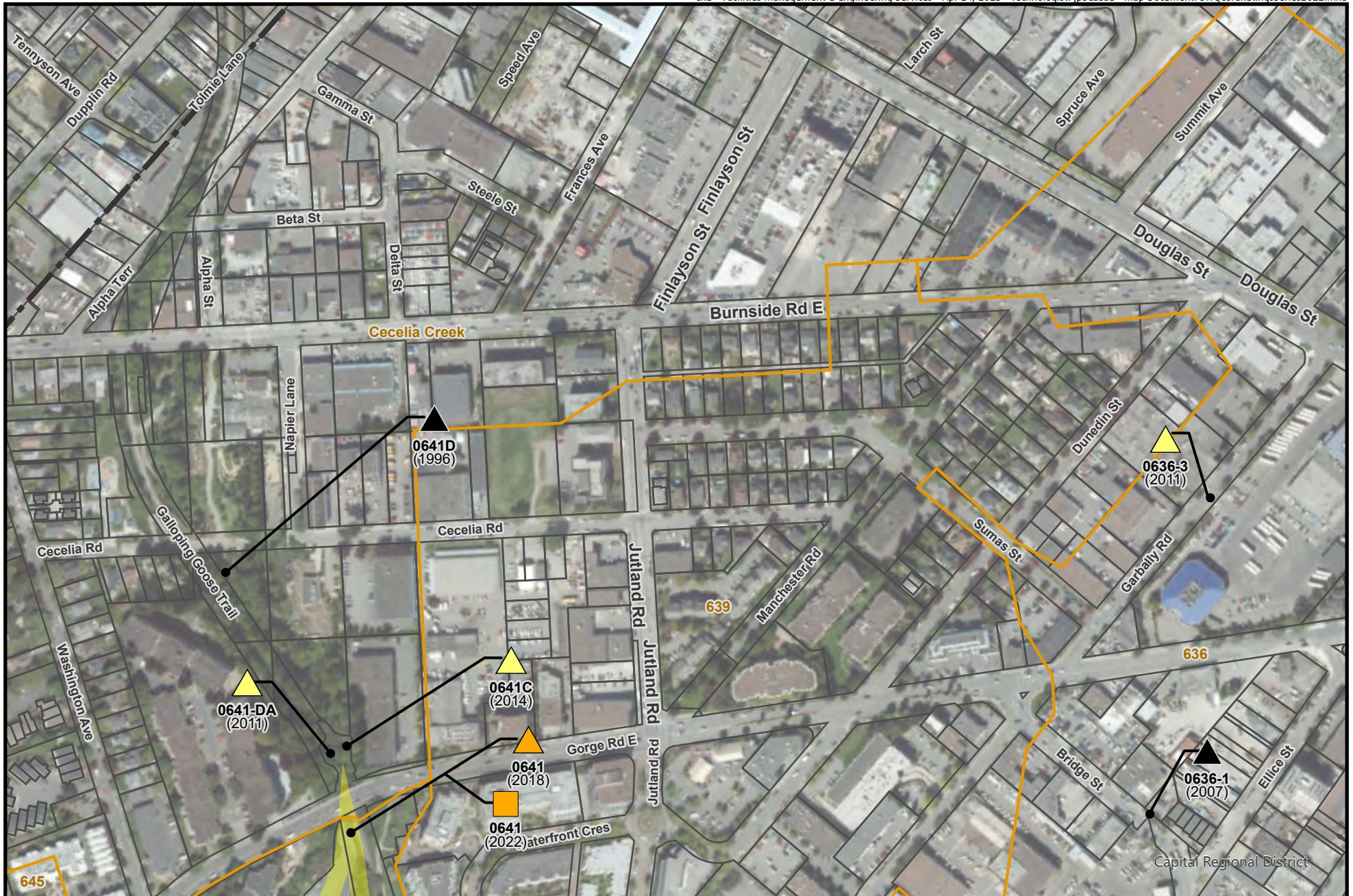
Figure 68
Stormwater Discharge Location
and Level of Concern

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Projection: UTM ZONE 10N NAD 83



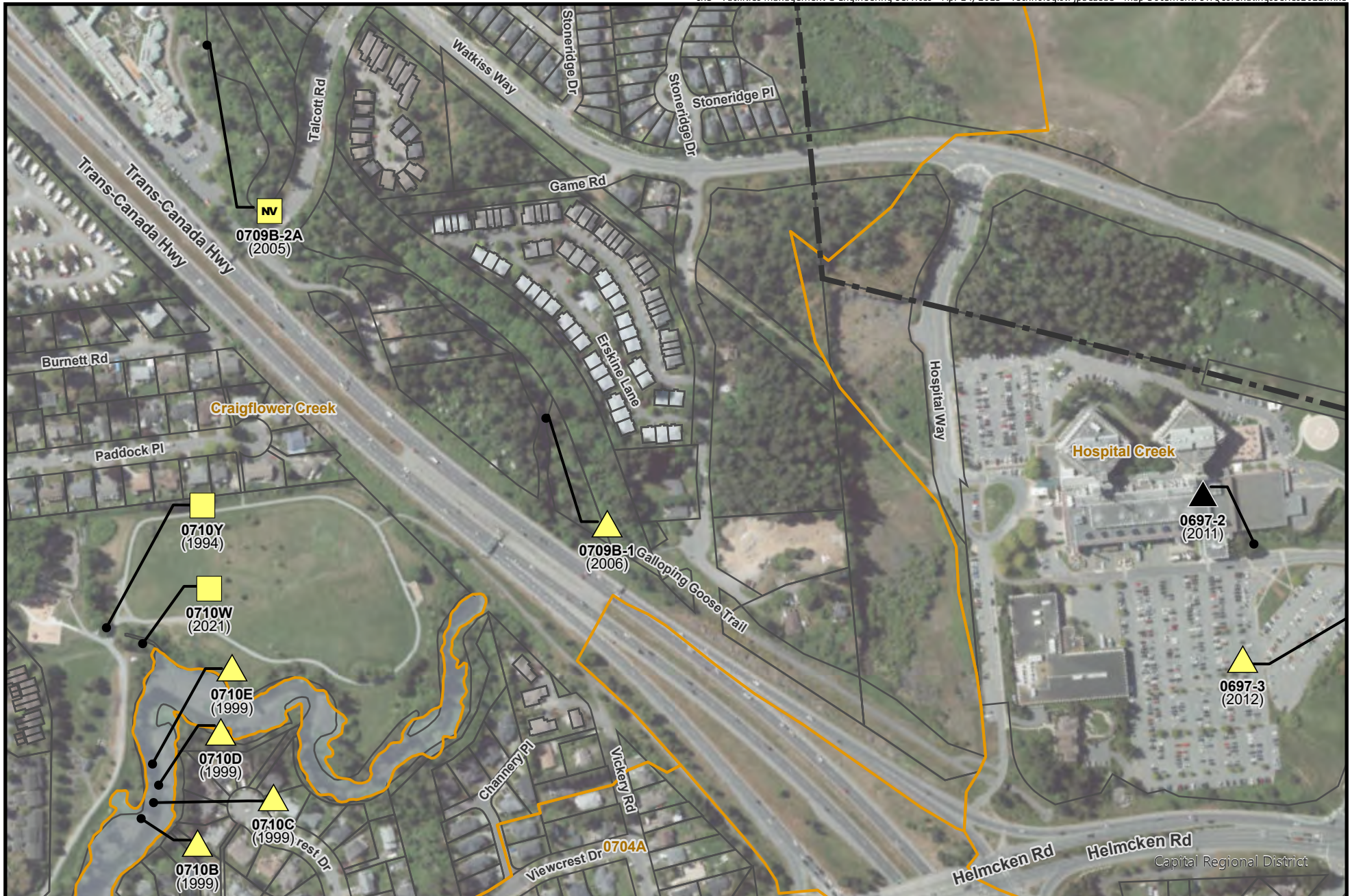
For Legend
See Figure 1

For Area Key Index
See
Figure 1



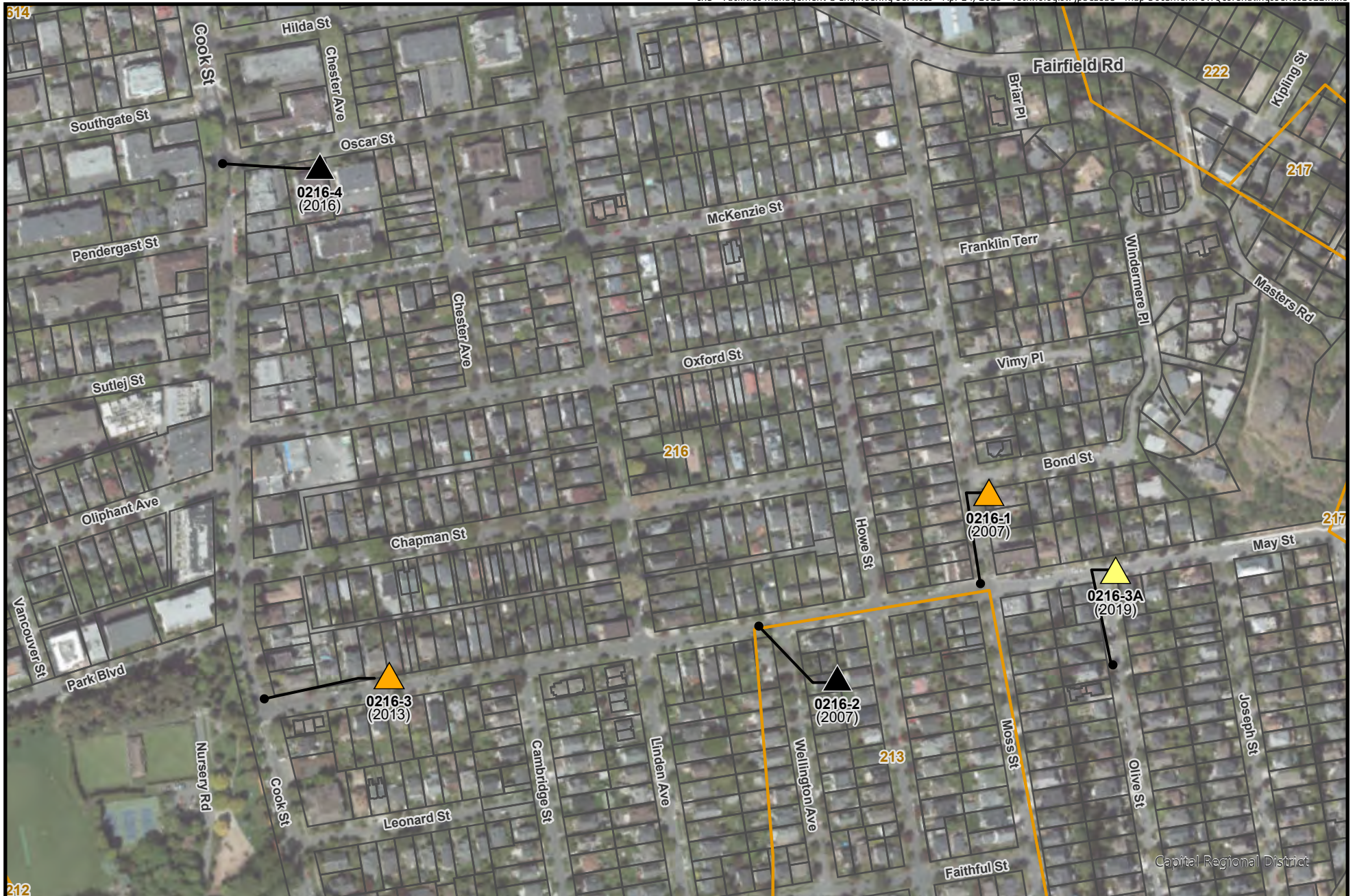
Figure 71
Stormwater Discharge Location
and Level of Concern

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	0 25 50 100 150 Metres Projection: UTM ZONE 10N NAD 83		For Legend See Figure 1 For Area Key Index See Figure 1		Figure 72 Stormwater Discharge Location and Level of Concern
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Projection: UTM ZONE 10N NAD 83



For Legend
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For Area Key Index
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Figure 2

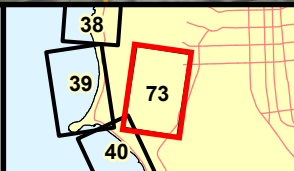
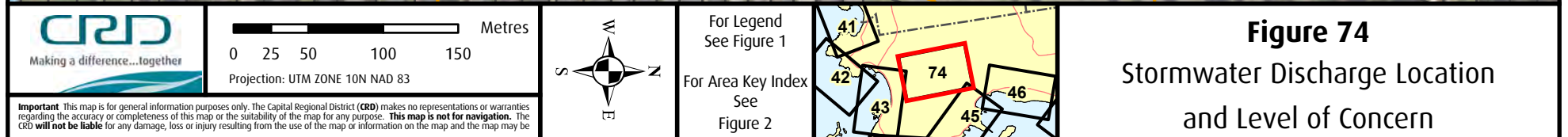
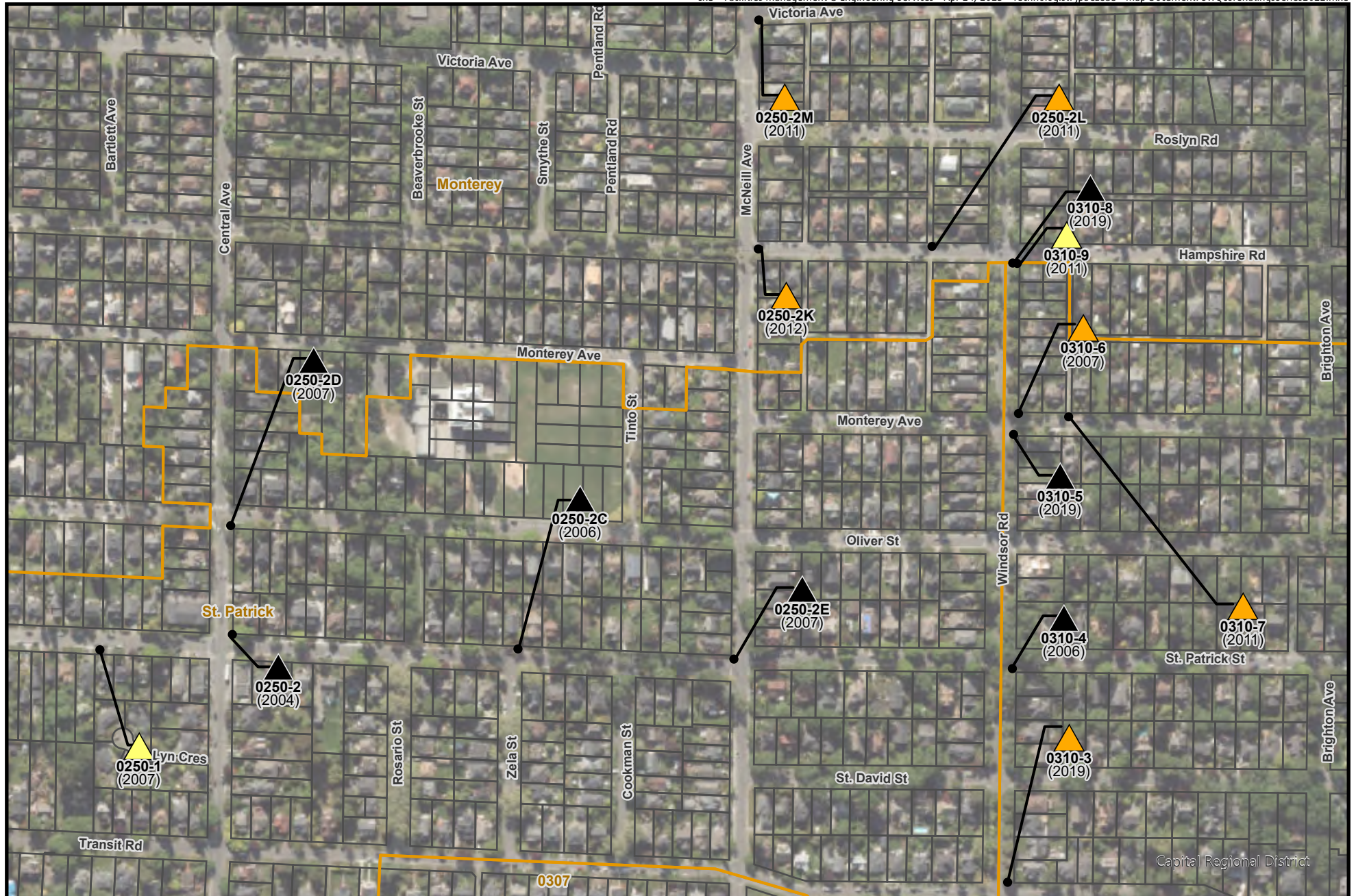


Figure 73
Stormwater Discharge Location
and Level of Concern

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APPENDIX B

CORE AREA STORMWATER PUBLIC HEALTH CONCERN RATINGS

Table 1 Core Area Public Health Concern Ratings

Discharge	Jurisdiction at Discharge	Fig. No.	Bacterial Rating	Public Shoreline Use Rating	Sum of Ratings	Level of Concern			Comments	Recommendations
						2020	2021	2022		
0916	Colwood/DND	7	2	2	4	Low	Low	Moderate	Colwood Creek; intensive sampling	Continue monitoring
0917	Colwood/DND	9	1	1	2	NA	NA	Low	Low flow in winter; dry in summer	Resample in 2027
0918	Colwood/DND	9	1	1	2	NA	NA	Low	Dry	Resample in 2027
0926	Colwood	8	1	2	3	Low	Moderate	Moderate	Bee Creek; only one measurement in 2022	Confirm rating
0927	Colwood	8	2	2	4	NA	NA	Low	Only sampled once	Confirm rating
0928	Colwood	8	2	2	4	Low	Low	Moderate	Selleck Creek; discharges into Esquimalt Lagoon	Continue monitoring creek
0929	Colwood	7	2	2	4	NA	NA	Moderate	Sampled once	Confirm rating
0930	Colwood	7	1	2	3	Low	Low	Low	Discharges into Esquimalt Lagoon	Resample in 2025
0931	Colwood	7	2	2	4	Low	Low	Moderate	Lagoona Brook; discharges into Esquimalt Lagoon	Continue monitoring
0932	Colwood	7	1	2	3	Low	Low	Low	Discharges into Esquimalt Lagoon	Continue monitoring
0933	Colwood	7	2	2	4	Low	Low	Moderate	Discharges into Esquimalt Lagoon	Continue monitoring
0935	Colwood	7	1	2	3	NA	Low	Low		Confirm rating
0935A	Colwood	7	1	2	3	Low	Low	Low	Public beach	Continue monitoring
0722AA	Esquimalt	30	1	2	3	Moderate	Low	Low	Lower counts confirmed	Resample in 2025
0727	Esquimalt	29	1	2	3	Moderate	Low	Low	Elevated count in 2021	Confirm rating
0730	Esquimalt	29	1	2	3	NA	NA	Low		Resample in 2027
0736	Esquimalt	29	1	2	3	NA	NA	Low	Small catchment	Resample in 2027
0736A	Esquimalt private	29	2	2	4	Low	Low	Moderate	Cross-connection fixed	Confirm rating and do investigations
0737	Esquimalt	29	1	2	3	Low	Low	Low		Resample in 2027
0741	Esquimalt	28	1	2	3	NA	NA	Low	Dry in winter; sampled once	Resample in 2027
0742	Esquimalt	28	2	2	4	Moderate	Low	Moderate		Confirm rating
0742b	Esquimalt	28	1	2	3	Low	Moderate	Low		Confirm rating
0743	Esquimalt	28	1	2	3	NA	NA	Low		Confirm rating
0743A	Esquimalt	28	2	2	4	Moderate	Moderate	Moderate	May be influenced by creek flows	Continue monitoring
0744	Esquimalt	28	2	2	4	Moderate	Moderate	Moderate	Gorge Creek	Continue monitoring
0744A	Esquimalt	28	1	2	3	Moderate	Moderate	Low	Low flow	Continue monitoring
0744B	Esquimalt	28	3	2	5	High	High	High	One cross-connection fixed; relined one section	Continue source investigations
0749	Esquimalt	28	2	2	4	Moderate	Moderate	Moderate		Continue monitoring
0749A	Esquimalt private	28	2	2	4	Moderate	Low	Moderate	Private pipe	Confirm rating
0750	Esquimalt	28	1	2	3	NA	Low	Low	Rarely flows	Resample in 2027
0751	Esquimalt	28	3	2	5	Moderate	Moderate	Moderate	High count	Continue monitoring
0754	Esquimalt	27	1	2	3	NA	Low	Low		Resample in 2027

Table 1 Core Area Public Health Concern Ratings

Discharge	Jurisdiction at Discharge	Fig. No.	Bacterial Rating	Public Shoreline Use Rating	Sum of Ratings	Level of Concern			Comments	Recommendations
						2020	2021	2022		
0779	Esquimalt	24	2	2	4	Moderate	Low	Moderate		Confirm rating
0780	Esquimalt	24	3	2	5	Moderate	Moderate	High	Sewer odour	Continue monitoring
0781	Esquimalt	23	2	2	4	High	Moderate	Moderate	Sewer odour	Continue monitoring
0805	Esquimalt	22	3	3	6	High	High	High	SPSO	Continue monitoring and source investigations
0806	Esquimalt	22	3	3	6	High	High	High		Continue monitoring and source investigations
0814	Esquimalt	21	2	2	4	Moderate	Moderate	Moderate	SPSO	Continue monitoring
0865D	Esquimalt F.N.	17	1	2	3	Moderate	Moderate	Low	Iron bacteria present; odour	Confirm rating
0865F	Esquimalt F.N.	17	2	2	4	Moderate	Low	Moderate		Confirm rating
0854	Esquimalt/DND	19	3	1	4	Moderate	Moderate	Moderate	SPSO; toilet paper present	Continue monitoring and investigate
0726	Esquimalt/Songhees F.N.	29	1	2	3	Moderate	Low	Low		Continue monitoring
6003	Langford	68	1	2	3	Low	Low	Low	Goldstream River SPSO	Continue monitoring
6006	Langford	68	1	1	2	Low	Low	Low		Continue monitoring
6008	Langford	70	1	3	4	Low	Low	Low		Continue monitoring
0231	Oak Bay	41	1	2	3	Low	Moderate	Low		Confirm rating
0236	Oak Bay	41	2	2	4	NA	NA	Moderate		Continue monitoring
0237	Oak Bay	42	1	2	3	NA	Low	Low		
0244	Oak Bay	43	1	2	3	Moderate	Moderate	Low		Continue monitoring
0245	Oak Bay	43	2	3	5	High	High	High	White foam observed occasionally	Continue monitoring and source investigations
0249	Oak Bay	43	2	2	4	Moderate	High	Moderate	EC elevated in summer, but low flow	Confirm rating
0250	Oak Bay	43	2	2	4	Moderate	Moderate	Moderate	Outfall, sampled manhole, water pooled	Continue monitoring
0257A	Oak Bay	44	1	1	2	NA	NA	Low		Resample in 2027
0304	Oak Bay	45	2	1	3	NA	NA	Low	EC elevated in winter, low flow in summer	Resample in 2027
0305	Oak Bay	45	1	1	2	NA	NA	Low	Dry	Resample in 2027
0305A	Oak Bay	45	1	1	2	NA	NA	Low	Dry, short line	Resample in 2027
0306	Oak Bay	45	1	2	3	Moderate	Moderate	Low	Dry	Confirm rating
0307	Oak Bay	45	2	2	4	Moderate	Moderate	Moderate		Continue monitoring
0309	Oak Bay	45	1	2	3	Low	Low	Low		Resample in 2027
0310	Oak Bay	45	2	2	4	Moderate	Low	Moderate		Continue monitoring
0310A	Oak Bay	45	3	2	5	Moderate	Moderate	Low		Confirm rating

Table 1 Core Area Public Health Concern Ratings

Discharge	Jurisdiction at Discharge	Fig. No.	Bacterial Rating	Public Shoreline Use Rating	Sum of Ratings	Level of Concern			Comments	Recommendations
						2020	2021	2022		
0316	Oak Bay	46	2	2	4	Moderate	Moderate	Moderate	Bowker Creek; High flows, SPSO	Continue monitoring creek
0317	Oak Bay	46	1	2	3	Moderate	Low	Low	SPSO; manhole; suds observed	Confirm rating
0318	Oak Bay	46	2	3	5	High	High	High	Counts lower	Continue monitoring
0320	Oak Bay	46	1	3	4	High	High	Moderate	Counts lower	Continue monitoring
0321	Oak Bay	47	1	3	4	Moderate	Low	Low	Outfall	Continue monitoring
0321A	Oak Bay	47	2	3	5	Moderate	Moderate	Moderate	Outfall	Continue monitoring; get marine sample
0322	Oak Bay	47	3	3	6	High	High	High	Outfall; counts higher	Continue monitoring; confirm higher count
0323	Oak Bay	47	1	3	4	High	High	Moderate	Stream; lots of birds	Continue monitoring
0323A	Oak Bay	47	2	1	3	NR	Low	Low		Resample in 2027
0324	Oak Bay	47	1	2	3	Low	Low	Low	Dry or low flows	Resample in 2027
0325	Oak Bay	48	1	1	2	Low	Low	Low	Dry or low flows	Resample in 2027
0503	Saanich	50	2	3	5	High	High	High	Cadboro Bay; duck pond upstream; counts lower	Continue monitoring.
0505	Saanich	50	1	3	4	Moderate	High	Moderate		Confirm rating
0506	Saanich	50	1	3	4	High	Moderate	Low		Confirm rating
0507	Saanich	50	1	3	4	Moderate	Low	Low	Low flow	Resample in 2027
0508	Saanich	50	1	3	4	Low	Moderate	Low	One source repaired	Continue monitoring and source investigations
0516	Saanich	51	1	1	2	NA	NA	Low		Resample in 2027
0518	Saanich	51	1	1	2	NA	Moderate	Low		Confirm rating
0519	Saanich private	51	1	1	2	NA	NA	Low		Resample in 2027
0520	Saanich private	51	1	1	2	NA	NA	Low		Resample in 2027
0521A	Saanich	51	1	2	3	NA	Low	Low		Resample in 2027
0522	Saanich	51	1	2	3	NA	Moderate	Low		Confirm rating
0525	Saanich private	51	1	2	3	NA	NA	Low	Private pipe	Resample in 2027
0530	Saanich	51	1	1	2	NA	NA	Low	Only sampled once	Resample in 2027
0539A	Saanich	51	1	1	2	NA	NA	Low	Only sampled once	Resample in 2027
0540	Saanich	55	1	1	2	NA	NA	Low	Only sampled once	Resample in 2027
0541	Saanich	56	1	2	3	Low	Low	Low	Access difficult	Resample in 2027
0541A	Saanich	56	1	3	4	Low	Low	Low	Arbutus Cove	Resample in 2027
0541B	Saanich	56	1	3	4	Low	Moderate	Low	Arbutus Cove	Continue monitoring
0550	Saanich	58	1	2	3	NA	Low	Low		Resample in 2027
0551	Saanich private	58	1	2	3	NA	Low	Low		Resample in 2027

Table 1 Core Area Public Health Concern Ratings

Discharge	Jurisdiction at Discharge	Fig. No.	Bacterial Rating	Public Shoreline Use Rating	Sum of Ratings	Level of Concern			Comments	Recommendations
						2020	2021	2022		
0552	Saanich private	58	1	2	3	NA	Low	Low		Resample in 2027
0553	Saanich	58	1	2	3	NA	Low	Low		Resample in 2027
0554	Saanich private	58	1	2	3	NA	Low	Low		Resample in 2027
0557	Saanich	59	1	2	3	NA	Low	Low		Resample in 2027
0558	Saanich	59	1	2	3	Low	Low	Low	Elevated count; near Mt. Douglas Park access	Continue monitoring
0559	Saanich	60	2	3	5	Low	Moderate	Moderate	Mt. Douglas Creek High flows, SPSO	Continue monitoring
0560	Saanich	60	1	3	4	NA	NA	Low		
0561	Saanich	60	1	3	4	NA	NA	Low	Dry in winter; sampled once	Resample in 2027
0564	Saanich	61	1	3	4	NA	Low	Low		Resample in 2027
0567	Saanich	62	3	2	5	Moderate	Moderate	High	Beach access, waterfall; suds previously	Continue monitoring
0574	Saanich	62	2	2	4	Low	Moderate	Low	Galey Brook; laundry soap	Confirm rating
0576A	Saanich	63	1	3	4	Low	Low	Low	High use beach	Continue monitoring
0578	Saanich	63	1	3	4	Low	Low	Low		Resample in 2027
0580	Saanich	64	1	3	4	High	High	Moderate	Gardom Creek	Confirm rating
0581	Saanich	64	1	3	4	High	High	Moderate		Confirm rating
0589	Saanich	65	1	3	4	Low	Low	Low		Resample in 2027
0592	Saanich	65	2	1	3	Moderate	Low	Low	Noble Creek High flow	Continue monitoring creek
0653	Saanich	27	1	2	3	Moderate	Moderate	Low	Counts lower	Confirm rating
0658A	Saanich	28	3	2	5	Moderate	Low	Moderate	One high count	Confirm rating
0659	Saanich	28	1	2	3	Moderate	Low	Low	Dry in summer, low in winter	Resample in 2027
0671	Saanich	29	1	2	3	Moderate	Moderate	Low		Confirm rating
0676	Saanich	29	1	2	3	Low	Low	Low	SPSO; brown foam, sulfur odour	Continue monitoring
0679	Saanich	29	2	2	4	NA	Low	Low		Resample in 2027
0691A	Saanich	32	2	2	4	Moderate	Moderate	Moderate		Continue monitoring
0690D	Saanich	33	1	2	3	Low	Low	Low	Colquitz Creek; High flow	Continue monitoring
0865AB	Songhees F.N	17	1	2	3	Low	Low	Low	No flow; only sampled once	Continue monitoring
0865B	Songhees F.N	17	1	2	3	Low	Low	Low	No flow; only sampled once	Continue monitoring
0865C	Songhees F.N	17	1	2	3	Low	Low	Low	Low flow; only sampled once	Continue monitoring
0209	Victoria	37	3	2	5	Moderate	Moderate	High	208 is an overflow for 209; infrastructure upgrades	Continue monitoring
0210	Victoria	37	2	2	4	Moderate	Low	Moderate		Confirm rating

Table 1 Core Area Public Health Concern Ratings

Discharge	Jurisdiction at Discharge	Fig. No.	Bacterial Rating	Public Shoreline Use Rating	Sum of Ratings	Level of Concern			Comments	Recommendations
						2020	2021	2022		
0211	Victoria	39	1	2	3	Low	Low	Low	Low flow	Resample in 2027
0212	Victoria	39	1	3	4	Moderate	Low	Moderate		Confirm rating
0214	Victoria	39	2	2	4	High	High	Moderate	SPSO; work done upstream; lower counts 213 on Victoria maps	Continue monitoring
0216	Victoria	40	3	2	5	High	High	High	SPSO, high flow, sewage odour	Continue monitoring
0217	Victoria	40	1	2	3	Moderate	Moderate	Low	Combined flow with 0218; outfall pipe underwater	Continue monitoring
0222	Victoria	40	3	2	5	High	High	High	Moderate flows	Continue monitoring and source investigations
0227	Victoria	41	1	2	3	Moderate	Moderate	Low	Low flow SPSO; SS and SD relining completed	Continue monitoring
0228	Victoria	41	1	3	4	NA	NA	Low	Private pipe	Confirm rating
0228A	Victoria	41	1	3	4	NA	NA	Low	Private pipe	Confirm rating
0229	Victoria	41	2	3	5	High	High	Moderate	Gonzales Bay; flows low in summer	Continue monitoring and source investigations
0230	Victoria	41	3	2	5	Moderate	High	High	Gonzales Bay; outfall in ocean; sampled manhole	Continue monitoring
0603	Victoria	36	3	2	5	High	High	High	Lower counts; relining and infrastructure upgrades	Continue monitoring
0605	Victoria	36	1	1	2	Low	Low	Low	Private pipe; coast guard	Resample in 2027
0607	Victoria	36	3	2	5	High	High	High	SPSO	Continue monitoring; start source investigations
0607A	Victoria	36	2	2	4	Moderate	Low	Moderate	Eastern pipe; in 607 catchment	Confirm rating
0610	Victoria	35	2	2	4	High	Moderate	Moderate	Cross-connection found	Continue monitoring
0611	Victoria	35	3	2	5	High	High	High	Counts lower; waiting for legislature to respond	Continue monitoring
0613	Victoria	35	2	2	4	Moderate	Moderate	Moderate	Variable counts	Continue monitoring and source investigations
0614	Victoria	35	3	2	5	High	High	High		Continue monitoring
0619	Victoria	34	2	2	4	High	High	Moderate	Sewer odour	Confirm rating
0619B	Victoria	34	3	2	5	NA	NA	Moderate	High count in winter; dry in summer	Confirm rating
0620	Victoria	34	2	1	3	Moderate	Moderate	Low		Confirm rating
0622	Victoria	34	1	2	3	Low	Moderate	Low	Near kayak launch; elevated during rainfall	Confirm rating
0623	Victoria	34	3	1	4	Moderate	Low	Moderate	Low flow	Continue monitoring and investigations

Table 1 Core Area Public Health Concern Ratings

Discharge	Jurisdiction at Discharge	Fig. No.	Bacterial Rating	Public Shoreline Use Rating	Sum of Ratings	Level of Concern			Comments	Recommendations
						2020	2021	2022		
0624	Victoria	34	3	1	4	NA	Low	Moderate	Newer pipe; elevated counts; creosote odour	Confirm rating
0626	Victoria	34	3	1	4	Moderate	Moderate	Moderate	Need permission to access; lower counts; high flow	Continue monitoring
0627	Victoria	34	3	1	4	Moderate	Moderate	Moderate	Need permission to access; high flow	Continue monitoring
0629	Victoria	26	3	1	4	Moderate	Moderate	Moderate	Dark discharge; foul odours; only one sample	Continue monitoring and investigations
0630	Victoria	26	1	1	2	NA	NA	Low		Resample in 2027
0633	Victoria	26	2	1	3	NA	Moderate	Low	Small catchment	Confirm rating
0634	Victoria	26	3	1	4	Moderate	Moderate	Moderate	Low flow; hydrocarbon, compost odours	Source narrowed; continue monitoring
0636	Victoria	26	3	1	4	Moderate	Moderate	High	High flow; 15 million CFU/100 mL; foul odour, murky, grey	Continue monitoring; start investigations
0639	Victoria	26	3	1	4	NA	Moderate	Moderate	Selkirk Water development; aka 639A	Continue monitoring
0641	Victoria	71	2	2	4	Moderate	Moderate	Moderate	Cecelia Creek; high flow; repaired main; SPSO	Continue monitoring and source investigations
0643	Victoria	27	1	2	3	Low	Low	Low	Low flow to dry	Resample in 2027
0645	Victoria	27	2	2	4	Moderate	Moderate	Moderate	Dry in summer	Continue monitoring
0645A	Victoria private	27	2	2	4	Moderate	Moderate	Moderate	Difficult access Private discharge	Continue monitoring
0646	Victoria	27	1	2	3	Low	Low	Low	Dry in summer	Resample in 2027
0649	Victoria private	27	1	2	3	High	Moderate	Moderate	Gorge Road Hospital Private discharge; lower counts	Continue monitoring
0650	Victoria	27	3	2	5	High	High	High	Low flow in summer	Continue monitoring
0756	Victoria	27	1	2	3	NA	Low	Low	Surges	Resample in 2027
0758A	Victoria	27	3	2	5	High	Moderate	High	Low flow in summer	Confirm rating
0759	Victoria	26	1	2	3	Moderate	Low	Low		Confirm rating
0768	Victoria	25	3	2	5	Moderate	Moderate	Moderate	SPSO; sewer odour	Confirm rating
0769	Victoria	25	3	2	5	Moderate	Moderate	Moderate	SPSO	Confirm rating
0775	Victoria	24	3	2	5	Moderate	Moderate	High	SPSO	Confirm rating
0777A	Victoria	24	3	2	5	High	High	High		Confirm rating
0697	View Royal	31	1	2	3	Low	Moderate	Low	Hospital Creek: SPSO	Confirm rating
0703	View Royal	31	1	2	3	Low	Moderate	Low		Confirm rating
0705	View Royal	31	2	2	4	NA	Low	Low		Resample in 2027
0709B	View Royal	31	1	2	3	Moderate	Moderate	Low	Craigflower Creek; SPSO	Continue monitoring creek
0710	View Royal	31	1	2	3	Moderate	Low	Low		Continue monitoring

Table 1 Core Area Public Health Concern Ratings

Discharge	Jurisdiction at Discharge	Fig. No.	Bacterial Rating	Public Shoreline Use Rating	Sum of Ratings	Level of Concern			Comments	Recommendations
						2020	2021	2022		
0712	View Royal	30	1	2	3	Low	Low	Low		Resample in 2027
0722	View Royal	30	1	2	3	Moderate	Low	Low		Resample in 2027
0722AA	Esquimalt	30	1	2	3	NA	Low	Low		Resample in 2027
0872	View Royal	16	1	2	3	Low	Low	Low	SPSO; low flows	Continue monitoring
0874	View Royal	15	1	2	3	Low	Low	Low		Resample in 2026
0879	View Royal	15	1	2	3	NA	NR	Low	Only sampled once	Confirm rating
0881	View Royal	15	1	2	3	NA	NR	Low	Dry in spring; only sampled once	Confirm rating
0886	View Royal	14	1	2	3	Low	Low	Low	Millstream Creek; SPSO	Continue monitoring creek
0865G	View Royal	17	1	1	2	Low	Moderate	Low		Confirm rating

Notes:
Level of Concern determined by sum of the bacterial and shoreline ratings. Low = sums of 2 and 3, moderate = sum of 4 and high = sums of 5 and 6.
EC = Escherichia coli (E. coli) counts.
NR = Not rated due to insufficient data or sample could not be obtained.
NA = Not assessed this year.
SPSO = This discharge acts as a sewage pump station overflow.
Private discharges are not part of the municipal system.

APPENDIX C

CORE AREA STORMWATER DISCHARGE BACTERIAL DATA

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0209	Foot of San Jose, west of Holland Point	no odour, clear, no rain	2021-01-15	220	40
		no odour, clear, no rain	2021-06-21	5000	9
		no odour, clear, no rain	2022-01-26	2800	60
		no odour, clear, no rain prior	2022-06-28	5100	40
SW0210	Foot of Lewis, west of Holland Point	no odour, clear, no rain	2021-01-15	130	85
		no odour, clear, no rain	2021-03-17	2	45
		no odour, clear, no rain	2021-06-21	2	5
		no odour, clear, no rain	2022-01-26	5	13
		no odour, clear, no rain prior	2022-06-28	2100	7
SW0211	East of Finlayson Point	no odour, clear, overcast with light rain	2021-02-25	11	11
		no odour, clear, no rain	2021-06-21	< 1	7
		no odour, clear, no rain	2022-01-27	5	11
		no odour, clear, no rain prior	2022-06-28	< 1	6
SW0212	Foot of Cook Street, beach access	no odour, clear, no rain	2021-01-15	5	100
		no odour, clear, no rain	2021-02-26	8	65
		no odour, clear, previous rain	2021-03-29	80	100
		no odour, clear, no rain	2021-06-21	4	5
		no odour, clear, no rain	2022-01-26	< 1	42
		no odour, clear, no rain prior	2022-06-28	5	4
SW0214	Clover Point	no odour, clear, no rain	2022-01-26	3600	> 250
		no odour, clear, no rain prior	2022-06-28	28	> 200
SW0216	Foot of Eberts Street	no odour, clear, rain/heavy rain previous	2021-02-04	1000	> 250
		no odour, clear, previous rain	2021-03-29	11000	200
		no odour, clear, no rain	2021-06-21	110000	65
		no odour, clear, no rain	2022-01-26	1900	> 300
		no odour, clear, no rain prior	2022-06-28	5800	> 100
		no odour, clear, no rain prior	2022-07-06	3000	> 120
		no odour, clear, no rain prior	2022-07-12	12000	> 100
		no odour, clear, no rain prior	2022-07-20	11000	> 100
		no odour, clear, no rain prior	2022-07-25	8700	> 80
SW0216-3	MH#D3640 @ Cook Street & May Street	no odour, clear, no rain	2021-03-30	8000	35
SW0218	Foot of Memorial Crescent, Ross Bay	no odour, clear, rain/heavy rain previous	2021-02-04	59	60
		no odour, murky, no rain	2021-03-30	17	22
		no odour, clear, no rain	2021-06-21	300	2
		no odour, clear, no rain	2022-01-27	56	9
		no odour, clear, no rain prior	2022-07-12	20	7

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0222	Middle of Ross Bay Cemetery	no odour, murky, rain/heavy rain previous	2021-02-04	500	> 800
		no odour, clear, no rain	2021-06-21	3000	100
		no odour, clear, no rain	2022-01-27	12000	> 250
		creosote odour, clear, no rain prior	2022-06-28	7600	> 200
SW0227	Foot of Wildwood Crescent	no odour, clear, rain/heavy rain previous	2021-02-04	400	9
		no odour, clear, no rain	2021-06-21	280	< 1
		no odour, clear, no rain	2022-01-27	11	4
		no odour, clear, no rain prior	2022-06-28	59	< 1
SW0228	Robertson Road, west side of Gonzales Bay	no odour, clear, no rain	2022-02-24	< 1	< 1
		no odour, clear, no rain prior	2022-06-28	3	< 1
SW0228A	West side of Gonzales Bay	no odour, clear, no rain	2022-02-24	1	3
		dry, not sampled, no rain prior	2022-06-28		0
SW0229	Foot of Ross Street, Gonzales Bay	no odour, clear, rain/heavy rain previous	2021-02-04	250	22
		dry, not sampled, no rain	2021-06-21		0
		no odour, clear, no rain	2022-01-27	140	5
		dry, not sampled, no rain prior	2022-06-28		0
SW0230	Foot of Foul Bay Road, Gonzales Bay	no odour, clear, rain/heavy rain previous	2021-02-04	24000	30
		no odour, clear, no rain	2021-06-21	26000	6
		no odour, clear, no rain	2022-01-28	34000	12
		slight sewer odour, clear, no rain	2022-06-21	58000	8
SW0231	Foot of Marne Street, Gonzales Bay	no odour, murky black, rain/heavy rain previous	2021-02-04	610	24
		no odour, clear, no rain	2021-06-21	15	< 1
		no odour, clear, no rain	2022-01-28	72	5
		flow too low to sample, no rain prior	2022-06-28		< 0.01
SW0236	Foot of Crescent Road, Harling Point	no odour, clear, no rain	2022-01-28	21	6
		no odour, clear, no rain prior	2022-06-28	3100	5
SW0237	Harling Point	no odour, clear, rain/heavy rain previous	2021-02-04	370	10
		flow too low to sample, no rain	2021-06-21		< 0.01
		no odour, clear, no rain	2022-01-28	15	3
		no odour, clear, no rain prior	2022-06-28	1	5
SW0244	McNeill Bay, across from 242 Beach Drive	no odour, murky, rain/heavy rain previous	2021-02-04	53	22
		no odour, clear, no rain	2021-06-14	730	6
		no odour, clear, no rain	2022-01-24	60	11
		no odour, clear, no rain	2022-02-24	100	11
		no odour, clear, rain two days ago	2022-07-04	110	5

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0245	Foot of Monterey Avenue, McNeill Bay	no odour, slightly murky, rain in past two days	2021-01-06	230	55
		no odour, clear, previous rain	2021-03-29	360	250
		no odour, slightly murky, no rain	2021-06-14	< 1	12
		no odour, amber with white foam, light rain	2021-08-17	28000	300
		no odour, clear, rain two days ago	2021-09-16	170	40
		no odour, clear, no rain	2022-01-24	870	65
		no odour, clear, no rain	2022-01-27	120	60
		no odour, clear, rain two days ago	2022-07-04	570	12
SW0249	Foot of Oliver, McNeill Bay	no odour, clear, light snow	2021-02-10	66	< 1
		no odour, clear, no rain	2021-06-14	14000	1
		no odour, clear, no rain	2022-01-27	5	2
		no odour, clear, rain two days ago	2022-07-05	150	< 1
SW0250	Foot of St. Patrick, McNeill Bay	no odour, clear, pooled with unknown flow, light snow	2021-02-10	1200	< 0.01
		no odour, clear, standing water, previous rain	2021-03-29	330	< 0.01
		no odour, clear, no rain	2021-06-14	1100	3
		no odour, clear, standing water, rain two days ago	2021-09-16	160	0
		no odour, clear, unknown flow, no rain	2022-01-27	730	
		no odour, clear, pooled with unknown flow, rain two days ago	2022-07-05	61000	
SW0257A	Foot of Radcliffe Lane	no odour, clear, no rain	2022-02-24	< 1	12
		no odour, clear, rain two days ago	2022-07-05	27	< 1
SW0304	End of Satellite Street	no odour, clear, no rain	2022-02-24	860	< 1
		flow too low to sample, rain two days ago	2022-07-05		< 0.01
SW0305	South of Oak Bay Marina, 1270 Beach Drive	dry, not sampled, no rain	2022-02-24		0
		dry, not sampled, rain two days ago	2022-07-05		0
SW0305A	South of Oak Bay Marina, west of 1247 Beach Drive	flow too low to sample, no rain	2022-02-24		< 0.01
		dry, not sampled, rain two days ago	2022-07-05		0
SW0306	South side of Oak Bay Marina	no odour, clear, unknown flow, overcast with light rain	2021-02-25	4400	< 0.01
		no odour, clear, previous rain	2021-03-29	260	200
		flow too low to sample, no rain	2021-06-22		< 0.01
		no odour, clear, some marine influence, no rain	2021-08-25		40
		flow too low to sample, no rain	2022-02-24		< 0.01
		flow too low to sample, rain two days ago	2022-07-05		< 0.01

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0307	Oak Bay Marina	no odour, clear, overcast with light rain	2021-02-25	4000	5
		slight sewer odour, clear, previous rain	2021-03-29	400	2
		no odour, clear, no rain	2021-06-22	110	2
		no odour, clear, rain yesterday	2022-02-01	170	< 1
		no odour, clear, rain two days ago	2022-07-05	2300	1
SW0308A	Windsor and Goodwin under ramp	no odour, clear, no rain	2021-01-20	34	< 1
		flow too low to sample, no rain	2021-06-22		< 0.01
SW0309	End of Windsor Road, upper pipe	no odour, clear, no rain	2021-01-20	< 1	5
		flow too low to sample, no rain	2021-06-22		< 0.01
		no odour, clear, surge flow, rain yesterday	2022-02-01	< 1	10
		no odour, clear, rain two days ago	2022-07-05	< 1	1
SW0310	Lower pipe at the end of Windsor Road	no odour, very turbid brown, no rain	2021-01-20	140	25
		no odour, clear, no rain	2021-06-22	28	5
		no odour, clear, rain yesterday	2022-02-01	540	11
		no odour, clear, rain two days ago	2022-07-05	90	9
SW0310A	North of Windsor Road, foot of stairs	no odour, clear, no rain	2021-01-20	5800	1
		no odour, clear, no rain	2021-06-22	1300	1
		no odour, clear, no rain	2022-02-24	15	1
		no odour, clear, rain two days ago	2022-07-05	48	3
SW0316	South of Somass Drive above tidal influence	no odour, clear, overcast with light rain	2021-02-25	260	> 2000
		no odour, clear, no rain	2021-06-22	800	> 400
		no odour, slightly murky, no rain	2022-02-24	40	> 2000
		no odour, clear, no rain prior	2022-07-06	320	> 400
SW0317	End of Bowker Lane	no odour, clear, no rain	2021-01-20	2	7
		no odour, amber, no rain	2021-06-22	86	5
		no odour, clear, suds in MH, rain	2022-01-31	11	32
		no odour, clear, no rain prior	2022-07-06	9	2
SW0318	End of Bowker Avenue	no odour, clear, no rain	2021-01-20	2000	60
		no odour, clear, no rain	2021-06-22	820	22
		no odour, murky grey, rain	2022-01-31	36	60
		no odour, clear, no rain prior	2022-07-06	21	30
SW0320	End of Dalhousie Street	no odour, green dye in discharge, no rain	2021-01-20	30	14
		no odour, clear, no rain	2021-06-22	1100	5
		no odour, murky grey, rain	2022-01-31	120	80
		no odour, clear, no rain prior	2022-07-06	68	16

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0321	End of Estevan Avenue	no odour, clear, no rain	2021-01-20	70	12
		flow too low to sample, no rain	2021-09-16		< 0.01
		no odour, clear, rain yesterday	2022-02-02	110	7
		no odour, clear, no rain prior	2022-07-06	35	6
SW0321A	Foot of Estevan near stairs; beach side	no odour, clear, no rain	2021-01-20	280	15
		no odour, clear, no rain	2021-06-22	2400	9
		no odour, clear, rain yesterday	2022-02-02	150	12
		no odour, clear, no rain prior	2022-07-06	1600	10
SW0322	End of Thorpe Place beach access	no odour, clear, no rain	2021-01-20	380	20
		no odour, clear, rain two days ago	2021-09-16	130	40
		no odour, clear, rain yesterday	2022-02-02	790	12
		no odour, clear, no rain prior	2022-07-06	70000	9
SW0323	North end of Esplanade	no odour, slight amber, no rain	2021-01-20	50	> 160
		no odour, clear, rain two days ago	2021-09-16	800	80
		no odour, clear, rain yesterday	2022-02-01	110	200
		no odour, clear, no rain prior	2022-07-06	360	40
SW0323A	Off stairs leading to Cattle Point	no odour, murky brown, no rain	2021-01-20	23	8
		dry, not sampled, no rain	2021-09-16		0
		no odour, murky brown, rain yesterday	2022-02-02	420	5
		flow too low to sample, no rain	2022-07-06		< 0.01
SW0324	Cattle Point	no odour, clear, no rain	2021-02-26	4	18
		dry, not sampled, no rain	2021-09-16		0
		dry, not sampled, no rain prior	2022-07-12		0
SW0325	End of Rutland Road	no odour, clear, unknown flow, no rain	2021-02-26	2	< 0.01
		dry season sample discontinued until sewer issue remedied	2021-09-16		
		dry, not sampled, no rain prior	2022-07-12		0
SW0327A	Foot of Hibbens Close	no odour, clear, no rain	2021-01-15	22	8
		flow too low to sample	2021-06-14		< 0.01
SW0501	2730 Hibbens Close, Cadboro Bay	no odour, clear, no rain	2021-01-15	2	75
		no odour, clear, no rain	2021-06-14	1	85
SW0503	Hobbs creek, Cadboro Bay	no odour, murky, no rain	2021-01-07	260	95
		no odour, clear, no rain	2021-01-15	250	> 120
		no odour, murky amber, rain/heavy rain previous	2021-02-04	360	> 120
		no odour, clear, no rain	2021-06-14	1400	90
		no odour, slightly brown, rain yesterday	2022-02-02	4100	80
		no odour, clear, no rain prior	2022-07-12	2100	65

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0505	Diffuser; east of Gyro Park, Cadboro Bay	no odour, murky amber, rain/heavy rain previous	2021-02-04	21	> 200
		no odour, clear, no rain	2021-05-19	420	200
		no odour, clear, no rain	2021-06-14	710	65
		no odour, clear, no rain	2022-02-25	37	> 250
		no odour, clear, no rain prior	2022-07-12	53	60
SW0505-4	MH between 2608/2604 Penrhyn Street	no odour, clear, rain yesterday	2021-02-26		7
SW0505-6	MH Cadboro Bay/Penrhyn Road intersection	no odour, clear, rain yesterday	2021-02-26		7
SW0505-7	MH at driveway of 3844 Hobbs Street	no odour, clear, rain yesterday	2021-02-26		7
SW0506	Telegraph Bay Road, west of beach access	no odour, clear, no rain	2021-01-15	8	60
		no odour, clear, no rain	2021-06-14	12	9
		no odour, clear, rain yesterday	2022-02-02	18	35
		no odour, clear, no rain prior	2022-07-12	100	7
SW0507	Small pipe, foot of Telegraph Bay Road	no odour, clear, no rain	2021-01-15	< 1	2
		flow too low to sample	2021-06-14		< 0.01
		no odour, clear, rain yesterday	2022-02-02	< 1	1
		no odour, clear, no rain prior	2022-07-12	60	< 1
SW0508	Diffuser, foot of Telegraph Bay Road	no odour, clear, no rain	2021-01-15	7	100
		no odour, clear, no rain	2021-06-14	1400	12
		no odour, clear, rain yesterday	2022-02-02	8	40
		no odour, clear, no rain prior	2022-07-12	40	11
SW0513	West of boat ramp at 2893 Sea View Road, Ten Mile Point	no odour, clear, light rain previous	2022-03-01	2	2
		dry, not sampled, no rain	2022-09-22		0
SW0514	South of boat ramp at 2893 Sea View Road, Ten Mile Point	dry, not sampled, no rain	2022-09-22		0
SW0515	4 m north of beach access at 2929 Sea View Road, Ten Mile Point	no odour, clear, overcast with light rain	2021-02-25	13	46
		flow too low to sample, no rain	2021-06-17		< 0.01
SW0516	2977 Sea View Road, Ten Mile Point	no odour, clear, rain yesterday	2022-02-02	9	18
		slight foul odour, clear, otter activity observed	2022-09-22	5	10
SW0518	Tudor Avenue beach access	no odour, clear, no rain	2021-01-07	3	35
		no odour, clear, no rain	2021-06-17	14000	5
		no odour, clear, rain yesterday	2022-02-02	38	9
		no odour, clear, no rain	2022-09-22	2	1
SW0519	South of Tudor Avenue beach access, Ten Mile Point	flow too low to sample, no rain	2022-02-25		< 0.01
		dry, not sampled, no rain	2022-09-22		0
SW0520	3905 Tudor Avenue, Ten Mile Point	no odour, clear, no rain	2022-02-25	< 1	3
		no odour, clear, no rain	2022-09-22	12	2

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0521A	McAnally Road and Smugglers Cove Road	dry, not sampled	2021-02-25		0
		dry, no rain	2021-06-17		0
		dry, not sampled, rain yesterday	2022-02-03		0
		dry, not sampled, no rain	2022-09-22		0
SW0522	Foot of McAnally, Smugglers Cove	no odour, clear, overcast with light rain	2021-02-25	1700	9
		flow too low to sample, no rain	2021-06-17		< 0.01
		no odour, clear with iron oxide bacteria, rain yesterday	2022-02-03	6	< 1
		dry, not sampled, no rain	2022-09-22		0
SW0525	3030 Spring Bay Road, Ten Mile Point	dry, not sampled, no rain	2022-02-25		0
		dry, not sampled, no rain	2022-09-22		0
SW0530	End of Phyllis/ Mt. Bakerview Road, Ten Mile Point	no odour, clear, light rain previous	2022-03-01	< 1	12
SW0533	In rock wall; west of Cranford Place beach access	no odour, clear, no rain	2021-01-07	8	12
		dry, no rain	2021-06-17		0
SW0534	East of Cranford Place beach access	no odour, clear, no rain	2021-01-07	2	18
		flow too low to sample, no rain	2021-06-17		< 0.01
SW0539A	4025 Locarno Lane, Arbutus Cove	no odour, clear, no rain	2022-09-22	120	45
SW0540	East corner of 4035 Larcono Lane, Finnerty Cove	no odour, clear, no rain in past two days	2022-03-02	2	7
SW0541	1 m from fence, 4031 Hollydene Place, Arbutus Cove	no odour, clear, overcast with light rain	2021-02-25	16	18
		no odour, clear, no rain	2021-06-17	12	7
		no odour, clear, light rain previous	2022-01-20	70	32
SW0541A	Black flexible pipe, base of hillside, 4039 Hollydene Place	flow too low to sample	2021-02-25		< 0.01
		dry, no rain	2021-06-17		0
		could not find sample site due to landslide	2022-01-20		
SW0541B	Black flexible pipe, base of hillside, 4041 Hollydene Place	no odour, clear, overcast with light rain	2021-02-25	1700	6
		no odour, clear, no rain	2021-06-17	5	3
		no odour, clear, light rain previous	2022-01-20	6	5
SW0542	2296 Arbutus Cove Lane, Arbutus Cove	no odour, clear, light rain previous	2022-01-20	7	3
SW0542A	Arbutus Cove NE corner of vacant lot	no odour, clear, light rain previous	2022-01-20	< 1	7
SW0542B	Center of eastern property line 2270 Arbutus Road	no odour, clear, light rain previous	2022-01-20	8	8
SW0542C	Between 2254 and 2270 Arbutus Road	no odour, clear, light rain previous	2022-01-20	< 1	10
SW0543	140 m south of stairs; Arbutus Cove Lane beach access	no odour, clear, light rain previous	2022-01-20	< 10	10
SW0543A	2 m south of discharge 544, Arbutus Cove	no odour, clear, light rain previous	2022-01-20	57	7
SW0544	55 m south of Arbutus Cove Lane beach access stairs	no odour, clear, light rain previous	2022-01-20	49	8
SW0545	Foot of southern stairs; end of Arbutus Cove Lane beach access, Arbutus Cove	no odour, clear, light rain previous	2022-01-20	23	24

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0545A	End of Arbutus Cove Lane beach access	no odour, clear, light rain previous	2022-01-20	4	12
SW0549	End of Shore Way, Gordon Head	no odour, clear, overcast with light rain	2021-02-25	1	7
		flow too low to sample, no rain	2021-06-17		< 0.01
SW0550	Foot of Balmacarra Road and Leynes, Gordon Head	flow too low to sample	2021-02-25		< 0.01
		no odour, clear, no rain	2021-06-17	69	5
		no odour, clear, rain yesterday	2022-02-03	6	40
SW0551	4659 Vantreight Road, Gordon Head	flow too low to sample	2021-02-25		< 0.01
		dry, no rain	2021-06-17		0
		dry, not sampled, rain yesterday	2022-02-03		0
SW0552	31 m west of Balmacarra and Leynes beach access	no odour, clear, overcast with light rain	2021-02-25	24	6
		dry, no rain	2021-06-17		0
		flow too low to sample, rain yesterday	2022-02-03		< 0.01
SW0553	110 m west of Balmacarra Road and Leynes beach access	no odour, clear, overcast with light rain	2021-02-25	1	1
		dry, no rain	2021-06-17		0
		flow too low to sample, rain yesterday	2022-02-03		< 0.01
SW0554	280 m west of Balmacarra Road/Leynes beach access	no odour, clear, overcast with light rain	2021-02-25	4	3
		dry, no rain	2021-06-17		0
		no odour, clear, rain yesterday	2022-02-03	< 10	< 1
SW0557	480 m east of Mt. Douglas Park beach access stairs	no odour, clear, no rain	2021-03-04	2	9
		flow too low to sample	2021-06-08		< 0.01
		no odour, clear, rain yesterday	2022-02-03	28	6
		dry, not sampled, no rain	2022-09-16		0
SW0558	180 m east of Mt. Douglas beach access stairs	no odour, clear, no rain	2021-03-04	11	12
		no odour, clear, rain previous	2021-06-08	61	4
		no odour, clear, rain yesterday	2022-02-03	40	9
		no odour, clear, no rain	2022-09-16	250	1
SW0559	Mt. Doug Creek, Cordova Bay	no odour, clear, no rain	2021-03-04	32	> 1200
		no odour, clear, rain previous	2021-06-08	60	> 200
		no odour, clear, no rain	2021-08-18	340	200
		no odour, clear, no rain	2021-08-25	34	200
		no odour, clear, no rain	2021-09-01	26	150
		no odour, clear, mixed rain	2021-09-08	12	150
		no odour, clear, rain previous	2021-09-15	290	250
		no odour, clear, heavy rain (near first flush)	2021-09-17	3200	> 3000
			2021-10-14	410	> 700
			2021-10-20	240	> 1200

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
			2021-10-28	2800	5000
			2021-11-03	80	1300
			2021-11-09	150	1000
		no odour, clear, rain yesterday	2022-02-03	470	> 2000
		no odour, clear, no rain	2022-09-16	26	75
SW0560	130 m west of Mt. Douglas Park beach access	no odour, clear, no rain in past two days	2022-03-02	2	9
		flow too low to sample, no rain	2022-09-16		< 0.01
SW0561	430 m west of Mt. Douglas beach access	dry, not sampled, no rain	2022-04-29		0
SW0564	4649 Cordova Bay Road	no odour, clear, no rain	2021-01-20	10	40
		no odour, clear, no rain	2022-02-10	< 1	22
		no odour, clear, no rain previous	2022-08-16	50	25
SW0567	South side of 4771 Timber Place	no odour, clear, no rain	2021-01-20	680	80
		no odour, clear, no rain	2021-03-04	20	85
		no odour, clear, rain previous	2021-06-08	3800	14
		no odour, brown, no rain	2022-02-10	470	35
		no odour, clear, no rain previous	2022-08-16	7000	30
SW0574	4915 Cordova Bay Road	no odour, turbid brown, no rain	2021-01-20	12	> 100
		no odour, clear, no rain	2021-03-03	17	85
		no odour, clear, rain previous	2021-06-08	280	60
		no odour, slightly murky, moderate rain two days ago	2021-09-21	2400	65
		no odour, clear, no rain	2022-02-10	11	100
		no odour, clear, no rain prior	2022-04-07	23	85
		no odour, clear, no rain previous	2022-08-16	50	200
SW0576A	South of beach access; 4989 Cordova Bay Road	no odour, clear, no rain	2021-01-20	7	70
		no odour, clear, no rain	2021-03-03	5	40
		no odour, clear, rain previous	2021-06-08	13	50
		no odour, clear, no rain	2021-07-20	69	18
		no odour, clear, moderate rain two days ago	2021-09-21	68	46
		no odour, clear, no rain	2022-02-10	2	28
		no odour, clear, no rain prior	2022-04-07	15	65
		no odour, clear, no rain previous	2022-08-16	130	125
SW0578	60 m south of beach access; 5091 Cordova Bay Road	no odour, clear, light rain	2021-04-09	28	500
		no odour, clear, rain previous	2021-06-08	48	> 200
		no odour, clear, no rain	2022-02-25	8	> 300
		no odour, clear, no rain previous	2022-08-16	27	400

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0580	20 m south of park on Agate Lane	no odour, clear, no rain	2021-03-03	1	9
		no odour, clear, rain previous	2021-06-08	230	3
		no odour, clear, no rain	2022-02-10	19	8
		dry, not sampled, no rain previous	2022-08-16		0
SW0581	5179 Agate Lane	no odour, clear, no rain	2021-03-03	< 1	30
		no odour, clear, rain previous	2021-06-08	520	20
		flow too low to sample, no rain	2022-02-10		< 0.01
		no odour, clear, no rain previous	2022-08-16	58	50
SW0589	South of Parker Park beach access, Burnham Brook	no odour, clear, previous rain	2021-04-09	4	450
		no odour, clear, rain previous	2021-06-08	4	80
SW0592	Noble Creek, north side of 5575 Parker Road	no odour, clear, no rain	2021-03-03	13	> 700
		no odour, clear, no rain	2021-08-24		400
		no odour, murky brown, no rain	2022-02-10	16	> 600
		no odour, amber, no rain previous	2022-08-16	530	500
SW0601	Montreal Street, behind breakwater	no odour, clear, potential marine, no rain	2021-03-31	1	3
		flow too low to sample, no rain	2021-08-20		< 0.01
SW0601A	GVHA Dallas Road, center of middle cruise ship dock, d/s of oil/water separator	dry, not sampled, no rain	2021-03-31		0
		access to sample site blocked, could not sample	2021-08-20		
SW0602	Helijet parking lot	no odour, clear, no rain	2021-03-31	< 1	12
		no odour, turbid, light rain previous	2021-08-20	300000	8
SW0603	20 m south of James Bay Anglers	strong sewer odour with toilet paper, no rain	2021-03-30	2000000	40
		no odour, clear, geese present, light rain previous	2021-08-20	450000	5
		slight sewer odour, clear, rain	2022-03-21	9300	15
		no odour, clear, no rain prior	2022-07-15	17000	2
SW0604	South corner of Canadian Coast Guard lot	no odour, clear, no rain	2021-03-30	2	50
		no odour, clear, heavy rain two days ago	2021-09-21	90	25
SW0605	5 m west of fire hydrant at Canadian Coast Guard property	no odour, clear, no rain	2021-03-30	64	1
		flow too low to sample, no rain	2021-09-21		< 0.01
		no odour, clear, rain	2022-03-21	17	< 1
		dry, not sampled, no rain prior	2022-07-25		0
SW0607	East of Fishermans Wharf, northwest pipe	no odour, clear, no rain	2021-03-17	7800	32
		no odour, slight amber, no rain	2021-06-15	940000	17
		no odour, clear, rain	2022-03-21	6900	300
		slight sewer odour, amber, no rain prior	2022-07-15	30000	18

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0607A	East of Fishermans Wharf, southeast pipe	no odour, clear, no rain	2021-03-17	10	36
		no odour, clear, rain previous	2021-06-15	7	24
		no odour, clear, rain	2022-03-21	2000	50
		no odour, clear, no rain prior	2022-07-15	190	14
SW0609A	5 m SW of discharge 609, Laurel Point	flow too low to sample, rain	2022-03-21		< 0.01
		flow too low to sample, no rain prior	2022-07-15		< 0.01
SW0609B	12 m SW of discharge 609A, Laurel Point	dry, not sampled, rain	2022-03-21		0
		flow too low to sample, no rain prior	2022-07-15		< 0.01
SW0610	Foot of Oswego Street	no odour, clear, no rain	2021-03-17	610	9
		no odour, clear, rain previous	2021-06-15	90	9
		no odour, clear, no rain	2022-03-04	4700	9
		no odour, clear, no rain prior	2022-07-14	2200	8
SW0611	At foot of Menzies Street	no odour, clear, no rain	2021-03-17	170000	9
		no odour, clear, rain previous	2021-06-15	260000	11
		sewer odour, clear, no rain	2022-03-04	16000	12
		sewer odour, clear, no rain prior	2022-07-14	17000	7
SW0613	Curved portion of causeway wall at Government Street and Belleville	no odour, clear, no rain	2021-04-01	120	80
		no odour, clear, no rain	2021-06-15	1100	17
		low tide odour, clear, rain	2022-01-31	400	> 200
		no odour, clear, no rain prior	2022-07-14	3800	65
SW0614	Humboldt/Wharf and Government	no odour, clear, light rain previous	2021-04-30	300	140
		no odour, clear, no rain	2021-06-24	680	26
		low tide odour, murky, rain	2022-01-31	9000	> 250
		no odour, clear, no rain prior	2022-07-14	1900	45
SW0615	South of Adventure Centre float building	dry, not sampled, rain	2022-03-21		0
SW0616	South of Air BC terminal	dry, not sampled, rain	2022-03-21		0
SW0618	Foot of Fort Street	no odour, clear, no rain	2021-03-31	< 1	50
		no odour, clear, no rain	2021-06-24	7	3
SW0619	South side of Johnson Street Bridge	slight sewer odour, murky, no rain	2021-03-17	280000	7
		no odour, clear, no rain	2021-06-24	880	2
		musty/sewer odour, murky, rain	2022-03-22	600	15
		no odour, clear, no rain prior	2022-07-15	92	2
SW0619B	Under Regency dock walkway	no odour, clear, rain	2022-03-22	8100	2
		flow too low to sample, no rain prior	2022-07-15		< 0.01

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0620	North side of Johnson Street Bridge	slight sewer odour, murky, no rain	2021-03-17	4700	22
		no odour, clear, no rain	2021-06-24	7600	11
		musty/sewer odour, murky, rain	2022-03-22	3300	300
		organic odour, brown, no rain prior	2022-07-15	2600	20
SW0622	End of Swift Street	flow too low to sample, no rain	2021-03-30		< 0.01
		no odour, clear, no rain	2021-06-24	240	1
		no odour, clear, rain	2022-03-21	16	5
		sewer odour, amber, no rain prior	2022-07-25	30	1
SW0623	End of Chatham Street	flow too low to sample, no rain	2021-03-30		< 0.01
		dry, not sampled, no rain	2021-06-24		0
		no odour, clear, rain	2022-03-22	730000	100
		flow too low to sample, no rain prior	2022-07-15		< 0.01
SW0624	2140 Store Street, Rock Bay	no odour, clear, no rain	2021-04-01	7	4
		no odour, clear, no rain	2021-06-24	60	1
		musty odour, clear, rain	2022-03-23	12000	10
		creosote odour, clear, no rain prior	2022-07-25	2200	1
SW0626	Behind 2122 Government Street, Rock Bay	slight odour, clear, no rain	2021-04-01	49000	500
		no odour, clear, no rain	2021-06-24	60000	22
		no odour, clear, rain	2022-03-23	4000	200
		sewer odour, slight amber, no rain prior	2022-07-25	9000	22
SW0627	South side of Ocean Cement, Rock Bay	no odour, clear, no rain	2021-04-01	1200	800
		no odour, clear, no rain	2021-06-24	260000	30
		slight sewer odour, clear, rain	2022-03-23	9800	600
		no odour, clear, pooled with unknown flow, no rain prior	2022-07-25	1700	
SW0629	East of foot of Bridge Street, Rock Bay	sewer odour, slightly murky, no rain	2021-04-01	12	45
		sewer odour, very turbid, rain	2022-03-23	3200	50
		no odour, dark brown flow with film on surface, no rain	2022-09-22	10000	20
SW0629-2	MH#D3017 @ 540 John Street; Boyd Auto Glass	no odour, slight amber flow, no rain	2021-03-05	< 1	8
SW0629-8	MH D3033, SE corner of Hillside Avenue/Rockbay Avenue (outlet flow)	no odour, clear, no rain	2021-03-05		2
SW0630	Foot of Bridge Street, Rock Bay	no odour, turbid, rain	2022-03-22	140	40
		dry, not sampled, heavy rain two days ago	2022-08-25		0
SW0633	Under south side of Bay Street Bridge	flow too low to sample	2021-03-31		< 0.01
		sewer odour, very turbid, light rain	2021-08-17	1600	30
		strong sewer odour, sudsy, rain prior two days	2022-03-23	300	5

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0634	End of David Street, below Budget Steel	foul odour, silty, no rain	2021-08-23	3400	5
		decomposition odour, cloudy flow, rain	2022-03-23	70000	10
		foul, some standing water, no rain	2022-09-22	23000	2
SW0634-A	MH#D3006 at Hillside and Pleasant	foul odour, very murky brown, rain/rain	2021-01-12	15000	32
SW0636	South side of Victoria municipal yard, South Bay	no odour, clear, no rain	2021-04-01	800	> 1000
		foul odour, light turbid colour, no rain	2021-08-23	290000	200
		hydrocarbon odour, very silty, rain	2022-03-23	7000	500
			2022-09-22	15000000	
SW0639A	Selkirk Water Development	no odour, milky flow, no rain	2021-03-30	1200	20
		no odour, clear, no rain	2021-08-23	13000	120
		slight sewer odour, clear, rain prior two days	2022-03-24	13000	100
		no odour, clear, no rain	2022-08-25	1800	15
SW0641	Mouth of Cecelia Creek	no odour, slightly murky, no rain	2021-01-21	320	> 1000
		sewer odour, clear, rain two days ago	2021-09-16	480	400
		slight sewer odour, clear, rain prior two days	2022-04-11	1800	700
		no odour, clear, no rain	2022-08-23	2100	500
SW0643	Foot of Washington Avenue	no odour, clear, no rain	2021-01-22	< 1	2
		flow too low to sample, no rain	2021-08-19		< 0.01
		no odour, clear, no rain in past two days	2022-03-03	11	1
		flow too low to sample, heavy rain two days ago	2022-08-23		< 0.01
SW0645	Carrol Street easement	no odour, clear, no rain	2021-01-22	250	4
		access to sample site blocked, could not sample	2021-08-19		
		no odour, murky, no rain in past two days	2022-03-03	1200	6
SW0645A	Prince Charles Apts/Gorge Road	no odour, clear, no rain	2021-01-22	420	6
		access to sample site blocked, could not sample	2021-08-19		
		no odour, clear, no rain in past two days	2022-03-03	540	5
SW0646	20 m east of large concrete outfall	no odour, clear, no rain	2021-01-22	< 1	3
		flow too low to sample, no rain	2021-08-19		< 0.01
		no odour, clear, no rain in past two days	2022-03-03	15	2
		dry, not sampled, heavy rain two days ago	2022-08-23		0
SW0649	Head of scoured channel, Gorge Road Hospital	no odour, clear, no rain	2021-01-22	560	7
		no odour, clear, light rain previous	2021-08-19	1100	1
		no odour, clear, no rain in past two days	2022-03-03	130	< 1
		dry, not sampled, heavy rain two days ago	2022-08-23		0

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0650	East of "Outfall" sign; end of Harriet Road	sewer odour, clear, rain previous	2021-04-26	28000	15
		flow too low to sample, no rain	2021-08-19		< 0.01
		no odour, slight brown, no rain in past two days	2022-03-03	110000	9
		no odour, clear, no rain in past two days, sampled during surge flow	2022-03-03	8000	20
		musty odour, slightly murky, no rain	2022-08-23	12000	3
SW0653	Cedar Shore Apts; below tennis courts	strong sewage odour, solid sewage, no rain	2021-03-30	1800	100
		no odour, clear, light rain previous	2021-08-19	2100	30
		asphalt odour, clear, rain prior two days	2022-03-24	14	90
		no odour, clear, no rain	2022-08-23	70	45
SW0654	6 m north of tennis courts at Cedar Shore Apts	no odour, clear, no rain	2021-03-30	< 1	25
		no odour, clear, light rain previous	2021-08-19	14	< 1
SW0657	West of Gorge Bridge in small cove	flow too low to sample, light rain previous	2021-05-12		< 0.01
SW0658A	Directly below 384 Gorge Road	no odour, murky, rain previous	2021-04-26	95	2
		flow too low to sample, no rain	2021-08-19		< 0.01
		no odour, murky white with film, rain prior two days	2022-03-24	< 100	10
		no odour, clear, no rain previous	2022-08-18	10000	2
SW0659	Foot of Gorge View Drive	no odour, clear, rain previous	2021-04-26	14	8
		dry, not sampled, no rain	2021-08-19		0
		no odour, clear, rain prior two days	2022-03-24	1	10
		flow too low to sample, no rain previous	2022-08-18		< 0.01
SW0669	Foot of Dysart Road	dry, not sampled, rain previous	2021-04-26		0
SW0671	Foot of Austin Avenue	no odour, clear, rain previous	2021-04-26	620	15
		no odour, silty, light rain previous	2021-08-19	200	20
		no odour, clear, rain prior two days	2022-03-24	22	40
		no odour, clear, no rain previous	2022-08-18	70	2
SW0675	Foot of Colquitz Avenue		2021-04-26		0
		dry, not sampled, no rain	2021-09-15		0
SW0676	Across from 820 Gorge Road	no odour, slight brown foam, rain previous	2021-04-26	3	2
		dry, not sampled, no rain	2021-09-15		0
		no field notes, rain prior	2022-03-25	< 1	2
		dry, not sampled, no rain previous	2022-08-18		0
SW0679	Gorge Road at Admirals Road	sulphur odour, clear, rain previous	2021-04-26	12	25
		no odour, clear, rain two days ago	2021-09-16	7	20

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0690D	Under 3rd bridge to east, Colquitz River	no odour, clear, no rain	2021-05-06	200	2000
		no odour, clear, algae in flow, light rain previous	2021-09-01	150	> 500
		no odour, clear, rain prior two days	2022-04-11	23	70000
SW0690D-12	Haliburton Brook, at bridge		2022-05-31	6	
		flow too low to sample	2022-06-30	28	
			2022-07-29		
			2022-08-26		
			2022-11-01	300	
			2022-12-02	1	
SW0690D-12A	Haliburton Brook, downstream of the Pat. Bay Hwy		2022-05-31	3	
			2022-11-01	82	
			2022-12-02	7	
SW0690D-15	Hamsterly Creek/Whiskey Creek, east side of Hamsterly Beach		2022-05-31	5	
			2022-06-30	< 2	
		flow too low to sample	2022-07-29		
			2022-11-01	81	
			2022-12-02	4	
SW0690D-17	O'Donnell Creek, sample at bridge		2022-05-31	25	
			2022-06-30	20	
			2022-07-29		
			2022-08-26		
			2022-11-01	60	
			2022-12-02	23	
SW0690D-17B	O'Donnell Creek, downstream of Walton Place/Oldfield Road intersection		2022-05-31	47	
			2022-11-01	150	
			2022-12-02	15	
SW0690D-17C	O'Donnell Creek, downstream of Brookhaven Road		2022-05-31	2200	
			2022-06-30	870	
SW0690D-2	Colquitz River, behind Tillicum Mall at fish ladder	no odour, amber, no rain	2022-04-25	34	> 800
		no odour, clear, no rain	2022-08-10	95	> 1000
SW0690E	Garry Road @ Cuthbert Holmes Park, SW corner of parking lot	dry, not sampled, no rain	2021-05-06		0
		dry, not sampled, rain yesterday	2021-09-15		0

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0691A	Wilkinson Road right-of-way, 1173A & B Portage Road	no odour, clear, rain previous	2021-04-26	340	25
		flow too low to sample, rain yesterday	2021-09-15		< 0.01
		rain two days ago	2022-03-25	220	60
		flow too low to sample, no rain previous	2022-08-18		< 0.01
SW0692	End of Portage Road	no odour, clear, rain previous	2021-04-26	5	50
		no odour, clear, no rain	2021-09-15	27	5
SW0697	Beside 152 Street Giles Street, Hospital Creek	no odour, clear, light rain previous, likely marine influenced	2021-04-30	340	250
		no odour, clear, marine influence, no rain	2021-08-25	50	30
		no odour, clear, rain prior two days	2022-03-24	10	800
		no odour, clear, no rain previous	2022-08-18	87	50
SW0703	Tidewater Road easement, SE of Helmcken Park	no odour, murky from sampling, raised detection, no rain	2021-05-06	< 100	2
		no odour, clear, light rain previous	2021-08-19	4000	5
		rain two days ago	2022-03-25	< 2	3
		dry, not sampled, no rain prior	2022-07-25		0
SW0705	Foot of Thomas Park Road	no odour, clear, no rain	2021-05-06	< 1	5
		dry, not sampled, no rain	2021-08-19		0
		rain two days ago	2022-03-25	< 1	30
		no odour, clear, no rain prior	2022-07-25	1	1
SW0709B	Craigflower Creek, under Helmcken Road Bridge	no odour, clear, no rain	2021-05-06	6	1500
		no odour, clear, no rain	2021-09-15	230	200
		no odour, clear, rain prior two days, flow too high to estimate	2022-04-11	10	
		no odour, slight amber, no rain prior	2022-07-25	43	> 80
SW0710	15 m south of Helmcken Road Bridge	no odour, clear, rain previous	2021-03-09	< 1	6
		no odour, clear, no rain	2021-06-24	1	2
		no odour, clear, no rain	2022-02-15	< 1	6
		no odour, clear, no rain prior	2022-07-25	150	1
SW0710W	5 m downstream of footbridge over Craigflower Creek	no odour, clear, rain previous	2021-03-09	< 1	15
		no odour, clear, no rain	2021-06-24	4	5
SW0712	East of E&N railway and north of Old Island Hwy	no odour, clear, rain previous	2021-03-09	< 1	45
		no odour, clear, no rain	2021-03-17	1	46
		no odour, clear, no rain	2021-06-24	14	7
		no odour, clear, no rain	2022-02-15	5	9
		no odour, clear, no rain prior	2022-07-25	9	7

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0722	Directly under center of Craigflower Bridge	no odour, clear, rain previous	2021-03-09	< 1	11
		no odour, clear, no rain	2021-03-17	7	10
		no odour, clear, no rain	2021-06-25	150	4
		no odour, murky grey, rain previous	2021-09-16	32	10
		chemical odour, clear with some suds, surge flow, no rain	2022-02-15	7	20
		no odour, clear, sampled during surge flow, no rain prior	2022-07-20	23	12
SW0722AA	SW corner of Craigflower Bridge from rip rap of rain garden	no odour, clear, rain previous	2021-03-09	< 1	6
		no odour, clear, no rain	2021-06-25	28	3
		no odour, clear, no rain	2022-02-15	1	5
		no odour, clear, no rain prior	2022-07-20	170	6
SW0726	S corner of motel at Craigflower and Admirals	no odour, clear, no rain, unknown flow	2021-03-17	49	
		no odour, clear, no rain	2021-06-25	60	9
		no odour, clear, no rain	2022-03-04	12	40
		no odour, clear, no rain prior	2022-07-20	340	11
SW0727	2 m to west of path at foot of Aral Road	no odour, clear, rain previous	2021-03-09	9	9
		no odour, clear, light rain previous	2021-08-19	480	5
		no odour, clear, no rain	2022-02-15	22	6
		no odour, clear, no rain prior	2022-07-20	180	5
SW0730	East side of 905 Aral Road	rain two days ago	2022-03-25	2	2
		flow too low to sample, no rain prior	2022-07-20		< 0.01
SW0736	Below 934 Mesher Place	rain two days ago	2022-03-25	10	20
		flow too low to sample, no rain prior	2022-07-20		< 0.01
SW0736A	#14-915 Glenvale, man-made stream	no odour, clear, rain previous	2021-03-09	1	9
		flow too low to sample, no rain	2021-08-19		< 0.01
		no odour, clear, no rain	2022-02-15	13	6
		no odour, clear, no rain prior	2022-06-24	590	4
		no odour, clear, no rain	2022-07-12	28	1
		no odour, clear, no rain prior	2022-07-20	1500	1
SW0737	Foot of Garthland Road	no odour, clear, rain previous	2021-03-09	3	5
		no odour, clear, no rain	2021-03-17	< 1	5
		no odour, turbid, light rain previous	2021-08-19	10	1
		strong sewer odour from pipe, clear, no rain prior	2022-07-20	3	< 0.01
SW0741	447 Foreshaw Road	dry, not sampled, rain two days ago	2022-03-25		0

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0742	Foot of Sioux Place, upstream edge of pool dam	no odour, clear with suds, no rain	2021-03-17	4	14
		no odour, clear, no rain	2021-08-05	21	2
		no odour, clear, no rain	2022-02-17	3	7
		no odour, clear, no rain previous, geese present	2022-08-18	1100	3
SW0742-2A	Culvert, SE of Craigflower Road, Gorge Vale Golf Course entrance	no odour, clear, light rain	2021-05-12	7	3
SW0742-2B	Flow from NW of Craigflower Road culvert	no odour, iron oxide bacteria, light rain	2021-05-12	40	30
		muddy, no rain	2021-08-05	440	2
SW0742-2C	NE of Gorge Vale Golf Course Fairway in wooded area	no odour, clear, pooled water, no rain	2021-08-05	68	
SW0742B	SW of parking area @ Kinsmen Gorge Park	no odour, clear, no rain, unknown flow	2021-03-17	1800	
		flow too low to sample, no rain	2021-08-05		< 0.01
		no odour, clear, unknown flow, no rain	2022-02-17	< 1	
		could not sample due to backflooding	2022-08-18		
SW0743	Gorge-Esquamalt Park, south bank of creek on bench	rain two days ago	2022-03-25	12	1
		dry, not sampled, no rain previous	2022-08-18		0
SW0743A	Gorge-Esquamalt Park, N of Esquamalt Parks nursery, south bank	no odour, clear, no rain	2021-03-17	560	< 1
		flow too low to sample, no rain	2021-08-05		< 0.01
		flow too low to sample, no rain	2022-02-17	1	< 0.01
		no odour, clear, no rain previous, potentially marine influenced	2022-08-18	600	2
SW0744	Gorge Creek main flow - dual pipes under Craigflower Road	no odour, clear, rain previous	2021-03-09	870	> 300
		no odour, clear, no rain	2021-03-17	190	180
		no odour, clear, no rain	2021-08-05	480	150
		no odour, slightly murky, no rain	2022-02-17	630	> 250
		no odour, slightly amber, no rain prior	2022-08-19		24
SW0744A	Gorge-Esquamalt Park, across from upper settling pond	no odour, clear, rain previous	2021-03-09	650	> 100
		flow too low to sample, no rain	2021-08-05		< 0.01
		no odour, clear, no rain	2022-02-17	< 1	< 1
		no odour, clear, no rain	2022-08-19		0
SW0744B	Gorge-Esquamalt Park, across from 1034 Gosper Crescent	sewer odour, murky, rain in past two days	2021-01-06	47000	20
		sewer odour, murky, rain previous	2021-03-09	2100	9
		sewer odour, murky, no rain	2022-01-28	300000	5
		sewer odour, murky grey, no rain	2022-02-17	410000	5
		sewer odour, murky, no rain	2022-03-09	2200000	7
		sewer odour, murky, rain previous	2022-05-04	4300000	6
		no odour, clear, no rain prior	2022-06-24	67000	7
		sewer odour, murky, rain two days ago	2022-07-04	74000	9
		slight sewer odour, slightly murky, no rain	2022-07-12	72000	3

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
		sewer odour, turbid, no rain prior	2022-07-20	10000	4
		slight sewer odour, murky, no rain prior	2022-08-09	14000	4
		sewer odour, murky, rain during and in the past two days	2022-11-02	1400	20
		slight sewer odour, clear, no rain within two days	2022-11-21	160000	5
		sewer odour, murky brown, rain present	2022-12-06	55000	
SW0749	South side of 306 Uganda	no odour, clear, rain previous	2021-04-27	240	2
		flow too low to sample, no rain	2021-08-23		< 0.01
		no odour, clear, no rain	2022-03-04	800	9
		flow too low to sample, heavy rain two days ago	2022-08-23		< 0.01
SW0749A	Property line at 930 and 936 Selkirk Avenue, old wooden spillway	no odour, murky, rain previous	2021-04-27	1	10
		no odour, slight silty, no rain	2021-08-23	21	2
		flow too low to sample	2022-03-04		< 0.01
		no odour, clear, no rain previous	2022-08-23	4600	8
SW0750	Behind 930 Selkirk Avenue, under wood wharf	dry, not sampled, no rain	2021-08-23		0
		dry, not sampled, heavy rain two days ago	2022-08-23		0
SW0751	Behind 928 Selkirk	no odour, clear, rain previous	2021-04-27	870	10
		no odour, clear, no rain	2021-08-23	1200	5
		no odour, clear, no rain	2022-03-04	400	7
		no odour, clear, no rain previous, sampled before surge flow	2022-08-23	1700	5
		no odour, clear, no rain previous, sampled during surge flow	2022-08-23	11000	100
SW0754	End of Arm Street	flow too low to sample, rain previous	2021-04-27		< 0.01
		flow too low to sample, no rain	2021-08-23		< 0.01
SW0756	Between viewing platforms, foot of Arm Street	musty odour, clear, rain previous	2021-04-27	28	5
		no odour, clear, no rain	2022-03-04	120	4
		no odour, clear, no rain previous	2022-08-23	39	4
SW0758A	Below play area in Banfield Park	no odour, clear, rain previous	2021-04-27	1000	5
		flow too low to sample, no rain	2021-08-23		< 0.01
		no odour, cloudy flow with suds, rain	2022-03-23	55000	15
		flow too low to sample, no rain prior	2022-08-23		< 0.01
SW0759	West of Trestle Bridge, foot of Currie Lane	no odour, clear, no rain	2021-04-01	64	10
		flow too low to sample, no rain	2021-08-05		< 0.01
		no odour, cloudy flow, rain	2022-03-23	180	5
		not sampled due to pooled water with no flow	2022-08-23		< 0.01
SW0767	South of Johnson Street Bridge, below Ocean Point Resort	no odour, clear, no rain	2021-04-01	< 1	120
		no odour, clear, no rain	2021-06-25	< 1	5

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0768	Below parking area east of 65 Songhees Road	sewer odour, slightly murky, no rain	2021-03-31	46	45
		no odour, clear, no rain	2021-06-25	520	40
		strong sewer odour, cloudy flow, rain	2022-03-23	2500	50
		no odour, slight amber, no rain prior	2022-07-14	34000	5
SW0769	Foot of Cooperidge Place	no odour, clear, no rain	2021-03-31	80	60
		no odour, clear, no rain	2021-06-25	520	40
		no odour, clear, rain	2022-04-12	980	500
		no odour, clear, no rain prior	2022-07-14	12000	4
SW0775	Foot of Robert Street	no odour, clear, no rain	2021-03-31	1700	10
		no odour, clear, no rain	2021-08-25		< 1
		no odour, clear, no rain	2022-03-04	3000	6
		no odour, amber, no rain prior	2022-07-14	9400	8
SW0777A	Extends from curve in rock wall at foot of Barnard Avenue	slight sewer odour, murky, rain in past two days	2021-01-06	4900	70
		sewer odour, clear, no rain	2021-08-25		10
		slight sewer odour, murky, no rain	2022-01-24	51000	75
		sewer odour, murky, no rain	2022-03-04	25000	65
		strong sewer odour, murky grey, rain previous two days	2022-04-19	20000	40
		slight sewer odour, murky, no rain within two days	2022-05-13	44000	60
		slight sewer odour, murky, no rain prior	2022-07-14	27000	35
SW0779	West side of 531 West Bay Terrace, under boardwalk, West Bay	no odour, clear, no rain	2021-02-24	21	9
		dry, not sampled, no rain	2021-06-18		0
		perfume odour, brown, potential surge flow event, no rain	2022-02-07	50000	9
		no odour, clear, no rain	2022-02-16	4000	2
		no odour, clear, no rain prior	2022-07-14	4300	1
SW0780	Under boardwalk sitting area, below 537 Head Street, West Bay	no odour, clear, no rain	2021-02-24	2800	15
		no odour, clear, no rain	2021-04-01	800	35
		flow too low to sample, no rain	2021-06-18		< 0.01
		flow too low to sample, no rain	2021-08-25		< 0.01
		no odour, clear, no rain	2022-02-07	19000	6
		no odour, clear, no rain prior	2022-07-14	80	6
SW0781	Below 503 Head Street, West Bay	no odour, clear, no rain	2021-02-24	320	> 60
		no odour, clear, no rain	2021-04-01	280	300
		sewer odour, clear, no rain	2021-06-18	7	65
		sewer odour, silty, no rain	2021-08-25		500
		creosote odour, clear, no rain	2022-02-07	460	50
		no odour, clear, no rain prior	2022-07-14	27	12

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0805	8 m west of Kinver Street beach access	no odour, clear, no rain	2021-02-24	13000	60
		no odour, clear, no rain	2021-06-17	11000	11
		no odour, clear, no rain	2021-06-18	39000	12
		sewer odour, murky, no rain	2021-07-28	170000	12
		slight sewer odour, clear, no recent rain	2021-08-25	140000	
		sewer odour, murky grey, light rain prior	2021-09-23	280000	58
		sewer odour murky grey, rain during sample	2021-11-30	11000	> 500
		sewer odour, brown, rain previous	2022-01-17	23000	> 500
		sewer odour, murky, no rain	2022-01-28	120000	200
		sewer odour, murky, no rain within two days	2022-05-13	130000	20
		strong sewer odour, murky, no rain prior	2022-07-14	520000	20
SW0806	10 m west of Kinver Street beach access	no odour, clear, no rain	2021-02-24	530	48
		sewer odour, clear, no rain	2021-04-01	1300	40
		no odour, clear, no rain	2021-06-17	2400	6
		no odour, clear, no rain	2021-06-18	1300	6
		slight sewer odour, murky, no rain	2021-07-28	32000	1
		slight sewer odour, clear, no recent rain	2021-08-25	120000	
		no odour, clear, light rain prior	2021-09-23	6900	1
		sewer odour murky grey, rain during sample	2021-11-30	190	> 400
		sewer odour, murky, no rain	2022-01-28	200	35
		no odour, clear, no rain within two days	2022-05-13	2100	9
		no odour, clear, no rain prior	2022-07-14	1300	4
SW0807	1173 Munro Street beach access, east of stairs	no odour, clear, no rain	2021-02-24	4	10
		no odour, clear, no rain	2021-06-18	50	1
SW0808	West side of Saxe Point Park beach access	no odour, clear, no rain	2021-02-24	25	5
		dry, not sampled, no rain	2021-06-18		0
SW0813	Foot of Foster Street, east side of cove	no odour, clear, no rain	2021-02-24	34	9
		no odour, clear, no rain	2021-06-18	70	2
SW0814	Crack in rocks at foot of Grafton Street	no odour, clear, no rain	2021-02-24	17	3
		no odour, clear, no rain	2021-06-18	2300	3
		no odour, clear, no rain	2022-02-16	1000	< 1
		flow too low to sample, no rain prior	2022-07-14		< 0.01
SW0854	Foot of Gate Road off Admirals Road	sewer odour, turbid, paper in discharge	2021-03-31	3000	60
		sewer odour, murky with toilet paper, no rain	2021-06-25	1300	25
		sewer odour, murky grey, light rain previous two days	2022-03-23	800	60
		slight organic odour, slight amber, no rain prior	2022-07-14	44000	9

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0865AB	North of 200 Maplebank Road	flow too low to sample	2021-03-31		< 0.01
		could not access due to COVID restrictions	2021-09-16		
		no odour, clear, rain prior	2022-04-19	< 2	15
SW0865B	Below baseball field and small wood sided house	no odour, clear, no rain	2021-03-31	40	< 1
		could not access due to COVID restrictions	2021-09-16		
		dry, not sampled, no rain	2022-04-19		0
		dry, not sampled, heavy rain two days ago	2022-08-25		0
SW0865C	South end of Plumper Bay	no odour, clear, no rain	2021-03-31	< 1	< 1
		could not access due to COVID restrictions	2021-09-16		
		dry, not sampled, no rain	2022-04-19		0
		flow too low to sample, heavy rain two days ago	2022-08-25		< 0.01
SW0865D	South side of Plumper Bay	no odour, clear, no rain	2021-03-31	40	11
		could not access due to COVID restrictions	2021-09-16		
			2022-04-19	4	15
		dry, not sampled, heavy rain two days ago	2022-08-25		0
SW0865DA	SE Plumper Bay, middle of lot 24 Kosapsum Crescent	slight sewer odour, turbid brown, no rain	2021-03-31	20	7
		flow too low to sample, no rain	2022-04-19		< 0.01
		flow too low to sample, no rain	2022-08-25		< 0.01
SW0865E	Plumper Bay, south side of playground	no odour, clear, no rain	2021-03-31	< 1	7
		flow too low to sample, no rain	2022-08-25		< 0.01
SW0865F	North side of Plumper Bay north of BC Aboriginal Disability Society building	no odour, clear, no rain	2021-03-31	1	8
		could not access due to COVID restrictions	2021-09-16		
		no odour, clear, rain prior	2022-04-19	2	5
		strong fertilizer odour, clear, no rain	2022-08-25	4600	10
SW0865G	Thetis Cove, end of Hallowell Road (access trail)	no odour, clear, no rain	2021-03-31	5600	30
		dry, not sampled, no rain	2021-09-16		0
		no odour, clear, rain prior	2022-04-19	1	40
		no odour, clear, no rain	2022-08-25	150	20
SW0866	Portage Park, west of rock outcropping	no odour, clear, no rain	2021-03-31	3	35
		dry, not sampled, no rain	2021-09-16		0
SW0872	Below PS at foot of Stewart, 3 m west of walkway	no odour, clear, no rain	2021-03-31	24	13
		dry, not sampled, no rain	2021-09-16		0
		no odour, clear, rain	2022-04-12	25	50
		dry, not sampled, no rain	2022-08-25		0

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0874	Foot of Heddle Avenue, 4 m below park bench, Tovey Bay	no odour, clear, no rain	2021-03-31	100	7
		dry, not sampled, no rain	2021-08-12		0
		no odour, clear, rain	2022-04-12	10	20
		dry, not sampled, no rain	2022-08-25		0
SW0879	Creek on west side of Price Road	no odour, clear, no rain	2021-06-04	3	40
		no odour, clear, rain prior two days	2022-04-11	18	400
		no odour, clear, no rain	2022-08-25	470	300
SW0881	Foot of Dukrill, NE of beach access stairs	dry, no sample taken, no rain	2021-06-04		0
		dry, not sampled, no rain	2022-04-11		0
		dry, not sampled, no rain	2022-08-25		0
SW0882	North bank on east side of Parsons Bridge	no odour, clear, very light rain last night	2021-05-07	< 1	30
		no odour, clear, no rain	2021-08-12	22	20
SW0886	Mill Stream below 1700 Wilfert Road, rapids, west side of property	no odour, clear, very light rain last night	2021-05-07	15	2000
		no odour, clear, no rain	2021-08-12	68	800
		no field comments, rain prior two days, flow too high to estimate	2022-04-11	17	
		no odour, clear, no rain	2022-10-05		1000
SW0887	End of Wilfert Road, flows into SE side of Millstream Creek at rapids	dry, not sampled, very light rain last night	2021-05-07		0
		dry, not sampled, no rain	2021-08-12		0
SW0912	East side of Fort Rodd Hill, 2 m north of yellow buildings	no odour, clear, some rain	2021-02-23	920	40
		dry, not sampled, no rain	2021-08-12		0
SW0915	20 m west of Belmont Park septic tanks	no odour, clear, light snow	2021-02-10	1	24
		no odour, clear, no rain	2021-08-12	22	20
		no odour, clear, rain prior	2022-04-13	2	90
		no odour, clear, no rain	2022-08-25	19	30
SW0916	Colwood Creek mouth	no odour, clear, light snow	2021-02-10	12	> 500
		no odour, clear, no rain	2021-08-06	48	200
		no odour, clear, rain prior	2022-04-13	15	> 2000
		no odour, clear, no rain prior	2022-07-25	180	60
		no odour, clear, no rain	2022-08-10	65	75
		no odour, clear, no rain	2022-08-17	900	75
		no odour, clear, no rain	2022-08-24	42	75
		no odour, clear, no rain	2022-08-31	26	75
		no odour, clear, no rain	2022-09-08	180	
		no odour, clear, rain overnight	2022-10-24	5000	200
		no odour, clear, rain previous	2022-10-31	700	> 1000
		no odour, clear, no rain	2022-11-10		> 1500

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
		no odour, clear, no rain	2022-11-17	23	1000
		no odour, clear, rain present	2022-11-22	250	3000
SW0917	Below yellow-black guard fence, west of Colwood Creek	no odour, clear, rain prior	2022-04-13	< 1	10
		dry, not sampled, no rain prior	2022-07-25		0
SW0918	40 m west of 917, below Royal Roads playing fields	pipe under water, no sample, no rain prior	2022-07-25		
		could not access, discharge pipe under water	2022-08-25		
SW0923	30 m west of 922, creek	no odour, clear, light rain previous	2021-04-27	23	300
SW0924	60 m west of 923	no odour, clear, light rain previous	2021-04-27	14	250
		no odour, clear, no rain	2021-08-06	8	150
SW0925	25 m north of chain link fence on north side of Ocean Grove	no odour, clear, rain previous	2021-04-27	3	120
		no odour, clear, no rain	2021-08-06	20	100
SW0926	10 m south of chain link fence on north side of Ocean Grove	no odour, clear, light snow	2021-02-10	4	> 250
		no odour, clear, no rain	2021-08-06	220	800
		no odour, clear, rain prior	2022-04-13	9	1000
SW0927	Matilda Drive beach access, Miller Brook	no odour, clear, rain prior	2022-04-13	58	30
SW0928	Foot of Portsmouth Drive, Selleck Creek	no odour, clear, light snow	2021-02-10	37	80
		no odour, clear, no rain	2021-08-06	150	500
		no odour, clear, rain prior	2022-04-13	28	450
		no odour, clear, no rain	2022-08-25	490	400
SW0929	Below foot of Anchorage Avenue	no odour, clear, rain prior	2022-04-13	1100	60
		no odour, clear, no rain	2022-08-25	2000	30
SW0930	Below 3279 Anchorage Avenue, north of concrete stairs	no odour, clear, rain previous	2021-04-27	< 1	60
		dry, not sampled, no rain	2021-08-06		0
		no odour, clear, rain prior	2022-04-13	< 1	40
SW0931	SW side of 3279 Anchorage Avenue, Lagoona Brook	no odour, clear, rain previous	2021-04-27	740	50
		no odour, clear, no rain	2021-08-06	9	70
		no odour, clear, rain prior	2022-04-13	4	35
		no odour, clear, no rain	2022-08-25	340	30
SW0931-1	NW side of 3279 Anchorage Avenue, Lagoona Brook	no odour, clear, rain previous	2021-04-27	3	50
SW0932	Ditch discharging into south end of Esquimalt Lagoon	no odour, clear, rain previous	2021-04-27	< 1	100
		no odour, clear, no rain	2021-08-06	9	350
		no odour, clear, rain prior	2022-04-13	< 1	300
		no odour, clear, no rain	2022-08-25	1	150

Table 1 Core Area Stormwater Discharge Bacterial Data

Station ID	Station Name	Sample Comment	Sample Date	E. Coli	Flow Rate
				TOT	NoRs
				CFU/ 100 mL	L/min
SW0933	Pipe at south end of Esquimalt Lagoon	no odour, clear, possibly marine influenced, rain previous	2021-04-27	49	100
		no odour, clear, no rain	2021-08-06	48	200
		no odour, clear, rain prior	2022-04-13	17	80
		no odour, clear, no rain	2022-08-25	1000	130
SW0934	Across the street from 3330 Ocean Boulevard	no odour, clear, light snow	2021-02-10	< 1	1
		no odour, clear, light rain	2021-04-27	1	10
		no odour, clear, no rain	2021-08-06	130	10
SW0935	Top of bank on Ocean Boulevard east side of Milburn Drive	no odour, clear, light snow	2021-02-10	1	28
		no odour, clear, rain prior	2022-04-13	1	10
		no odour, clear, no rain	2022-08-25	< 1	20
SW0935A	Foot of Milburn below discharge 936	no odour, clear, no rain	2021-08-06	13	200
		no odour, clear, rain prior	2022-04-13	12	80
		no odour, clear, no rain	2022-08-25	2	400
SW0940A	North end of stormwater detention pond, rip rap, buried pipe	no odour, clear, light snow	2021-02-10	< 1	40
		dry, not sampled, no rain	2021-08-06		0
SW6003	Discharge of Goldstream River	no odour, clear, some rain previous	2021-03-08	2	> 5000
		no odour, clear, no rain	2021-08-18	23	> 8000
		no odour, clear, no rain	2021-08-25	20	> 8000
		no odour, clear, no rain, flow too high to estimate	2022-04-29	2	
		no odour, clear, no rain	2022-10-05	33	> 2000
SW6006	West side of Saanich Inlet, north side of Hall's Boathouse driveway	no odour, clear, no rain, flow does not continue past creosote log storage	2022-04-29	1	5
		dry, not sampled, no rain	2022-10-05		0
SW6008	North side of barn style building at 3680 Trans Canada Hwy.	no odour, clear, some rain previous	2021-03-08	1	22
		dry, not sampled, rain yesterday	2021-09-15		0
		no odour, clear, no rain	2022-04-29	< 1	250

Notes:
Flow is visually estimated.
CFU/100 mL is colony forming units per 100 millilitres.
u/s is upstream.
d/s is downstream.

APPENDIX D

***ESCHERICHIA COLI* SAMPLING QUALITY ASSURANCE AND QUALITY CONTROL PROGRAM**

APPENDIX D

***ESCHERICHIA COLI* SAMPLING QUALITY ASSURANCE AND QUALITY CONTROL PROGRAM FOR 2022**

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APPENDIX D

ESCHERICHIA COLI SAMPLING QUALITY ASSURANCE AND QUALITY CONTROL PROGRAM FOR 2022

1.0 INTRODUCTION

Quality assurance and quality control (QA/QC) programs are a set of protocols adopted to ensure that the results of a study are valid, internally consistent, and comparable with similar projects. These protocols are set out in writing and based on current and relevant research. This appendix discusses:

- field sampling methods
- sample handling procedures
- analytical procedures
- field and laboratory replication (quality control)
- data assessment

The data collected for the stormwater monitoring QA/QC program are used to ensure consistency in field handling and analytical methods. If the data exceed a specified precision criterion, then the lab is notified of a potential problem in the procedure and steps are taken to resolve the issue.

2.0 METHODS FOR *ESCHERICHIA COLI* SAMPLING

CRD staff collected water samples in 500-mL wide-mouth sterile disposable bottles containing 1.5 mL of sodium thiosulphate (a sample preservative). Bottles were supplied by Bureau Veritas (formerly Maxxam Analytics) in Victoria, BC. Labelled samples were stored in an insulated cooler with ice packs and delivered the same day to the laboratory. Bureau Veritas analyzed samples for *Escherichia coli* (*E. Coli*) bacteria following the procedures in Standard Methods (APHA, 1998) and reported as colony forming units/100 mL (CFU/100 mL).

CRD staff collected samples for QA/QC on days that the weather was representative of the sampling season (wet or dry). Conditions such as "first flush", major storms or any other effect that might tend to prejudice the results were avoided.

2.1 Stormwater Discharge Sampling

Field samplers collected stormwater discharge samples from the point of discharge. Care was taken to avoid contamination of the sample with substances that did not originate in the stormwater (e.g., salt water, other discharges) that may confuse the results.

2.2 Quality Assurance

2.2.1 Stormwater Sample Replicates (Field Splits)

Ten percent of the samples collected were replicated and the field replicate samples identified as "field splits". CRD staff collected a single sample in a 500-mL sample bottle and inverted 30 times to ensure that the sample was well-mixed. The sample was then split evenly into two separate bottles. Staff labelled the bottles and submitted them to Bureau Veritas for analysis. These samples were submitted as blind samples (not identified as field splits).

2.2.2 Quality Control Precision Assessment

In 2022, field staff collected 18 field splits at six stormwater discharges in the core area of the CRD. Samples were analyzed for *E. Coli* levels. Field splits were used to establish the precision criterion for the CRD Core Area, District of Sooke and Southern Gulf Island Electoral Area sampling programs. The discharges were chosen based on previous high, moderate, or low levels of *E. Coli* concentrations (two discharges for each category) to represent the varying *E. Coli* counts that would be analyzed. Staff collected three individual 500-mL grab samples at each of the six stations and split each into two replicate bottles. Staff also submitted three blank samples of potable water in 500-mL sample bottles as part of the assessment. Each sample had a unique identification number and was submitted blindly to the lab (i.e., the lab had no information about the sample).

2.2.3 Calculation of Laboratory Precision

Laboratory precision for *E. Coli* analysis (e.g., a measure of consistency by the lab) is determined by analyzing 18 pairs of field samples (field splits). The following, taken from Standard Methods, 18th Edition (APHA, 1998), explains the procedure for calculating the precision criterion and determining whether the log ranges for the field splits are “acceptable” or “unacceptable”:

- The data are arranged in pairs (D_1 and D_2). The log of each field measurement is determined (L_1 , L_2) and the difference (range) in the log value between each pair of field splits is calculated: $R = (L_2 - L_1)$. An average range (Mean-R) is then determined for all of the pairs.
- The precision criterion is calculated by multiplying the Mean-R by 3.27 and is rounded to one decimal place.
- The log range (R) is calculated for each of the field splits and compared to the precision criterion, to determine whether the sample is acceptable or not, according to the following criterion:

Acceptable (A) If the calculation is less than the precision criterion, then the field data are within normal variability.

Unacceptable (U) If the calculation is greater than the precision criterion, then the field data are outside of the normal variability. All data collected after the last "acceptable" set of data should be discarded and no further analysis should be done until the source of the problem is identified by the lab.

It is important not to put too severe an interpretation on the results from the QA calculation, especially when they are close to the "unacceptable" guideline. Each result represents a value within a 95% confidence interval, which gets proportionately larger as the actual result gets smaller. Therefore, one can expect 5% of the samples to be outside of the precision criterion, through randomness. Also, any *E. Coli* count under 200 FC/100 mL is considered too small an amount to accurately calculate or compare to a precision criterion (APHA, 1998). It is also important to note that discharges with *E. Coli* counts lower than 200 FC/100 mL receive a low public health concern rating.

The results are rounded to one decimal place and compared to the precision criterion (e.g., 0.5). If the calculated value from the duplicate results still exceeds the criterion (e.g., 0.55 or greater), then an informal investigation of the laboratory should be initiated. If only a few duplicates are unacceptable (e.g., one out of every 20 pairs of duplicates), the lab is probably meeting the guideline.

The overall process is intended to act as an "alarm", alerting the study group to potential problems with the sampling and analytical procedures. As part of the review, the following elements are considered:

- the number of pairs exceeding the criterion
- the actual *E. Coli* value of the pairs of data
- field notes on the "field split" procedure
- comments from the laboratory

3.0 RESULTS

3.1 Quality Assurance Results

Field staff collected 18 pairs of stormwater samples from six discharges having historically high, moderate or low levels of *E. Coli* bacteria. Staff blindly submitted samples to the lab for analysis of the *E. Coli* concentration and used the data to calculate the precision criterion.

3.1.1 Blanks

Field staff submitted three blank samples (CRD tap water) to the lab for analysis for *E. Coli* bacteria. Blanks were reported as having <10 CFU/100 mL. Therefore, the results meet the QA requirements.

3.1.2 Precision Criterion

Table 1 shows the lab results of the 18 pairs of samples used to determine the precision criterion for the 2022 Stormwater Monitoring Program. The calculated criterion for this laboratory, using these 18 sets of duplicates was 0.6.

3.1.3 Field Splits

Wet Weather Sampling

Table 2 presents the results for the field splits collected in the core area during the wet period of the 2022 Stormwater Sampling Program. Data were compared to the precision criterion (0.6), as described in Section 3.1.2. One of the field splits exceeded the precision criterion; however, they had counts below 200 CFU/100 mL. Counts below 200 CFU/100 mL are not expected to meet the precision criteria. Therefore, the results are acceptable.

Dry Weather Sampling

Table 3 presents the results for the field splits collected in the core area during the dry period of the 2022 Stormwater Sampling Program. None of the field splits exceeded the precision criterion; therefore, the results are acceptable.

4.0 CONCLUSIONS

Requirements for the Stormwater Monitoring QA/QC Program were carried out in 2022. The QA/QC results were acceptable for rating stormwater discharges for public health concerns.

5.0 REFERENCES

APHA, 1998. American Public Health Association, American Water Works Association, Water Pollution Control Federation, 20th Edition. Standard Methods for the Examination of Water and Wastewater.

Drinnan, R.W. 1995. Memo to R. Miller, CRD Engineering, February 7; 4pp.

Hutcheson, D. 1995. Memo to R. Miller, CRD Engineering, February 7; 2pp.

Table 1 Laboratory Quality Assurance Exercise Results for 2022

CRD Data, Batch Samples: 18 pairs, January 2022						
Discharge No.	Pair No.	1st Duplicate D1	2nd Duplicate D2	Log D1 L1	Log D2 L2	Range of Logs (Rlog) (Log L1 - Log L2)
424	1	3	7	0.4771	0.8451	0.3680
	2	10	10	0.9031	0.6021	0.3010
	3	17	17	0.8451	0.6021	0.2430
543	1	8	4	1.0000	0.0000	1.0000
	2	5	6	0.0000	0.0000	0.0000
	3	6	4	0.0000	0.3010	0.3010
245	1	260	240	2.9395	2.9191	0.0204
	2	280	220	2.8573	2.9345	0.0772
	3	280	260	2.9395	2.9912	0.0517
231	1	230	140	1.8573	1.8261	0.0313
	2	150	190	1.8062	1.9542	0.1481
	3	250	170	1.7782	1.8451	0.0669
805	1	47000	42000	4.3617	4.3979	0.0362
	2	14000	7600	4.7160	4.4472	0.2688
	3	21000	26000	4.3802	4.398	0.0177
777A	1	15000	15000	4.7076	4.6435	0.0641
	2	17000	15000	4.7243	4.7559	0.0316
	3	17000	14000	4.7404	4.6721	0.0683
Mean - Rlog (Sum Rlog/18)						0.1182
Precision Criterion (3.27 x Mean-Rlog)						0.3865

Table 2 Laboratory Quality Assurance Results – Wet Period 2022

Date	Discharge Number	E. Coli Counts CFU/100 mL	Log	Log Range	Acceptable (A) or Unacceptable (U)
26-Jan	216	1900	3.2788	0.1326	A
		1400	3.1461		
31-Jan	320	120	2.0792	0.0792	A
		100	2.0000		
3-Feb	559	470	2.6721	0.0189	A
		450	2.6532		
7-Feb	781	460	2.6628	0.0000	A
		460	2.6628		
10-Feb	567	470	2.6721	0.3297	A
		220	2.3424		
17-Feb	744	630	2.7993	0.0068	A
		640	2.8062		
17-Feb	744B	410000	5.6128	0.0943	A
		330000	5.5185		
25-Feb	578	8	0.9031	0.0000	A
		8	0.9031		
2-Mar	540	2	0.3010	0.3010	A
		1	0.0000		
3-Mar	645	1200	3.0792	0.4559	A
		420	2.6232		
4-Mar	611	16000	4.2041	0.1627	A
		11000	4.0414		
4-Mar	775	3000	3.4771	0.0142	A
		3100	3.4914		
22-Mar	620	3300	3.5185	0.0000	A
		3300	3.5185		
23-Mar	854	800	2.9031	0.1322	A
		590	2.7709		
11-Apr	933	17	1.2304	0.0544	A
		15	1.1761		
13-Apr	886	2	0.3010	0.8751	U*
		15	1.1761		

Notes:

*Counts below 200 CFU/100 mL are not expected to meet the criterion.

5% of samples will have results outside of the precision criterion, through randomness.

Table 3 Laboratory Quality Assurance Results – Dry Period 2022

Date	Discharge Number	E. Coli Counts CFU/100 mL	Log	Log Range	Acceptable (A) or Unacceptable (U)
28-Jun	212	5	0.6990	0.3010	A
		10	1.0000		
5-Jul	245	570	2.7559	0.0316	A
		530	2.7243		
6-Jul	320	68	1.8325	0.1587	A
		98	1.9912		
12-Jul	503	2100	3.3222	0.0669	A
		1800	3.2553		
12-Jul	505	53	1.7243	0.3171	A
		110	2.0414		
14-Jul	854	44000	4.6435	0.0872	A
		36000	4.5563		
14-Jul	777A	27000	4.4314	0.5180	A
		89000	4.9494		
25-Jul	626	9000	3.9542	0.2499	A
		16000	4.2041		
25-Jul	916	180	2.2553	0.0235	A
		190	2.2788		
18-Aug	622	30	1.4771	0.0544	A
		34	1.5315		
8-Aug	658A	10000	4.0000	0.0414	A
		11000	4.0414		
23-Sep	886	92	1.9638	0.0362	A
		100	2.0000		
25-Aug	915	19	1.2788	0.0235	A
		18	1.2553		

Notes:

*Discharges with counts below 200 CFU/100 mL are not expected to meet the criterion.
5% of samples will have results outside of the precision criterion, through randomness.

APPENDIX E

CORE AREA STORMWATER CONTAMINANT DATA

Table 1 Stormwater Sediment Contaminant Data

		Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Silver	Zinc	HPAH	LPAH	TOC	Sample Comments
Marine Sediment Quality Guidelines	CRD MSQG	57	5.1	260	390	450	0.41	6.1	410	12	5.2	-	
	CCME ISQG	7.24	0.7	52.3	18.7	30	0.13	1	124	-	-	-	
	CCME PEL	42	4.2	160	108	112	0.7	2.2	271	-	-	-	
Vancouver Island Background		4	0.95	65	100	40	0.15	1	150	-	-	-	
SW0212	2021-03-29	2.29	0.069	15.8	31	14.7	< 0.05	< 0.05	47.2	0.047	0.015	0.56	black/dark grey fines, rain yesterday
SW0218	2021-03-30	3.81	0.099	24.2	36.8	42.8	0.079	< 0.05	107	0.18	0.022	0.35	medium grey sand, no rain
SW0307-2A	2021-03-29	2.73	0.31	47.4	70.5	86.2	0.081	< 0.05	206	5.5	0.87	12	medium grey sand, no rain
SW0324	2021-03-29	3.38	0.115	24.5	24.6	18.3	< 0.05	< 0.05	71.5	0.25	0.046	7.5	sand & gravel, rain previous
SW0324	2022-04-29	3.39	0.139	29.4	45	190	< 0.05	0.06	103	0.14	0.079	-	dark brown mulch, no flow, rain previous
SW0505-6	2021-02-26	2.92	0.299	47.3	70.3	134	0.056	0.06	260	4.2	0.77	7.9	fine sand and dark organic mud, previous rain
SW0559	2021-09-08	2.74	0.088	20.9	20.5	5.89	< 0.05	< 0.05	82.2	0.076	0.013	1.8	sand, mud, small gravel, rain previous
SW0574	2021-04-09	4.25	0.116	24.4	44.2	8.46	< 0.05	0.13	155	0.62	0.39	0.43	fine organic mud and sand
SW0578	2021-04-09	2.26	0.065	16.4	20	3.36	< 0.05	0.093	75.1	0.05	0.0037	0.072	medium grey sand and gravel with vegetation
SW0589	2021-04-09	5.38	0.137	22.5	25.7	4.79	< 0.05	0.18	60.7	0.11	0.031	1.7	medium brown fines and sand
SW0633	2022-03-24	2.3	0.156	44.5	50.2	15.8	< 0.05	0.053	134	0.47	0.14	-	medium brown fines, sand and gravel
SW0655	2022-04-12	2.08	0.09	45.8	43.9	415	< 0.05	< 0.05	80.7	0.12	0.0099	-	medium brown fines and sand
SW0687	2022-04-12	4.2	0.156	28.2	42.3	24.1	0.423	0.073	155	3.1	0.92	-	medium brown fines
SW0692	2021-04-26	4.54	0.227	34.5	51.8	43.9	< 0.05	< 0.05	211	0.16	0.022	2.6	medium brown fines and sand with organics, no rain
SW0712	2021-03-17	2.22	0.156	29	21.2	4.57	< 0.05	< 0.05	47.3	8.5	1.9	0.66	medium brown sand and gravel
SW0712	2022-02-15	3.7	0.166	55.4	54.1	20.8	< 0.05	< 0.05	153	1.6	0.28	4.1	darker brown fines and gravel, rusty metal in channel, no rain
SW0737	2021-03-17	7.44	0.369	50.7	46.6	8.29	0.067	0.085	63.6	18	7.2	1.4	soil and organics (sticks and cones), very light rain last night
SW0737	2022-07-20	5.71	0.103	23.3	50.8	10.6	< 0.05	< 0.05	98.7	0.21	0.031	2	fine sand and gravel, very light rain last night
SW0742-2A	2021-08-05	3.6	0.437	36.6	81.3	10.8	0.182	0.178	274	0.28	0.16	6.8	medium brown fines, evidence of iron oxide bacteria on surface, no rain
SW0742-2B	2021-08-05	26.3	0.291	25.3	38.4	12.3	22.2	0.103	122	0.2	0.04	4.5	orange mud, no rain
SW0744	2021-03-31	2.65	0.182	29.1	38.3	26.6	< 0.05	0.322	164	0.64	0.12	0.6	fine dark mud with leaves, no rain
SW0866	2021-03-31	5.24	0.174	24.1	28.7	22.1	< 0.05	< 0.05	249	0.054	0.008	0.05	light organic duff and soil, dry, no rain
SW0873	2022-04-12	2.06	0.079	41.3	49.2	13.3	< 0.05	< 0.05	99.2	3.8	0.84	-	no odour, slightly murky, no recent rain
SW0874	2021-03-31	6.11	0.381	40.9	69.2	33.9	0.091	0.102	356	0.22	0.03	3.9	medium grey/brown sand and fines, no rain
SW0874	2021-08-12	7.68	0.275	42.7	49.2	68.3	0.066	0.086	300	0.29	0.079	3.2	sand, rain yesterday
SW0874	2022-04-12	5.29	0.276	33.6	46.2	28	0.057	0.486	214	0.48	0.061	-	sand and fines, rain last night
SW0875	2022-05-11	3.19	0.285	23.5	36.9	10.7	< 0.05	< 0.05	105	2.3	0.26	-	dark grey sand with some paint flecks
SW0879	2022-04-11	7.93	0.381	36.2	97.9	19	0.052	0.078	131	0.085	0.014	-	thick sand and black mud
SW0882	2021-05-07	11.5	0.23	34.5	116	32.1	0.051	< 0.05	254	2.8	0.42	1.5	fines and sand
SW0887	2021-05-07	2.02	0.132	21.4	24.4	13.8	0.078	< 0.05	124	0.12	0.026	6.2	sand
SW0916	2022-04-13	1.45	0.064	18.9	22.1	5.15	< 0.05	< 0.05	70.1	0.024	0.0017	-	sand with mud and silt
SW0933	2022-04-13	2.96	0.088	27.4	42.9	8.13	< 0.05	< 0.05	83.1	0.19	0.026	-	dark fine mud and silt, rain previous two days
SW0934	2021-04-27	2.15	0.123	24.6	40.3	12.5	< 0.05	0.054	108	0.17	0.028	3.7	sand and fine silt, rain previous two days
SW6003	2021-09-08	4.49	0.063	47.5	38.7	4.76	< 0.05	< 0.05	60.7	0.047	0.009	1.6	dark brown fines with organic debris, rain within past two days, no flow
SW6006	2022-04-29	5.58	0.336	46.4	106	84.2	0.08	0.131	199	6.7	1.5	-	medium brown fines, marine influenced, rain within the past two days

Table notes on next page.

Table 1, Continued

Notes

Concentrations are in mg/kg dry weight.
CRD MSQG = Marine sediment quality guidelines adopted from Washington State's Department of Ecology for protection of aquatic life.
LPAH and HPAH are low and high molecular weight polycyclic aromatic hydrocarbons, respectively.
CCME = Canadian Council of Ministers of the Environment.
ISQG = interim sediment quality guideline; concentrations above this level but below the PEL will occasionally result in adverse effects on aquatic life.
PEL = probable effects level; concentrations above this level will frequently result in adverse effects to aquatic life.
Vancouver Island Background Concentrations are regional estimates (95th percentiles) from BC MOE; https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/protocols/protocol_4.pdf

XX	italicised values are those that exceed a guideline but are below the Vancouver Island background concentration.
XX	Value is greater than or equal to the CCME ISQG.
XX	Value is greater than or equal to the CCME PEL.
XX	Value is greater than or equal to CRD MSQG and adverse effects to aquatic life are likely to occur.

For mercury only, the CRD MSQG is lower than the CCME PEL.
Some samples are not collected at discharge to marine, therefore marine guidelines are not applicable but used for screening purposes, see Table 4 for freshwater comparisons.

Table 2 Calculation of Sediment Contaminant Ratings

Ratios of Contaminant Concentration / CRD Marine Sediment Quality Guideline (MSQG)													
		Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Silver	Zinc	HPAH	LPAH	Sum of Ratios	Contaminant Rating
	CRD MSQG	57	5.1	260	390	450	0.41	6.1	410	12	5.2		
Station	Sample Date	Ratio of Concentration to Guideline											
SW0212	2021-03-29	0.04	0.01	0.06	0.08	0.03	0.12	0.01	0.12	0.00	0.00	0.48	Low
SW0218	2021-03-30	0.07	0.02	0.09	0.09	0.10	0.19	0.01	0.26	0.02	0.00	0.85	Low
SW0307-2A	2021-03-29	0.05	0.06	0.18	0.18	0.19	0.20	0.01	0.50	0.46	0.17	2.00	Moderate
SW0324	2021-03-29	0.06	0.02	0.09	0.06	0.04	0.12	0.01	0.17	0.02	0.01	0.61	Low
SW0324	2022-04-29	0.06	0.03	0.11	0.12	0.42	0.12	0.01	0.25	0.01	0.02	1.15	Moderate
SW0505-6	2021-02-26	0.05	0.06	0.18	0.18	0.30	0.14	0.01	0.63	0.35	0.15	2.05	Moderate
SW0559	2021-09-08	0.05	0.02	0.08	0.05	0.01	0.12	0.01	0.20	0.01	0.00	0.55	Low
SW0574	2021-04-09	0.07	0.02	0.09	0.11	0.02	0.12	0.02	0.38	0.05	0.08	0.97	Low
SW0578	2021-04-09	0.04	0.01	0.06	0.05	0.01	0.12	0.02	0.18	0.00	0.00	0.50	Low
SW0589	2021-04-09	0.09	0.03	0.09	0.07	0.01	0.12	0.03	0.15	0.01	0.01	0.60	Low
SW0633	2022-03-24	0.04	0.03	0.17	0.13	0.04	0.12	0.01	0.33	0.04	0.03	0.93	Low
SW0655	2022-04-12	0.04	0.02	0.18	0.11	0.92	0.12	0.01	0.20	0.01	0.00	1.60	High
SW0687	2022-04-12	0.07	0.03	0.11	0.11	0.05	1.03	0.01	0.38	0.26	0.18	2.23	High
SW0692	2021-04-26	0.08	0.04	0.13	0.13	0.10	0.12	0.01	0.51	0.01	0.00	1.15	Moderate
SW0712	2021-03-17	0.04	0.03	0.11	0.05	0.01	0.12	0.01	0.12	0.71	0.37	1.56	Moderate
SW0712	2022-02-15	0.06	0.03	0.21	0.14	0.05	0.12	0.01	0.37	0.13	0.05	1.19	Moderate
SW0737	2021-03-17	0.13	0.07	0.20	0.12	0.02	0.16	0.01	0.16	1.50	1.38	3.75	High
SW0737	2022-07-20	0.10	0.02	0.09	0.13	0.02	0.12	0.01	0.24	0.02	0.01	0.76	Low
SW0742-2A	2021-08-05	0.06	0.09	0.14	0.21	0.02	0.44	0.03	0.67	0.02	0.03	1.72	Moderate
SW0742-2B	2021-08-05	0.46	0.06	0.10	0.10	0.03	54.15	0.02	0.30	0.02	0.01	55.23	High
SW0744	2021-03-31	0.05	0.04	0.11	0.10	0.06	0.12	0.05	0.40	0.05	0.02	1.00	Low
SW0866	2021-03-31	0.09	0.03	0.09	0.07	0.05	0.12	0.01	0.61	0.00	0.00	1.08	Moderate
SW0873	2022-04-12	0.04	0.02	0.16	0.13	0.03	0.12	0.01	0.24	0.32	0.16	1.22	Moderate
SW0874	2021-03-31	0.11	0.07	0.16	0.18	0.08	0.22	0.02	0.87	0.02	0.01	1.72	Moderate
SW0874	2021-08-12	0.13	0.05	0.16	0.13	0.15	0.16	0.01	0.73	0.02	0.02	1.58	Moderate
SW0874	2022-04-12	0.09	0.05	0.13	0.12	0.06	0.14	0.08	0.52	0.04	0.01	1.25	Moderate
SW0875	2022-05-11	0.06	0.06	0.09	0.09	0.02	0.12	0.01	0.26	0.19	0.05	0.95	Low
SW0879	2022-04-11	0.14	0.07	0.14	0.25	0.04	0.13	0.01	0.32	0.01	0.00	1.12	Moderate
SW0882	2021-05-07	0.20	0.05	0.13	0.30	0.07	0.12	0.01	0.62	0.23	0.08	1.81	Moderate
SW0887	2021-05-07	0.04	0.03	0.08	0.06	0.03	0.19	0.01	0.30	0.01	0.01	0.75	Low
SW0916	2022-04-13	0.03	0.01	0.07	0.06	0.01	0.12	0.01	0.17	0.00	0.00	0.48	Low
SW0933	2022-04-13	0.05	0.02	0.11	0.11	0.02	0.12	0.01	0.20	0.02	0.01	0.66	Low
SW0934	2021-04-27	0.04	0.02	0.09	0.10	0.03	0.12	0.01	0.26	0.01	0.01	0.70	Low
SW6003	2021-09-08	0.08	0.01	0.18	0.10	0.01	0.12	0.01	0.15	0.00	0.00	0.67	Low
SW6006	2022-04-29	0.10	0.07	0.18	0.27	0.19	0.20	0.02	0.49	0.56	0.29	2.35	Moderate

Notes

CRD MSQG = Marine sediment quality guidelines adopted from Washington State's Department of Ecology for protection of aquatic life.

These are ratios of the measured value over the MSQG.

LPAH and HPAH are low and high molecular weight polycyclic aromatic hydrocarbons, respectively.

Concentration is approaching MSQG (ratio greater than 0.75).

Concentration exceeds MSQG (ratio greater than 1).

Some samples are not collected at the discharge to marine and therefore marine guidelines are not applicable but are used for screening purposes.

Table 3 Summary of Recent Chemical Contaminant Ratings and Recommendations

Discharge ¹	Figure	Jurisdiction	Contaminant Ratings Over Time							Notes & Recommendations
			2016	2017	2018	2019	2020	2021	2022	
210 West of Holland Pt	37	Victoria	–	–	–	–	Low	–	–	No sediment at discharge in 2017 and 2018. Small residential catchment, historically low. Copper is elevated in water.
212 East of Finlayson Pt	39	Victoria	–	–	Moderate	Low	Low	Low	–	Elevated lead in 2018. Metals elevated in water in fall 2020; in subsequent samples copper elevated only.
216 Ross Bay	40	Victoria	High u/s	–	no sediment	Low	–	–	–	Elevated mercury u/s & discharge; 216 is tidal, sampled at 216-3A. CRD narrowed down a source of mercury. Copper elevated in water. Resample in 2022. COV did some relining in 2018.
218 Ross Bay	40	Victoria	–	–	–	–	NR	Low	–	No sediment in 2019 or 2020. Summer water sample clean. Confirm rating.
229 Gonzales Bay	41	Victoria	–	–	–	–	–	-	–	Small residential catchment; tidal; no sediment available; contaminants low in water.
244 McNeill Bay	43	Oak Bay	–	Moderate	–	–	–	–	–	Lead slightly elevated in 2012, low in 2017. Resample in 2023.
245 McNeill Bay	43	Oak Bay	–	–	–	–	–	–	–	Low in 2001, 2004, 2013. No sediment available in 2018. Water has low contaminants.
250 McNeill Bay	43	Oak Bay	–	High / Moderate	–	–	–	–	–	Elevated PAHs. 250-2A is POD but doesn't drain whole catchment. PAHs not detected in water but some elevated metals. Action Required. High in 250-1A & moderate at 250-2A. Continue to delineate the contamination. Confirm metals concentration in water.
306 Orchard & Newport Ave	45	Oak Bay	–	High	High	High u/s	High u/s	–	–	Elevated HPAH and lead. Action required. No sediment at 306-1 and 306-2 in 2019; elevated HPAH and lead in sediment at 306-2a (Newport Ave & Currie Rd), low PAH and lead in summer water sample. Sample in 2023.
307 Oak Bay Marina	45	Oak Bay	Moderate	–	High	High	-	Moderate at 307-2A	–	Sampled at 307 and 307-2. Elevated PAH, mercury, lead and zinc. Action Required: Oak Bay cleaned out manholes at Currie & Newport in 2021. Narrowed down to intersection of Newport and Currie. Confirm rating at 307-2.
310 Windsor Rd	45	Oak Bay	Low upstream	High upstream	–	High u/s	-	–	–	Copper, lead, zinc & PAH elevated (310-1). Other contaminants upstream. Low at 310-5 in 2016 elevated PAH in 2019. Upstream contamination at Windsor & Monterey. Action Required: Oak Bay cleaned out manholes in 2021. Confirm rating.
311 1420 Beach Dr	45	Oak Bay	–	–	–	–	–	–	–	Short line, packed with beach sand in 2017. Intertidal. Cease sampling.
316 Bowker Creek	46	Oak Bay	–	–	–	Low	–	–	–	Discharge rated low. Upstream, 316-5D rated high due to copper & zinc. Sample in 2024.
320 Dalhousie St	46	Oak Bay	–	–	Low	–	–	–	–	Resample in 2023.
323 North Esplanade	46	Oak Bay	Low	–	–	–	–	–	Low in water	Resample in 2025.

Table 3, Continued

Discharge ¹	Figure	Jurisdiction	Contaminant Ratings Over Time							Notes & Recommendations
			2016	2017	2018	2019	2020	2021	2022	
324 Cattle Point	46	Oak Bay	–	–	–	High	–	Low	Moderate	Sampled for first time in 2019; Elevated lead but doesn't drain into ocean. Cease sampling.
325 Rutland Rd	48	Oak Bay	–	–	–	–	–	–	–	Sample discharge in 2023.
327 Cadboro Bay	49	Oak Bay	–	–	Low	–	–	–	–	Resample in 2023.
503 Cadboro Bay	50	Saanich	High	Low	Moderate	–	–	–	–	Elevated PAHs in 2016. Resample in 2023.
505 Cadboro Bay	50	Saanich	–	High	High	High	High	Moderate u/s	–	Overflow for CRD's Penrhyn Station. Elevated Pb, Hg and PAH in 505-3. Sample 505-1 or -3 to avoid tidal influence. Action Required. Saanich cleaned line out 2019. Sediment elevated in Hg upstream to Cadboro Bay Rd. Continue source investigations upstream of 505-6.
558 Mt. Douglas beach	59	Saanich	–	Low	–	–	–	–	–	Sample in 2023.
559 Douglas Creek	60	Saanich	Low	Low	–	–	–	Low	–	Sample above weir (559-2) after spill June 17 had elevated zinc & PAHs. Resample in 2026.
574 Cordova Bay Rd	63	Saanich	Low	–	–	–	–	Low	–	Resample 2026.
578 Cordova Bay Rd	63	Saanich	–	–	–	–	–	Low	–	Resample 2026.
586 Parker Ave	64	Saanich	–	–	Low	–	–	–	–	Sample in 2024.
589 Burnham Brook	65	Saanich	–	–	–	–	–	Low	–	Drains golf course. Sample in 2026.
592 Noble Creek	65	Saanich	–	Low	–	–	–	–	–	Sample in 2023 (Noble Creek).
603 James Bay Anglers	36	Victoria	–	Moderate	NA	–	–	–	–	Elevated zinc & PAH in 2017; no sediment in 2018 or 2020. Contaminants in water low in summer. Action Required. Sediment not available. Confirm lower rating.
613 Government St & Belleville	35	Victoria	–	–	–	–	–	–	–	Moderate (2014). Sampled at 613-2 (MH D2719). Water samples have elevated copper and zinc in summer. Sample sediment in 2023.
613A Government St & Belleville	35	Victoria	–	–	–	–	–	–	–	Rated high in 2014 due to mercury & zinc behind Crystal Gardens. Cease sampling, line is intertidal.
614 Wharf & Government	35	Victoria	–	High u/s	Moderate	–	–	–	–	Elevated lead, mercury & zinc. Tidal. 614-1a is a short tributary, from a shallow line that drops into the discharge, confirmed by dye. Samples trapped at 614-2 in 2009 & 2014. Sampled 614-1A in 2017. Action Required. The CRD narrowed down a source. COV pumped out manhole at tourist sign and catchbasin in front of Empress Hotel.
620 North of Johnson St Bridge	34	Victoria	–	–	–	–	–	–	–	Action Required: Consistently rated high for zinc but copper & lead elevated in past. Couldn't access site in 2018. Fire upstream in 2019, elevated metals in water. Resample in 2023.
627 Rock Bay	34	Victoria	–	–	–	–	–	–	–	Tidally influenced at discharge (627) & 627-3. Action Required. Access difficult.
629 Rock Bay	26	Victoria	–	–	–	–	–	–	–	Water samples show elevated arsenic, cadmium, chromium, iron, lead, zinc and aqueous PAHs. Action Required. Access difficult.

Table 3, Continued

Discharge ¹	Figure	Jurisdiction	Contaminant Ratings Over Time							Notes & Recommendations
			2016	2017	2018	2019	2020	2021	2022	
630 Rock Bay	26	Victoria	–	–	–	–	–	–	–	Access difficult. Sample in 2022.
633 Bay Street Bridge	26	Victoria	–	Moderate	–	–	–	–	Low in sed / high in water	Difficult access. Low in sediment but elevated zinc and other metals in past at 633-2. Confirm rating Action Required. Elevated cadmium, chromium, copper, iron, lead, zinc and pyrene in water.
634 David St	26	Victoria	–	–	–	–	–	–	–	Action Required; Rated high for zinc in 2009. Water samples have high iron, cadmium, chromium, copper, iron, lead and zinc.
635 Ralmax	26	Victoria	–	–	–	–	–	–	–	This discharge is tidal & can't be sampled upstream; sampling ceased.
636 S. of Victoria Works yard	26	Victoria	–	–	Metals elevated in water	–	–	–	–	Elevated zinc and other metals in sediment. Action Required. Elevated cadmium, chromium, copper, iron, lead and zinc in water.
641 Cecelia Creek	26	Victoria	–	–	Moderate	–	–	–	–	Zinc and PAH above freshwater sediment guidelines Resample in 2018.
645 Carrol St	27	Victoria	–	–	Moderate	–	–	–	–	Resample in 2023.
649 Gorge Rd Hospital	27	Victoria private	–	–	–	–	–	–	–	Copper, mercury & zinc elevated. Copper elevated in water sample, mercury detected; may have been sampling historical sediment. Action Required. Hospital investigating sources.
653 Cedar Shore Appts	27	Saanich	–	–	–	–	–	–	Low in water	Sample in 2024.
654 Cedar Shore Appts	27	Saanich private	–	–	–	–	–	–	–	Rated high in past, but potential tidal influence. No seds in 2016 or 2018. Attempt resample in 2024.
655 E. of Gorge Bridge	28	Saanich	Low	Low	–	–	–	–	High	Lead elevated above PEL. Confirm rating.
657 W. of Gorge Bridge	28	Saanich	–	–	–	–	–	–	–	Tidal, sample at 657-1. Small catchment, need traffic control, low in past, cease sampling.
669 Dysart Rd	29	Saanich	–	Moderate	–	–	–	–	–	Report of oil coming out of pipe in June 2018; no PAHS detected in water in 2020. No sediment in pipe in 2018 or 2019; Could not access in 2020. Resample in 2022.
672 Adelaide Ave	29	Saanich	–	–	–	Moderate	Low	–	–	Resample in 2025.
679 Gorge & Admirals	29	Saanich	–	–	Low	–	–	–	–	Resample in 2023.
687 Westing Rd	30	Saanich	Moderate	–	–	–	–	–	High	Stream. Elevated mercury. Confirm rating.
689 Below Admirals Rd	33	Saanich	–	–	–	Low	Low	–	–	Resample in 2024.
690BB Foot of Dysart	33	Saanich	–	–	–	–	–	–	–	Tidal at discharge & no upstream sampling location.
690D Colquitz River	33	Saanich	Low	Low	–	–	–	–	–	No elevated metals in water in 2020. Resample in 2024.
690E Colquitz River	33	Saanich	Moderate	–	–	Low	Low	–	–	Resample in 2025.
692 Portage Rd	32	Saanich	–	–	–	Moderate	High	Moderate	–	Zinc elevated in sediment but low in water. Deteriorating pipe.
695 Camden Ave	32	View Royal	–	Moderate	–	Moderate	Low	–	–	Sampled at 695-1A; Resample in 2025.
697 Hospital Creek	31	View Royal	–	–	–	–	–	–	–	Zinc in ditch near hospital parking lot. Source narrowed down. Can't be sampled at discharge (sampling ceased).

Table 3, Continued

Discharge ¹	Figure	Jurisdiction	Contaminant Ratings Over Time							Notes & Recommendations
			2016	2017	2018	2019	2020	2021	2022	
698 Stillwater Rd	31	View Royal	–	–	–	Moderate	–	–	–	Resample in 2025.
709B Craigflower Creek	31	View Royal	–	–	–	–	Low	–	–	Continue monitoring.
710 Helmcken Rd Bridge	31	View Royal	–	–	Moderate	Moderate	–	–	–	Resample in 2024.
712 Old Island Hwy	30	View Royal	–	Moderate	Low	High	Moderate	Moderate	Moderate	Low contaminants in water. Resample in 2027.
722 Craigflower Bridge	30	View Royal	–	–	–	–	–	Moderate based on water	Low based on water	No seds in 2016, 2019 or 2020. Elevated copper in water in 2021, lower upon resampling.
726 Craigflower & Admirals	29	Esquimalt	–	Low	Low	–	–	–	–	Low rating confirmed. Resample in 2023.
737 Garthland Rd	29	Esquimalt	High	Low but High upstream	–	–	–	High	Low	PAHs elevated in 2021; low in 2022 Action Required. Source appears to be catchbasin in Garthland PI (737-1). Asked Esquimalt to clean out manhole. Confirm rating.
742 Sioux PI	28	Esquimalt	–	High	–	Low u/s	High u/s	High u/s	High u/s	Sampled at 742-2 as 742 is tidal. Source narrowed. Mercury 5X > guideline. Action Required. Esquimalt has been notified. Low mercury on the golf course.
744 Gorge-Esquimalt Park	28	Esquimalt	–	–	–	–	Moderate	Moderate	–	Elevated zinc in sediment and slightly elevated in water. Resample in 2024.
749 Uganda St	28	Esquimalt	–	High	–	–	–	–	–	Samples marine-influenced before 2008. Zinc and mercury elevated in 2017. Appears to be food waste present upstream. Oil spill in past. Copper elevated in water. Action Required. Source narrowed down. Esquimalt contacted. Resample after action taken.
758A Bamfield Park	27	Victoria	–	–	–	–	–	–	–	Discharge is intertidal. Rating based on 758A-1. No sediment in 2020. Manhole not accessible.
767 Ocean Pt Resort	25	Victoria	–	–	–	–	–	–	–	Short line, intertidal. Discharge not accessible. Zinc elevated in past. Removed from action list. Cease sampling.
780 Head St	24	Esquimalt	–	–	–	–	–	–	–	No sediment available in 2020. Resample in 2023.
781 Head St	23	Esquimalt	–	–	–	–	–	–	–	Elevated lead in 2015. Not enough sediment in 2016. No seds in 2017 or 2018.
806 Kinver St	22	Esquimalt	–	–	–	–	–	–	–	Copper & zinc in discharge; zinc & PAH u/s of Hatfield & Kinver but not farther u/s. Action Required; the CRD narrowed down to within two blocks. Resample discharge in 2023.
847 Concrete building	19	DND	–	–	–	–	–	–	–	Rating confirmed. Cannot access site. DND doing own monitoring. Cease sampling.
849 Fleet building	19	DND	–	–	–	–	–	–	–	Findings shared with DND.
866 Portage Park	16	View Royal	–	–	High u/s	–	Low	Moderate	–	Removed from action list. Previously rated high for zinc. Narrowed down; potentially historic source. Elevated copper and zinc in stream. VR cleaned out manhole and catchbasins upstream.
873 Helmcken Rd	16	View Royal	–	–	–	–	–	–	Moderate	Resample in 2027.

Table 3, Continued

Discharge ¹	Figure	Jurisdiction	Contaminant Ratings Over Time							Notes & Recommendations
			2016	2017	2018	2019	2020	2021	2022	
873A Helmcken Rd	16	View Royal	–	–	–	–	–	–	–	Sampled at 873 to represent discharge of 873, 873A and 873C. Zinc elevated in ditch upstream likely due to corroded pipe. Zinc low at discharge.
873C Helmcken Rd	16	View Royal	–	–	–	–	–	–	–	Sampled at 873 to represent discharge of 873, 873A and 873C. Corroded pipe u/s but zinc low at discharge.
874 Tovey Bay	15	View Royal	–	–	–	–	–	Moderate	Moderate	Zinc above PEL in sediment. Source may be corroded pipe. Copper elevated in water. Action removed. Resample in 2022.
875 View Royal Ave	15	View Royal	–	–	–	–	–	–	Low	Resample in 2027.
879 Price Rd	15	View Royal	–	–	–	–	–	–	Moderate	Resample in 2027.
882 Parsons Bridge	13	View Royal	–	Moderate	–	–	–	Moderate	–	No exceedances in water sample.
886 Millstream Creek	14	View Royal	–	–	Low	–	–	–	–	Resample in 2023 (Millstream Creek).
887 Wilfert Rd	14	View Royal	–	–	–	–	–	Low	–	Low in past. No sediment in 2018 or 2019.
902 Joe's Creek	13	DND	–	–	Low	–	–	–	–	Resample in 2024 (Joe's Creek).
916 Colwood Creek	9	Royal Roads	–	Low	–	–	–	–	Low	Resample in 2027.
921 Esquimalt Lagoon	8	Royal Roads	–	–	–	Low	–	–	–	Resample in 2024.
922 Hatley Creek	8	Royal Roads	–	–	–	Low	–	–	–	Resample in 2024.
926 Bee Creek	8	Colwood	Low	–	–	Low	Low	–	–	Elevated arsenic measured upstream. Resample in 2025.
927 Miller Brook	8	Colwood	–	–	Low	–	–	–	–	Resample in 2023.
928 Selleck Creek	8	Colwood	–	Low	–	Moderate	–	–	–	Sampled with 5-in-30s; Resample in 2024.
931 Lagoona Brook	7	Colwood	–	–	–	Low	–	–	–	Resample in 2024.
932 S end Esquimalt Lagoon	7	Colwood	–	–	–	Low	–	–	–	Resample in 2024.
933 S end Esquimalt Lagoon	7	Colwood	Low	–	–	–	–	–	Low	Resample in 2027.
934 Ocean Blvd	7	Colwood	–	–	–	–	–	Low	–	Resample in 2023.
937 Ocean Blvd	7	Colwood	–	–	–	Low	–	–	–	Resample in 2024.
6003 Goldstream River	67	Langford	Low	–	–	Low	–	–	–	Resample in 2026 as part of 5-in-30s.
6004 Saanich Inlet	67	Langford	–	–	–	Low	–	–	–	Resample in 2024.
6006 Saanich Inlet	68	Langford	–	High	–	–	–	–	Moderate	Action Required. Confirm rating; Elevated PAH in past; creosote log pile nearby.
6008 Trans Canada	68	Langford	–	–	Moderate	Moderate	–	–	–	Slightly elevated zinc. Sample water in 2023.

See table notes next page.

Table 3, Continued

Notes:

¹ Contaminant rating for a discharge is based on point of discharge.
Metals: arsenic As, cadmium Cd, chromium Cr, copper Cu, lead Pb, mercury Hg, silver Ag and zinc Zn,
Organic substances: high and low molecular weight polycyclic aromatic hydrocarbons HPAH and LPAH
u/s is upstream

Table 4 Freshwater Stream Sediment Analytical Data

		Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Silver	Zinc	HPAH	LPAH
Freshwater Sediment Quality Guidelines	CCME ISQG	5.9	0.6	37.3	35.7	35	0.17	0.5	123	0.1	0.1
	CCME PEL	17	3.5	90	197	91	0.486	-	315		
Vancouver Island Background		4	0.95	65	100	40	0.15	1	150	-	-
SW0559	2021-09-08	2.74	0.088	20.9	20.5	5.89	< 0.05	< 0.05	82.2	0.076	0.013
SW0744	2021-03-31	2.65	0.182	29.1	38.3	26.6	< 0.05	0.322	164	0.64	0.12
SW0866	2021-03-31	5.24	0.174	24.1	28.7	22.1	< 0.05	< 0.05	249	0.054	0.008
SW0887	2021-05-07	2.02	0.132	21.4	24.4	13.8	0.078	< 0.05	124	0.12	0.026
SW0916	2022-04-13	1.45	0.064	18.9	22.1	5.15	< 0.05	< 0.05	70.1	0.024	0.0017
SW6003	2021-09-08	4.49	0.063	47.5	38.7	4.76	< 0.05	< 0.05	60.7	0.047	0.009
SW6006	2022-04-29	5.58	0.336	46.4	106	84.2	0.08	0.131	199	6.7	1.5

Notes
Concentrations are in mg/kg dry weight.
LPAH and HPAH are low and high molecular weight polycyclic aromatic hydrocarbons, respectively.
CCME = Canadian Council of Ministers of the Environment.
ISQG = interim sediment quality guideline; concentrations above this level but below the PEL will occasionally result in adverse effects on aquatic life.
PEL = probable effects level; concentrations above this level will frequently result in adverse effects to aquatic life.
Vancouver Island Background Concentrations are regional estimates (95th percentiles) from BC ENV; https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/protocols/protocol_4.pdf
"- " means no guideline available.

XX	Light yellow; italicized values are those that exceed a guideline but are below the Vancouver Island background concentration.
XX	Value is greater than or equal to the CCME ISQG.
XX	Value is greater than or equal to the CCME PEL.

Table 5 Aqueous Metals in Stormwater Discharges Data

			Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	<i>E. Coli</i>	Flow Rate
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	CFU/100 mL	L/min
BC Marine Aquatic Life Guidelines		max	-	-	12.5 ¹	-	-	-	-	0.12	-	-	-	3	-	-
		average	-	-	-	-	-	-	-	-	-	-	-	2	-	-
BC Freshwater Aquatic Life Guidelines		max	-	-	5	-	-	-	-	0.59 (dissolved)	-	1/9 ²	-	11.4	-	-
		average	-	-	-	-	-	-	-	-	-	-	-	4	-	-
Station ID		Sample Date														
SW0209	Foot of San Jose Street	2022-01-26	99.4	0.547	1.03	21.3	< 0.01	< 0.005	61	0.023	58.7	0.63	0.163	6.06	2800	60
SW0210	Foot of Lewis Street	2021-03-17	16.1	0.142	1.48	24.2	< 0.01	< 0.005	23	0.0332	72.1	0.28	0.0655	2.4	2	45
		2021-06-21	8.68	0.168	1.38	29	< 0.01	< 0.005	24	0.0351	84.3	0.2	0.0522	3.54	2	5
		2022-01-26	16.1	0.102	1.31	29.4	< 0.01	< 0.005	24	0.0484	74.5	0.27	0.0775	4.73	5	13
SW0211	≈ 270m east of Finlayson Point	2022-01-27	309	0.091	0.701	11.9	< 0.01	< 0.005	21	0.0073	39.9	0.75	0.113	6.12	5	11
SW0212	Foot of Cook Street, beach access	2021-03-29	232	0.15	0.352	11.7	< 0.01	< 0.01	18	0.0052	21.7	0.43	0.133	2.34	80	100
		2021-06-21	96	0.117	0.675	18.1	< 0.01	< 0.01	31	0.0095	46.2	0.36	0.148	1.91	4	5
		2022-01-26	248	0.104	0.414	13.4	0.013	< 0.005	25	0.0095	24.5	0.46	0.176	3.34	< 1	42
SW0214	Clover Point	2022-01-26	46.8	0.269	0.516	11.9	< 0.01	< 0.005	57	0.0075	37.7	0.39	0.0919	3.24	3600	> 250
SW0216	Foot of Eberts Street	2021-03-29	168	0.495	1.01	20	< 0.01	< 0.01	66	0.0152	48.5	0.95	0.228	6.27	11000	200
		2021-06-21	125	0.626	2	19.2	< 0.01	0.026	88	0.0105	34	0.57	0.238	6.66	110000	65
		2022-01-26	480	0.516	1.23	28.1	0.014	0.012	72	0.0312	49.3	1.25	0.532	9.87	1900	> 300
SW0216-3	MH#D3640 @ Cook St. & May St.	2021-03-30	4530	0.504	1.89	47.7	0.087	0.11	76	0.0571	52.5	8.3	2.55	23.1	8000	35
SW0218	Foot of Memorial Crescent	2021-03-30	4330	1.63	2.2	35.3	0.064	0.075	86	0.0822	58.5	12.3	2.37	22.6	17	22
		2021-06-21	3000	0.834	2.22	34.5	0.169	< 0.02	480	0.047	106	3.64	1.09	12.3	300	2
		2022-01-27	1560	1.36	1.42	19.3	0.021	0.018	115	0.0306	62.5	4.79	0.52	8.51	56	9
SW0222	Middle of Ross Bay Cemetery	2021-06-21	609	0.419	1.05	21.2	0.015	0.037	57	0.0667	42.8	1.43	0.555	11	3000	100
		2022-01-27	93.9	0.359	0.93	22.1	< 0.01	0.028	50	0.0141	55.8	0.56	0.224	6.14	12000	> 250
SW0227	Foot of Wildwood Crescent	2022-01-27	163	0.703	0.454	11.6	< 0.01	< 0.005	46	0.0104	30	0.39	0.205	4.62	11	4
SW0228	Robertson Rd, Gonzales Bay	2022-02-24	290	0.909	1.58	13	< 0.01	< 0.01	47	0.0098	25.5	1.28	0.174	7.81	< 1	< 1
SW0228A	Robertson Street, west Gonzales Bay	2022-02-24	49.3	0.736	0.339	6.24	< 0.01	< 0.005	< 10	0.0072	4.42	0.68	0.0741	25.5	1	3
SW0229	Foot of Ross St, Gonzales Bay	2022-01-27	76.1	0.452	0.703	21.2	< 0.01	< 0.005	63	0.0155	41	0.64	0.176	4.18	140	5
SW0230	Foot of Foul Bay Rd, Gonzales Bay	2022-01-28	75.2	0.189	0.392	20.2	< 0.01	< 0.005	41	0.01	44.8	0.3	0.131	2.47	34000	12
SW0231	Foot of Marne St, Gonzales Bay	2022-01-28	44.2	0.315	0.41	43.8	< 0.01	< 0.005	40	0.0081	30.6	0.18	0.0966	4.12	72	5
SW0236	Foot of Crescent Rd, Harling Pt.	2022-01-28	51.8	0.699	0.44	16.3	< 0.01	< 0.005	193	0.013	43	0.8	0.186	7.29	21	6
SW0237	Harling Pt.	2022-01-28	134	0.461	0.626	18.1	< 0.01	< 0.005	62	0.0176	40.7	0.6	0.156	4.17	15	3
SW0244	Across from 242 Beach Drive, McNeil Bay	2022-02-24	83.3	0.28	3.68	15.4	< 0.01	< 0.01	25	0.011	28.1	1.54	0.107	6.51	100	11
		2022-07-04	63.1	0.444	2.63	21.9	< 0.01	< 0.005	46	0.0111	48.5	0.73	0.118	5.53	110	5
SW0245	Foot of Monterey Ave, McNeill Bay	2021-03-29	305	0.55	1	21.8	< 0.01	< 0.005	50	0.0132	38	1.04	0.203	5.33	360	250
		2022-01-27	154	0.422	0.813	18.2	< 0.01	0.005	56	0.0083	38.2	0.61	0.197	4.62	120	60
		2022-07-04	136	0.697	1.54	22.8	< 0.01	0.0075	64	0.0468	46.1	1.22	0.312	17	570	12
SW0249	Foot of Oliver, McNeill Bay	2022-01-27	238	0.514	1.32	25.4	< 0.01	< 0.01	91	0.0125	50	1.21	0.153	8.35	5	2
		2022-07-05	389	0.752	1.6	22.8	0.012	< 0.005	84	0.0183	43.9	1.68	0.18	10.8	150	< 1
SW0250	Foot of St. Patrick, McNeill Bay	2021-03-29	329	0.592	1.25	23.8	< 0.01	< 0.01	116	0.0121	45.6	1.12	0.219	6	330	< 0.01
		2021-09-16	152	< 1	1.9	12.2	< 0.5	< 0.25	3510	< 0.25	330	< 5	0.3	< 2.5	160	0
		2022-01-27	85	< 0.4	1.68	16.2	< 0.2	< 0.1	2030	< 0.1	214	< 2	0.18	3.9	730	
		2022-07-05	47	< 0.4	2.22	18.9	< 0.2	< 0.1	2650	< 0.1	260	< 2	0.13	4.1	61000	
SW0257A	Foot of Radcliffe Lane	2022-02-24	30.4	0.066	0.087	3.36	< 0.01	< 0.005	< 10	< 0.005	5.62	0.1	0.0376	2.51	< 1	12
		2022-07-05	42.9	0.438	0.606	3.13	< 0.01	0.0127	188	< 0.005	8.71	0.3	0.101	9.17	27	< 1
SW0304	End of Satellite Street	2022-02-24	61.5	3.52	1.01	9.13	< 0.01	< 0.01	21	0.0241	22.6	0.75	0.268	53.9	860	< 1
SW0306	South side of Oak Bay Marina	2021-03-29	396	0.371	1.22	27.5	< 0.01	< 0.01	123	0.0159	49.3	2.6	0.395	10.6	260	200
		2021-08-25	99	0.54	1.81	23.6	< 0.05	< 0.05	796	0.055	119	1	2.54	13.4		40
SW0307	Oak Bay Marina	2021-03-29	143	0.071	0.508	9.4	< 0.01	0.0246	25	0.0065	27.5	0.33	0.428	4.6	400	2
		2021-06-22	394	0.099	0.697	8.41	0.013	0.041	23	0.0302	15.8	0.81	0.473	7.41	110	2
		2022-02-01	57.4	0.183	0.383	10.5	< 0.01	< 0.005	43	0.0146	41.6	0.17	0.215	2.26	170	< 1
		2022-07-05	47.5	0.102	0.359	7.31	< 0.01	0.0276	27	0.0079	20.3	0.25	0.181	6.95	2300	1
SW0309	End of Windsor Road	2022-02-01	37.7	0.159	1.49	8.43	< 0.01	< 0.005	40	< 0.005	18.1	< 0.1	0.0449	2.59	< 1	10
		2022-07-05	62.8	0.377	0.604	5.23	< 0.01	< 0.005	23	< 0.005	13.1	0.27	0.0576	5.36	< 1	1

Table 5, Continued

			Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	<i>E. Coli</i>	Flow Rate
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	CFU/100 mL	L/min
BC Marine Aquatic Life Guidelines		max	-	-	12.5 ¹	-	-	-	-	0.12	-	-	-	3	-	-
		average	-	-	-	-	-	-	-	-	-	-	-	2	-	-
BC Freshwater Aquatic Life Guidelines		max	-	-	5	-	-	-	-	0.59 (dissolved)	-	1/9 ²	-	11.4	-	-
		average	-	-	-	-	-	-	-	-	-	-	-	4	-	-
Station ID		Sample Date														
SW0310	End of Windsor Road	2022-02-01	1310	0.354	1.18	29	0.036	< 0.01	46	0.0142	44.1	1.92	0.411	5.71	540	11
		2022-07-05	118	0.477	1.45	21.6	< 0.01	< 0.005	62	0.0118	49	0.72	0.146	9.47	90	9
SW0310A	Foot of stairs, north of Windsor Road	2022-02-24	27.4	0.417	0.467	26.6	< 0.01	< 0.005	49	0.0149	67.7	0.32	0.107	6.02	15	1
		2022-07-05	115	2.85	1.27	27.3	< 0.01	< 0.005	100	0.0131	86.7	0.57	0.135	6.93	48	3
SW0316	South of Somass Drive	2022-02-24	114	0.342	0.557	16.8	< 0.01	0.0089	54	0.0473	31.6	0.43	0.128	4.75	40	> 2000
		2022-07-06	125	0.419	1.12	15.7	< 0.01	< 0.01	86	0.0175	39.4	0.47	0.149	5.92	320	> 400
SW0317	End of Bowker Lane	2022-01-31	31.4	0.528	0.487	14.4	0.011	< 0.005	44	0.0095	42.6	0.28	0.104	11.6	11	32
		2022-07-06	21.3	0.539	0.635	23.9	< 0.01	< 0.005	67	0.0148	59.3	0.28	0.102	12.6	9	2
SW0318	End of Bowker Avenue	2022-01-31	133	0.257	0.361	9.4	< 0.01	< 0.005	44	0.0096	18.3	0.63	0.11	2.6	36	60
		2022-07-06	72.3	0.172	0.551	8.34	< 0.01	< 0.005	32	0.0094	16.1	0.52	0.085	2.12	21	30
SW0320	End of Dalhousie Street	2022-01-31	1800	0.944	5.52	30.3	0.077	0.0273	51	0.118	78	13.4	0.925	24.8	120	80
SW0321	End of Estevan Ave.	2022-02-02	211	0.376	0.766	11.9	< 0.01	0.005	30	0.013	22.9	0.59	0.159	4.81	110	7
		2022-07-06	97	0.328	1.16	15.9	< 0.01	< 0.005	36	0.0195	35	0.37	0.0842	10.3	35	6
SW0321A	Foot of Estevan	2022-02-02	427	0.322	1.63	12.6	< 0.01	< 0.005	47	0.0131	22	1.34	0.208	6.41	150	12
		2022-07-06	207	0.659	1.16	16.3	< 0.01	< 0.005	81	0.0229	30.7	1.46	0.612	7.57	1600	10
SW0322	End of Thorpe Place beach access	2022-02-02	379	0.417	0.941	19.5	< 0.01	0.0075	53	0.0136	30.7	1.03	0.166	4.75	790	12
		2022-07-06	138	0.658	1.3	21.7	< 0.01	< 0.005	77	0.0107	42.7	0.95	0.141	6.93	70000	9
SW0323	North end of Esplanade	2022-02-01	179	0.136	0.638	12	< 0.01	< 0.005	113	0.0083	31.4	0.47	0.198	3.11	110	200
		2022-07-06	54.2	0.152	0.645	10.8	< 0.01	< 0.005	146	< 0.005	37.8	0.17	0.0828	2.02	360	40
SW0323A	Stairs leading to Cattle Point	2022-02-02	232	0.063	0.456	10.2	0.012	< 0.01	29	0.0169	8.38	0.65	0.205	2.78	420	5
SW0503	Hobbs creek, Cadboro Bay	2022-02-02	1330	0.256	1.64	26.1	0.025	0.023	54	0.0568	35.1	3.01	0.885	9.81	4100	80
SW0505	Gyro Park east, Cadboro Bay	2021-06-14	90.8	0.158	0.726	14.7	< 0.01	< 0.005	69	0.01	42.2	0.59	0.142	4.4	710	65
		2022-02-25	54.4	0.118	0.505	12.8	< 0.01	< 0.005	43	0.007	41.4	0.4	0.125	1.84	37	> 250
SW0505-4	MH between 2608/2604 Penrhyn St.	2021-02-26	124	0.087	0.373	8.45	< 0.01	< 0.01	25	0.0095	19.3	0.28	0.119	2.22		7
SW0505-6	MH; corner of Cadboro Bay/Penrhyn Rd	2021-02-26	688	1.2	0.458	10.4	0.012	0.046	11	0.0164	2.34	2.07	0.595	12.7		7
SW0505-7	MH at driveway of 3844 Hobbs Street	2021-02-26	107	0.08	0.329	8.04	< 0.01	< 0.01	26	0.0083	20.1	0.25	0.124	1.95		7
SW0506	Foot of Telegraph Bay Rd, Cadboro Bay	2022-02-02	171	0.167	0.544	16	< 0.01	< 0.01	44	0.0143	33.5	0.56	0.339	4.62	18	35
SW0507	Foot of Telegraph Bay Rd, Cadboro Bay	2022-02-02	269	0.161	0.694	14.4	0.01	< 0.01	51	0.0166	33.4	0.95	0.365	4.41	< 1	1
SW0508	Foot of Telegraph Bay Rd, diffuser	2022-02-02	67.3	0.154	1.52	11.2	< 0.01	< 0.005	43	0.0117	23.8	0.46	0.098	5.18	8	40
SW0513	Ten Mile Point, 2893 Sea View Rd	2022-03-01	63.9	0.245	0.21	34	< 0.01	< 0.005	59	0.007	27	0.24	0.0824	3.04	2	2
SW0516	2977 Sea View Rd, Ten Mile Point	2022-02-02	111	0.147	0.292	10.4	< 0.01	< 0.005	52	< 0.005	24.2	0.26	0.196	3.8	9	18
SW0518	3895 Tudor Ave, Ten Mile Point	2022-02-02	74.2	0.192	0.876	12.9	< 0.01	< 0.005	49	0.0085	30	0.29	0.0796	3.53	38	9
SW0520	3905 Tudor Ave, Ten Mile Point	2022-02-25	22.2	0.177	0.159	19.5	< 0.01	< 0.005	70	0.0058	39.5	0.1	0.14	1.75	< 1	3
SW0522	Foot of McAnally, Smugglers Cove	2022-02-03	176	0.241	0.416	14.3	< 0.01	0.014	56	0.0443	20.8	0.42	0.436	7.55	6	< 1
SW0530	Phyllis/ Mt Bakerview Rd, Ten Mile Point	2022-03-01	111	0.069	0.244	6.34	< 0.01	< 0.01	67	< 0.005	15.9	0.2	0.064	2.07	< 1	12
SW0540	4035 Larcono Lane, Finnerty Cove	2022-03-02	52.8	0.135	0.441	9.23	< 0.01	< 0.005	21	< 0.005	32	0.2	0.113	3.41	2	7
SW0550	Balmacarra Rd / Leynes beach access	2022-02-03	47.9	0.096	0.333	7.76	< 0.01	< 0.005	16	< 0.005	14.7	0.26	0.131	1.61	6	40
SW0554	West of Balmacarra Rd/Leynes beach access	2022-02-03	1020	0.084	1.1	31.5	0.032	0.012	34	0.052	27.5	1.15	0.921	2.51	< 10	< 1
SW0557	East of Mt Douglas Park beach access	2022-02-03	121	0.419	1.65	11.9	< 0.01	< 0.005	17	0.0197	26.4	0.51	0.287	5.62	28	6
SW0558	East of Mt Douglas beach access	2022-02-03	234	0.236	0.442	14.4	0.011	< 0.005	25	0.0128	22.7	1.03	0.211	3.86	40	9
SW0560	West of Mt Douglas Park beach access	2022-03-02	245	0.038	0.224	6.23	< 0.01	< 0.005	< 10	< 0.005	14.2	0.42	0.115	1.24	2	9
SW0564	4649 Cordova Bay Rd	2022-02-10	208	0.092	0.254	10.4	< 0.01	< 0.01	21	0.0099	26.5	0.46	0.301	4.79	< 1	22
SW0567	south side of 4771 Timber Place	2022-02-10	5690	0.171	1.64	42.2	0.112	0.022	33	0.0373	46.1	7	3.15	27.1	470	35
SW0574	4915 Cordova Bay Rd	2022-02-10	24.7	0.117	0.333	9.87	< 0.01	< 0.005	24	< 0.005	34.5	0.12	0.11	1.85	11	100
SW0576A	4989 Cordova Bay Rd, south of access	2022-02-10	115	0.076	0.534	10.8	< 0.01	< 0.01	33	0.0092	37.1	0.59	0.123	1.83	2	28
SW0578	5091 Cordova Bay Rd	2022-02-25	16.1	0.05	0.461	12	< 0.01	< 0.005	43	< 0.005	36.4	0.38	0.0585	0.922	8	> 300
SW0580	20 m south of Agate Park	2022-02-10	41.7	0.099	0.237	6.28	< 0.01	< 0.005	29	0.0071	24.5	0.28	0.114	1.56	19	8
SW0589	Burnham Brook, south of Parker Park	2021-04-09	732	0.054	1.02	15.4	0.014	< 0.01	32	0.0086	48.6	1.18	0.508	2.11	4	450
SW0592	Noble Creek	2021-08-24	453	0.073	1.28	12.1	< 0.01	< 0.01	37	0.0061	37.6	0.8	0.39	1.58		400
		2022-02-10	1090	0.117	1.05	20.7	0.025	< 0.01	55	0.0372	42.8	2.06	0.93	4.93	16	> 600

Table 5, Continued

			Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	<i>E. Coli</i>	Flow Rate
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	CFU/100 mL	L/min
BC Marine Aquatic Life Guidelines		max	-	-	12.5 ¹	-	-	-	-	0.12	-	-	-	3	-	-
		average	-	-	-	-	-	-	-	-	-	-	-	2	-	-
BC Freshwater Aquatic Life Guidelines		max	-	-	5	-	-	-	-	0.59 (dissolved)	-	1/9 ²	-	11.4	-	-
		average	-	-	-	-	-	-	-	-	-	-	-	4	-	-
Station ID		Sample Date														
SW0603	20 m south of James Bay Anglers	2021-03-30	103	0.808	1.57	19.6	< 0.01	0.095	87	0.0214	47.5	0.74	0.196	10.9	2000000	40
		2021-08-20	149	1.05	2.5	13	< 0.01	0.098	247	0.0686	31.5	0.87	0.75	15.9	450000	5
SW0613	Government St. and Belleville	2022-01-31	354	0.734	0.743	22.7	< 0.01	0.112	60	0.0248	33	1.2	0.328	17.2	400	> 200
SW0614	Humboldt/Wharf and Government	2021-04-30	147	1.27	1.51	16.5	< 0.01	0.012	106	0.0259	46.5	1.34	0.284	21.5	300	140
		2021-06-24	74	0.9	1.49	16	< 0.05	< 0.05	430	< 0.025	71	1.37	0.194	26.7	680	26
		2022-01-31	241	0.668	0.993	12.7	< 0.01	0.128	67	0.0376	30.6	0.97	0.208	14.6	9000	> 250
SW0620	North side of Johnson Street Bridge	2021-03-17	424	0.667	1.63	30	< 0.01	0.047	151	0.24	51.3	0.55	0.275	88.6	4700	22
		2021-06-24	75.3	0.822	2.63	30.3	< 0.01	0.016	148	0.0357	51	0.92	0.207	22.4	7600	11
		2022-07-15	54	0.417	1.31	17.9	< 0.01	0.032	112	0.0233	34.4	0.47	0.167	18	2600	20
SW0626	Behind 2122 Government St, Rock Bay	2021-06-24	228	1.31	2.26	43.2	< 0.01	0.015	199	0.0217	56.2	1.07	0.477	26.8	60000	22
SW0627	South side of Ocean Cement, Rock Bay	2021-06-24	105	0.373	1.02	23.4	< 0.01	0.035	136	0.0191	44.2	0.49	0.285	7.1	260000	30
SW0629	East of foot of Bridge St, Rock Bay	2022-03-23	14300	4.08	8.03	204	0.194	0.274	256	0.982	107	26.8	8.11	537	3200	50
SW0629-2	MH#D3017 @ 540 John St; Boyd Auto Glass	2021-03-05	1230	3.03	0.651	68.1	0.019	0.596	78	0.0727	40.3	4.25	1.03	31.1	< 1	8
SW0629-8	MH D3033 Hillside/Rockbay Ave	2021-03-05	1200	5.13	0.694	66.8	0.017	0.231	15	0.301	5.25	5.14	1.21	366		2
SW0630	Foot of Bridge St., Rock Bay	2022-03-22	16200	2.58	7.55	125	0.308	0.273	29	0.214	55.4	42.5	8.38	63.5	140	40
SW0633	Under south side of Bay St. Bridge	2021-08-17	8560	4.82	7.72	107	0.162	0.209	62	0.364	42.8	16.3	6.85	105	1600	30
		2022-03-23	1670	3.64	3.52	65.1	0.028	0.081	101	0.104	63.3	6.09	2.38	62.3	300	5
SW0643	Foot of Washington Ave.	2022-03-03	170	0.541	1.07	24.3	< 0.01	< 0.01	40	0.0181	53.6	0.52	0.202	4.28	11	1
SW0645	Carrol St. easement	2022-03-03	176	0.436	0.654	17.4	< 0.01	< 0.01	41	0.0121	36	0.41	0.144	4.48	1200	6
SW0645A	Prince Charles Apts/Gorge Rd	2022-03-03	22.7	0.248	0.319	19.2	< 0.01	< 0.005	60	< 0.005	80.8	0.18	0.0737	1.35	540	5
SW0646	20 m east of large concrete outfall	2022-03-03	19.6	0.307	0.261	73.7	< 0.01	< 0.01	34	0.0332	192	0.25	0.075	2.36	15	2
SW0649	Gorge Rd. Hospital, head of channel	2021-01-22	210	0.609	0.867	33.5	< 0.01	0.118	37	0.0242	55.7	0.55	0.268	28.2	560	7
		2021-08-19	50.8	0.553	1.44	16.4	< 0.01	0.0527	57	0.0116	41.7	0.19	0.174	29.6	1100	1
		2022-03-03	64.3	0.142	0.698	13.2	< 0.01	0.0082	28	0.0085	42.5	0.27	0.106	8.03	130	< 1
SW0650	Harriet Road, east of "Outfall" sign	2022-03-03	359	0.945	0.476	20.7	< 0.01	< 0.01	47	0.0133	114	0.7	0.306	5.12	8000	20
		2022-03-03	2020	0.414	1.16	31.2	0.05	0.013	36	0.0361	34.2	3.17	1.03	8.56	110000	9
SW0653	Cedar Shore Apts tennis courts	2021-03-30	206	0.301	0.78	15.2	< 0.01	0.0059	59	0.0284	39.9	0.54	0.151	4.26	1800	100
		2021-08-19	62.5	0.51	1.07	24.7	< 0.02	< 0.01	263	0.014	53.5	0.64	0.149	2.69	2100	30
SW0654	North of Cedar Shore Apts	2021-03-30	16.5	0.226	0.336	16	< 0.01	< 0.005	62	0.0229	62.6	7.83	0.101	1.97	< 1	25
SW0692	End of Portage Rd.	2021-04-26	30.7	0.139	0.26	8.68	< 0.01	< 0.005	27	0.0057	30.5	0.17	0.197	1.84	5	50
		2021-09-15	124	0.429	0.659	14.3	< 0.01	< 0.005	38	0.009	43.2	0.47	0.239	4.02	27	5
SW0710	15 m south of Helmcken Rd Bridge	2022-02-15	591	0.12	0.514	10.9	0.012	< 0.01	22	0.0141	31.3	0.91	0.558	6.35	< 1	6
SW0712	West of 712A, east of E&N railway	2022-02-15	24.2	0.143	0.234	11.6	< 0.01	< 0.005	41	0.0108	37.7	0.14	0.0953	2.47	5	9
SW0722	Under center of Craigflower Bridge	2021-03-17	32.4	0.2	0.695	14.6	< 0.01	< 0.005	24	0.006	58.7	0.66	0.0956	1.78	7	10
		2021-09-16	3030	1.77	3.54	91.9	0.049	0.063	84	0.0477	89	4.96	4.04	16.4	32	10
		2022-02-15	42.5	0.4	0.459	13.6	< 0.01	< 0.005	24	0.0106	60.1	0.39	0.111	2.69	7	20
SW0722AA	SW corner of Craigflower Bridge	2022-02-15	413	0.368	0.724	16.5	< 0.01	0.015	22	0.0175	52.5	1.15	0.446	5.17	1	5
SW0727	Foot of Aral Rd.	2022-02-15	27.4	0.208	0.268	12.8	< 0.01	< 0.005	39	0.0104	53.5	0.16	0.0574	1.38	22	6
SW0736A	14-915 Glenvale, man-made stream	2022-02-15	62.3	0.174	0.265	9.3	< 0.01	< 0.01	35	0.007	56.4	0.41	0.147	2.53	13	6
SW0737	Foot of Garthland Rd.	2021-03-17	23.7	0.365	0.521	17.3	< 0.01	< 0.005	40	0.0074	66.7	0.33	0.103	2.54	< 1	5
		2021-08-19	24.1	0.528	0.682	26.7	< 0.01	< 0.005	120	0.0067	79.7	0.24	0.105	1.33	10	1
		2022-07-20	299	0.438	0.59	19.5	< 0.01	0.011	66	0.0245	70	0.74	0.273	8.48	3	< 0.01
SW0742	Foot of Sioux Pl.	2021-03-17	148	0.081	0.52	11.6	< 0.01	< 0.01	44	0.0089	34.9	0.49	0.441	1.76	4	14
		2021-08-05	67.9	0.168	0.616	12.5	< 0.01	0.01	177	0.0155	52.5	0.33	0.253	2.23	21	2
		2022-02-17	104	0.067	0.372	12.8	< 0.01	< 0.01	50	0.0075	34.2	0.34	0.319	1.49	3	7
SW0742-2A	Craigflower Rd culvert at Gorge Vale Golf Course	2021-05-12	57.5	0.091	0.463	8.24	< 0.01	< 0.005	344	0.0168	56.3	0.15	0.133	2.37	7	3
SW0742-2B	Craigflower Rd culvert at Gorge Vale Golf Course	2021-05-12	180	0.063	0.606	10.2	< 0.01	< 0.01	48	0.0059	34.7	0.54	0.401	1.24	40	30
		2021-08-05	8320	0.36	8.6	158	0.188	0.055	90	0.199	44.7	13.5	10.4	26.7	440	2
SW0742-2C	Craigflower and Shirley Rd, on golf course	2021-08-05	596	0.08	1.03	24.3	0.018	< 0.01	39	0.0178	39.9	1.04	1.63	1.62	68	
SW0742B	SW of Kinsmen Gorge Park parking area	2022-02-17	177	0.11	0.347	10.2	< 0.01	< 0.005	16	0.008	16.8	0.38	0.214	3.61	< 1	

Table 5, Continued

			Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	<i>E. Coli</i>	Flow Rate
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	CFU/100 mL	L/min
BC Marine Aquatic Life Guidelines		max	-	-	12.5 ¹	-	-	-	-	0.12	-	-	-	3	-	-
		average	-	-	-	-	-	-	-	-	-	-	-	2	-	-
BC Freshwater Aquatic Life Guidelines		max	-	-	5	-	-	-	-	0.59 (dissolved)	-	1/9 ²	-	11.4	-	-
		average	-	-	-	-	-	-	-	-	-	-	-	4	-	-
Station ID		Sample Date														
SW0744	Gorge-Esquamalt Park, Creek main flow	2021-03-17	131	0.167	0.488	15.4	< 0.01	< 0.005	52	0.0111	36	0.48	0.243	2.87	190	180
		2021-08-05	160	0.299	1.48	16.9	< 0.01	< 0.01	81	0.0119	34.7	0.57	0.31	4.57	480	150
		2022-02-17	67	0.151	0.493	15.2	< 0.01	< 0.005	51	0.0109	34.6	0.3	0.197	2.56	630	> 250
SW0744A	Gorge-Esquamalt Park, E of nursery	2022-02-17	37.3	0.177	0.369	26.8	< 0.01	< 0.01	95	0.0231	48.2	0.16	0.184	2.15	< 1	< 1
SW0744B	Gorge-Esq. Park, across from 1034 Gosper Cres.	2022-01-28	110	0.748	0.788	19.3	< 0.01	0.0095	129	0.0193	49.2	0.39	0.374	8.43	300000	5
		2022-02-17	124	0.685	0.959	18.4	< 0.01	0.29	167	0.0278	48.9	0.52	0.354	5.56	410000	5
SW0749	South side of 306 Uganda	2022-03-04	113	0.216	0.7	14.4	0.024	< 0.005	73	0.0093	36.2	0.57	0.131	3.61	800	9
SW0758A	Below play area in Banfield Park	2021-04-27	227	0.304	0.882	18.7	< 0.01	0.0109	111	0.0211	51	1.32	0.337	4.25	1000	5
SW0767	South of Johnson St. bridge, Ocean Pt Resort	2021-04-01	< 60	0.52	1.43	34.4	< 0.2	< 0.2	2270	0.12	250	< 2	0.25	< 2	< 1	120
		2021-06-25	187	< 1	1.4	59.9	< 0.5	< 0.5	4010	< 0.25	347	< 5	< 0.5	6	< 1	5
SW0769	Foot of Cooperidge Place	2021-06-25	156	0.83	1.39	9.41	< 0.05	< 0.05	804	0.091	71.8	0.58	0.17	6.73	520	40
SW0777A	Foot of Barnard Ave	2022-03-04	153	0.431	0.871	19.2	< 0.01	0.0698	72	0.0152	48.3	0.41	0.234	7.2	25000	65
SW0779	531 West Bay Terrace, West Bay	2022-02-07	5930	0.227	2.21	69.4	0.205	0.196	49	0.161	29	8.68	3.64	33.1	50000	9
		2022-02-16	55.6	0.165	0.454	13.2	< 0.01	< 0.005	103	0.0128	59.2	0.3	0.206	1.8	4000	2
SW0780	Below 537 Head St, West Bay	2021-04-01	67.9	0.992	0.537	10	< 0.01	0.018	50	0.0108	40.7	0.59	0.16	3.49	800	35
		2022-02-07	28.6	0.854	0.76	12.5	< 0.01	< 0.005	48	0.0123	45.3	0.49	0.128	3.3	19000	6
SW0781	503 Head St, West Bay	2021-04-01	103	0.174	0.416	11.5	< 0.01	< 0.01	24	0.01	23.2	0.72	0.11	2.7	280	300
		2021-08-25	108	0.134	0.307	6.23	< 0.01	< 0.01	14	0.0145	8.18	0.5	0.147	4.7		500
		2022-02-07	57.7	0.248	0.423	15	< 0.01	< 0.005	50	0.0118	40.1	0.32	0.12	3.39	460	50
SW0805	Kinver St beach access	2021-08-25	235	0.247	0.534	9.4	< 0.01	0.244	34	0.0222	15.1	0.47	0.293	15	140000	
		2022-01-28	130	0.303	0.474	10.2	< 0.01	0.191	58	0.0171	26.1	0.99	0.205	9.71	120000	200
SW0806	10 m west of Kinver St beach access	2021-04-01	194	0.276	0.723	22.2	< 0.01	< 0.01	47	0.0174	36.4	0.47	0.184	3.55	1300	40
		2021-08-25	757	0.285	1.7	18.2	0.012	0.133	51	0.0615	27.6	1.43	0.636	15.3	120000	
		2022-01-28	126	0.283	0.604	20.7	< 0.01	< 0.005	55	0.0188	38.3	0.33	0.189	3.51	200	35
SW0814	Crack in rocks at foot of Grafton St.	2022-02-16	411	0.274	0.785	13.2	< 0.01	0.0568	34	0.017	24	0.85	0.345	5.25	1000	< 1
SW0854	Foot of Gate Rd off Admirals Rd	2021-03-31	213	0.256	0.634	13.7	< 0.01	0.057	44	0.0188	40.6	0.84	0.222	8.24	3000	60
		2021-06-25	65.4	0.429	3.33	38.5	< 0.01	0.045	134	0.03	56.6	2.1	0.199	8.73	1300	25
		2022-03-23	732	0.461	0.75	15.5	< 0.01	0.016	60	0.0178	36.7	1.75	1.65	12	800	60
		2022-07-14	62.6	0.635	2.03	33.2	< 0.01	< 0.005	131	0.0226	63.5	0.46	0.406	7.99	44000	9
SW0866	Portage Park, west of rocks	2021-03-31	97.8	0.141	0.205	12.7	< 0.01	< 0.01	28	0.0075	38.3	0.2	0.243	1.77	3	35
SW0874	Foot of Heddle Ave, Tovey Bay	2021-03-31	555	0.178	0.427	18	0.011	< 0.01	19	0.0228	27.5	0.93	0.381	5.22	100	7
SW0879	Creek on west side of Price Rd.	2021-06-04	35.1	0.081	0.414	4.94	< 0.01	< 0.005	13	< 0.005	31.2	0.14	0.0882	1.28	3	40
SW0882	North bank, east side of Parsons Bridge	2021-05-07	42	0.234	0.225	13.1	< 0.01	< 0.01	40	0.0146	65.3	0.53	0.115	2.68	< 1	30
		2021-08-12	19.4	0.141	0.259	8.74	< 0.01	< 0.005	40	0.007	52.8	0.17	0.0601	1.75	22	20
SW0934	Across from 3330 Ocean Blvd.	2021-04-27	1930	0.084	0.672	12.9	0.031	< 0.01	36	0.0233	37.6	3.64	1.41	8.91	1	10
		2021-08-06	57.5	0.036	0.213	5.07	< 0.01	< 0.01	41	0.0141	36.4	0.56	0.091	1.72	130	10

Table 5, Continued

			Hardness (CaCO ₃)	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silicon	Silver
			mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
BC Marine Aquatic Life Guidelines		max	-	-	140	-	-	-	-	-	-	-	-	-	3
		average	-	-	2	-	-	-	0.02 ³	-	-	-	-	-	1.5
BC Freshwater Aquatic Life Guidelines		max	-	1000	81.6	-	-	-	-	-	-	-	-	-	0.1
		average	-	-	6.5	-	-	-	0.02 ³	-	-	-	-	-	0.05
Station ID		Sample Date													
SW0209	Foot of San Jose Street	2022-01-26	220	141	0.32	2.13	17.8	20.3		2.06	1.66	2.36	0.245	7860	< 0.005
SW0210	Foot of Lewis Street	2021-03-17	247	14.7	0.0288	3.26	16.3	0.777		1.8	0.835	1.44	0.293	8510	< 0.005
		2021-06-21	267	8.1	0.0297	3.07	13.8	0.685		1.67	0.954	1.83	0.285	6770	< 0.005
		2022-01-26	253	10.6	0.0131	2.57	16.2	1.19		1.45	1.07	1.44	0.249	7720	< 0.005
SW0211	≈ 270m east of Finlayson Point	2022-01-27	142	168	0.207	2.02	10.3	1.4		0.714	0.843	0.812	0.261	9060	< 0.005
SW0212	Foot of Cook Street, beach access	2021-03-29	81	174	0.369	0.9	6.49	12.7		0.387	0.92	1.02	0.097	6290	< 0.01
		2021-06-21	171	144	0.412	2.26	13.4	12.5		1.51	1.07	1.57	0.165	8260	< 0.01
		2022-01-26	91	139	0.172	0.87	7.26	10.1		0.454	1.32	0.863	0.13	7130	0.0067
SW0214	Clover Point	2022-01-26	140	50.1	0.126	1.44	11.2	4.98		0.659	0.899	1.68	0.233	8810	< 0.005
SW0216	Foot of Eberts Street	2021-03-29	169	200	0.356	2.37	11.6	22.9		2.7	2.41	3.02	0.259	6920	< 0.01
		2021-06-21	133	190	0.366	2.62	11.6	27.2		3.23	2.23	5.54	0.312	6910	< 0.01
		2022-01-26	179	784	3.98	2.49	13.6	83.9		2.23	2.98	2.88	0.349	8010	< 0.01
SW0216-3	MH#D3640 @ Cook St. & May St.	2021-03-30	196	6070	4.39	6.79	15.8	123		2.63	11	3.38	0.399	15300	0.055
SW0218	Foot of Memorial Crescent	2021-03-30	235	7640	31.9	5.61	21.5	199		1.61	9.46	2.89	0.324	15900	0.11
		2021-06-21	741	2860	3.45	16.3	115	165		2.95	3.65	33.6	0.212	15300	0.023
		2022-01-27	262	2330	11.9	4.09	25.7	61.5		1.47	4.12	6.14	0.296	11900	0.071
SW0222	Middle of Ross Bay Cemetery	2021-06-21	163	984	2.17	2.53	13.7	116		1.31	2.19	3.53	0.277	8680	0.019
		2022-01-27	191	119	0.216	1.85	12.6	22.6		2.99	2.19	2.63	0.253	8770	< 0.01
SW0227	Foot of Wildwood Crescent	2022-01-27	110	212	0.646	0.52	8.5	7.56		0.484	1.49	1.12	0.078	7300	0.0053
SW0228	Robertson Rd, Gonzales Bay	2022-02-24	90.4	361	0.541	0.95	6.52	72.2		0.476	1.53	2.24	0.064	5730	0.015
SW0228A	Robertson Street, west Gonzales Bay	2022-02-24	14.1	30.7	0.111	< 0.5	0.745	1.59		0.22	0.567	0.912	0.088	416	0.0126
SW0229	Foot of Ross St, Gonzales Bay	2022-01-27	160	77.1	0.337	2.73	13.9	4.82		1.76	1.97	1.9	0.242	8920	0.0088
SW0230	Foot of Foul Bay Rd, Gonzales Bay	2022-01-28	154	77	0.244	1.69	10.3	12.3		0.552	1.08	0.942	0.164	7390	0.0116
SW0231	Foot of Marne St, Gonzales Bay	2022-01-28	97.6	47.2	0.126	< 0.5	5.14	3.63		0.581	0.57	1.13	0.115	4370	< 0.005
SW0236	Foot of Crescent Rd, Harling Pt.	2022-01-28	182	35.4	0.172	2.12	18.2	9.39		3.4	4.03	1.82	0.253	8310	< 0.005
SW0237	Harling Pt.	2022-01-28	154	114	0.143	2.24	12.7	3.93		0.872	1.92	1.11	0.139	6940	< 0.005
SW0244	Across from 242 Beach Drive, McNeil Bay	2022-02-24	93.9	89.7	0.572	0.73	5.73	9.44		0.469	0.77	1	0.129	4540	< 0.01
		2022-07-04	166	49.7	0.178	1.6	10.8	14.6		0.977	1.11	1.36	0.176	8230	0.0051
SW0245	Foot of Monterey Ave, McNeill Bay	2021-03-29	145	286	0.372	1.3	12.1	13.5		1.42	1.63	1.83	0.176	7980	0.0051
		2022-01-27	148	413	0.243	0.9	12.8	26.7		0.977	1.41	1.72	0.16	8080	< 0.005
		2022-07-04	173	330	0.38	1.77	14	17.6		1.83	1.88	2.36	0.19	8700	0.0132
SW0249	Foot of Oliver, McNeill Bay	2022-01-27	210	203	0.427	2.04	20.6	12.3		2.56	2.37	2.98	0.161	8630	0.016
		2022-07-05	182	264	0.569	3.12	17.6	5.49		2.22	2.28	3.11	0.182	10200	0.0112
SW0250	Foot of St. Patrick, McNeill Bay	2021-03-29	210	369	0.573	3.09	23.3	7.34	0.0039	2.04	2.15	4.88	0.231	8040	< 0.01
		2021-09-16	4820	257	0.39	121	970	34.2		9.7	1.9	314	< 2	< 2500	< 0.25
		2022-01-27	2900	201	0.32	67	575	4.9		6.5	1.44	175	< 0.8	4160	< 0.1
		2022-07-05	3720	236	0.38	100	745	40.2		6.9	0.55	228	< 0.8	3440	< 0.1
SW0257A	Foot of Radcliffe Lane	2022-02-24	19.2	53.9	0.0523	< 0.5	1.25	3.96		0.089	0.257	0.28	< 0.04	2400	< 0.005
		2022-07-05	52.1	51	0.251	4	7.37	2.3		1.3	0.645	6.76	0.195	4160	0.059
SW0304	End of Satellite Street	2022-02-24	70.1	189	0.559	1.25	3.3	41.9		0.52	1.07	4.43	0.102	2470	< 0.01
SW0306	South side of Oak Bay Marina	2021-03-29	245	261	0.314	4.25	29.7	34.1	0.0113	2.68	2.14	10.4	0.275	7870	< 0.01
		2021-08-25	1150	153	0.32	30.4	207	12.2		5	3.35	69.8	0.32	8690	< 0.05
SW0307	Oak Bay Marina	2021-03-29	121	557	0.52	2.46	12.8	49.9	< 0.0019	0.272	1.26	1.86	0.067	5920	< 0.005
		2021-06-22	67	741	3.33	1.91	6.67	74		0.284	1.62	1.77	0.047	5770	< 0.01
		2022-02-01	178	205	0.291	2.95	17.9	26.6		0.314	1.1	1.68	0.105	7610	< 0.005
		2022-07-05	88.7	415	0.349	2.05	9.27	32.5		0.271	0.908	3.23	0.081	5110	0.0093
SW0309	End of Windsor Road	2022-02-01	76.9	71.3	0.116	1.18	7.71	33.9		0.619	0.416	1.73	0.06	4140	< 0.005
		2022-07-05	51	56	0.381	0.56	4.43	8.85		0.478	0.281	0.846	0.084	3170	0.0051
SW0310	End of Windsor Road	2022-02-01	171	802	0.631	1.56	14.8	13.7		1.07	2.84	1.53	0.177	9260	< 0.01

Table 5, Continued

			Hardness (CaCO ₃)	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silicon	Silver
			mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
BC Marine Aquatic Life Guidelines		max	-	-	140	-	-	-	-	-	-	-	-	-	3
		average	-	-	2	-	-	-	0.02 ³	-	-	-	-	-	1.5
BC Freshwater Aquatic Life Guidelines		max	-	1000	81.6	-	-	-	-	-	-	-	-	-	0.1
		average	-	-	6.5	-	-	-	0.02 ³	-	-	-	-	-	0.05
Station ID		Sample Date													
		2022-07-05	187	92.5	0.208	1.95	15.8	3.5		1.47	1.43	2.16	0.125	8970	< 0.005
SW0310A	Foot of stairs, north of Windsor Road	2022-02-24	282	30.3	0.119	1.48	27.4	23		1.17	1.22	1.75	0.255	7310	< 0.005
		2022-07-05	321	145	0.696	2.75	25.3	13.4		1.54	1.18	1.98	0.234	8950	0.0066
SW0316	South of Somass Drive	2022-02-24	118	212	0.563	1.41	9.41	21.5		1.07	1.02	1.88	0.109	5150	0.0063
		2022-07-06	146	256	0.611	2.44	11.5	31.8		3.8	1.35	1.85	0.101	8190	< 0.01
SW0317	End of Bowker Lane	2022-01-31	140	19.5	0.0683	< 0.5	8.17	0.62		0.647	1.17	2.33	0.13	8140	< 0.005
		2022-07-06	193	17.9	0.0598	< 0.5	10.9	0.351		0.874	1.02	3.62	0.134	9080	< 0.005
SW0318	End of Bowker Avenue	2022-01-31	69.7	101	0.147	0.54	5.84	3.97		0.495	0.798	0.964	0.098	5100	< 0.005
		2022-07-06	57.9	78.9	0.0945	0.55	4.31	7.62		0.424	0.633	1.17	0.078	4210	< 0.005
SW0320	End of Dalhousie Street	2022-01-31	261	1190	2.34	2.79	16.1	34.4		20.3	2.97	3.68	0.487	17400	0.0208
SW0321	End of Estevan Ave.	2022-02-02	83.1	172	0.501	1.45	6.28	6.25		0.626	1.03	1.05	0.089	6140	0.0061
		2022-07-06	129	78.9	0.405	1.32	10.1	2.98		0.742	0.787	1.28	0.066	9610	< 0.005
SW0321A	Foot of Estevan	2022-02-02	84.9	282	0.672	0.95	7.3	8.23		0.781	1.62	1.09	0.158	8050	0.0088
		2022-07-06	121	130	5.13	1.56	10.8	3.4		2.63	1.44	1.85	0.151	10500	< 0.005
SW0322	End of Thorpe Place beach access	2022-02-02	121	267	0.512	1.6	10.8	5.13		0.782	1.48	1.58	0.174	8800	< 0.005
		2022-07-06	160	103	0.294	2.22	12.9	2.65		1.63	1.31	1.67	0.177	11300	< 0.005
SW0323	North end of Esplanade	2022-02-01	121	258	0.215	0.8	10.4	31.4		0.31	1.47	1.66	0.222	9340	< 0.005
		2022-07-06	146	106	0.0987	1.02	12.7	12.6		0.436	0.671	1.09	0.18	10900	< 0.005
SW0323A	Stairs leading to Cattle Point	2022-02-02	35.2	278	0.205	< 0.5	3.46	19.2		0.1	2.45	1.08	0.116	5010	0.012
SW0503	Hobbs Creek, Cadboro Bay	2022-02-02	156	1830	5.33	2.33	16.5	108		0.599	2.71	4	0.188	9470	0.019
SW0505	Gyro Park east, Cadboro Bay	2021-06-14	214	191	0.301	2.45	26.4	53.9		0.854	0.749	6.54	0.269	9070	< 0.005
		2022-02-25	170	164	0.201	1.05	16.3	39.8		0.635	0.696	2.45	0.261	9570	< 0.005
SW0505-4	MH between 2608/2604 Penrhyn St.	2021-02-26	79.4	185	0.315	< 0.5	7.55	19		0.276	0.79	1.33	0.108	7190	< 0.01
SW0505-6	MH; corner of Cadboro Bay/Penrhyn Rd	2021-02-26	7.96	1090	3.83	0.64	0.51	21.3		1.1	1.75	0.78	0.056	1560	< 0.01
SW0505-7	MH at driveway of 3844 Hobbs Street	2021-02-26	81.7	157	0.11	< 0.5	7.65	17.9		0.233	0.8	1.36	0.116	7750	< 0.01
SW0506	Foot of Telegraph Bay Rd, Cadboro Bay	2022-02-02	129	369	0.204	1.07	11	102		0.834	1.95	1.51	0.176	7250	< 0.01
SW0507	Foot of Telegraph Bay Rd, Cadboro Bay	2022-02-02	149	330	1.37	1.48	15.8	11.7		0.42	2.59	1.05	0.373	9420	< 0.01
SW0508	Foot of Telegraph Bay Rd, diffuser	2022-02-02	92.6	52.7	0.105	< 0.5	8.02	6.18		0.204	0.605	0.907	0.096	7090	< 0.005
SW0513	Ten Mile Point, 2893 Sea View Rd	2022-03-01	93.1	13.6	0.0266	< 0.5	6.21	0.353		0.436	0.54	0.994	0.081	6020	< 0.005
SW0516	2977 Sea View Rd, Ten Mile Point	2022-02-02	98.8	248	0.0987	< 0.5	9.33	76.1		0.161	0.662	1.11	0.102	6800	< 0.005
SW0518	3895 Tudor Ave, Ten Mile Point	2022-02-02	111	46.1	0.0703	< 0.5	8.69	2.74		0.272	0.556	1.49	0.113	7460	< 0.005
SW0520	3905 Tudor Ave, Ten Mile Point	2022-02-25	136	21.8	0.042	< 0.5	8.98	2.18		0.476	0.496	2.29	0.192	5500	< 0.005
SW0522	Foot of McAnally, Smugglers Cove	2022-02-03	79.4	286	0.487	< 0.5	6.71	42.9		0.29	1.35	1.77	0.135	6020	< 0.01
SW0530	Phyllis/ Mt Bakerview Rd, Ten Mile Point	2022-03-01	71.9	50	0.022	< 0.5	7.8	0.66		0.08	0.3	1.05	0.098	6100	< 0.01
SW0540	4035 Larcono Lane, Finnerty Cove	2022-03-02	118	179	0.0923	0.58	9.23	23.2		0.268	0.652	1.7	0.185	8130	< 0.005
SW0550	Balmacarra Rd / Leynes beach access	2022-02-03	58.5	80.1	0.0636	< 0.5	5.28	11.3		0.177	0.464	1.09	0.11	4560	< 0.005
SW0554	W of Balmacarra Rd/Leynes beach access	2022-02-03	120	2180	1.1	0.9	12.3	448		0.133	1.52	1.68	0.054	13400	< 0.01
SW0557	East of Mt Douglas Park beach access	2022-02-03	96.4	91.8	0.198	0.89	7.41	2.25		0.28	1.06	0.85	0.09	6860	< 0.005
SW0558	East of Mt Douglas beach access	2022-02-03	89.3	162	0.16	1.14	7.89	10.8		0.456	1.69	1.58	0.104	6420	0.0155
SW0560	West of Mt Douglas Park beach access	2022-03-02	67	267	0.126	2.61	7.63	3.47		0.057	0.758	0.408	0.044	9310	< 0.005
SW0564	4649 Cordova Bay Rd	2022-02-10	90	267	0.157	< 0.5	5.79	18.8		0.289	2.32	0.86	0.137	6620	< 0.01
SW0567	South side of 4771 Timber Place	2022-02-10	157	6610	2.95	3.24	10.1	292		0.636	6.52	1.83	0.204	15900	0.039
SW0574	4915 Cordova Bay Rd	2022-02-10	120	245	0.047	< 0.5	8.16	72.1		0.223	0.603	0.987	0.111	7730	< 0.005
SW0576A	4989 Cordova Bay Rd, south of access	2022-02-10	142	186	0.17	1.78	11.9	13.5	< 0.0019	0.258	0.69	1.64	0.148	13400	< 0.01
SW0578	5091 Cordova Bay Rd	2022-02-25	140	341	0.047	1.08	12	48.7		0.272	0.425	1.63	0.129	11300	< 0.005
SW0580	20 m south of Agate Park	2022-02-10	86.6	123	0.0827	< 0.5	6.21	10.6	0.0023	0.25	0.63	1.84	0.09	8650	< 0.005
SW0589	Burnham Brook, south of Parker Park	2021-04-09	185	1280	0.427	1.53	15.5	390	< 0.0019	0.277	1.47	2.62	0.045	9690	< 0.01
SW0592	Noble Creek	2021-08-24	154	592	0.186	1.48	14.7	57.1	< 0.0019	0.815	1.38	5.16	0.096	8820	< 0.01
		2022-02-10	170	1540	0.686	2.09	15.2	148		1.14	3.13	4.71	0.193	10700	0.014
SW0603	20 m south of James Bay Anglers	2021-03-30	178	145	0.583	2.08	14.5	15.2		1.4	1.34	4.75	0.241	7300	0.021

Table 5, Continued

			Hardness (CaCO ₃)	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silicon	Silver
			mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
BC Marine Aquatic Life Guidelines		max	-	-	140	-	-	-	-	-	-	-	-	-	3
		average	-	-	2	-	-	-	0.02 ³	-	-	-	-	-	1.5
BC Freshwater Aquatic Life Guidelines		max	-	1000	81.6	-	-	-	-	-	-	-	-	-	0.1
		average	-	-	6.5	-	-	-	0.02 ³	-	-	-	-	-	0.05
Station ID		Sample Date													
		2021-08-20	114	268	2.18	1.74	8.66	54.1		2.5	2.4	5.21	0.308	6540	0.19
SW0613	Government St. and Belleville	2022-01-31	120	934	1.73	1.83	9.23	118		1.43	1.15	3.89	0.091	4450	< 0.01
SW0614	Humboldt/Wharf and Government	2021-04-30	206	271	1.82	2.49	21.8	9.27		2.74	2.38	6.44	0.258	5020	< 0.01
		2021-06-24	511	150	2.47	10.6	81.1	17.7		4.51	1.44	24.5	0.32	6600	< 0.05
		2022-01-31	135	275	1.07	2.16	14.3	10.6		1.22	1.08	4.33	0.121	3350	0.0074
SW0620	North side of Johnson St. Bridge	2021-03-17	188	473	1.05	7.9	14.6	134		2.66	2.1	6.31	0.35	5800	0.037
		2021-06-24	241	351	0.669	3.62	27.5	99.2		2.93	2	11.3	0.181	7060	0.026
		2022-07-15	162	932	0.505	2.43	18.4	84.9		1.68	1.01	6.43	0.12	5350	0.061
SW0626	Behind 2122 Government St, Rock Bay	2021-06-24	279	861	2.36	5.54	33.8	228		3.72	2.4	12	0.261	8360	0.011
SW0627	South side of Ocean Cement, Rock Bay	2021-06-24	207	515	0.884	4.03	23.5	162		1.21	1.92	6.4	0.153	7340	0.014
SW0629	East of foot of Bridge St, Rock Bay	2022-03-23	337	18200	178	9.85	16.7	715		7.26	57	10.5	1.34	20700	0.263
SW0629-2	MH D3017 at 540 John St; Boyd Auto Glass	2021-03-05	147	2890	5.81	1.96	11.2	321		1.84	5.84	1.66	0.103	7290	0.038
SW0629-8	MH D3033 Hillside/Rockbay Ave	2021-03-05	19.3	2370	133	2.35	1.5	56.2		10.4	18.5	3.45	0.079	3980	0.168
SW0630	Foot of Bridge St., Rock Bay	2022-03-22	172	18300	25.4	10.5	8.31	371		18.9	20	2.97	0.325	33800	0.087
SW0633	Under south side of Bay St. bridge	2021-08-17	141	13500	59.5	6.8	8.24	434		4.91	16.1	10.6	0.451	16200	0.117
		2022-03-23	215	3570	11	1.93	13.8	318		4.19	7.16	17	0.294	8260	0.054
SW0643	Foot of Washington Ave.	2022-03-03	203	183	0.135	1.7	16.8	13.6		0.695	1.41	1.54	0.099	8790	< 0.01
SW0645	Carrol St. easement	2022-03-03	135	171	0.32	1.21	10.8	12		0.583	0.91	1.36	0.084	7850	< 0.01
SW0645A	Prince Charles Appts/Gorge Rd	2022-03-03	306	52.1	0.0267	1.99	25.3	33.3		0.368	0.678	1.85	0.076	9100	< 0.005
SW0646	20 m east of large concrete outfall	2022-03-03	764	26.5	0.105	7.89	69.1	8.41		0.41	1.45	4.27	< 0.04	9300	< 0.01
SW0649	Gorge Rd. Hospital, head of channel	2021-01-22	221	310	0.667	2.58	19.9	93.2		0.896	1.63	5.83	0.14	7730	< 0.01
		2021-08-19	173	94.1	0.603	3.25	16.8	23.8		1.73	1.71	9.97	0.215	8910	0.0061
		2022-03-03	238	123	0.256	4.68	32.1	11.4		0.2	1.29	1	0.078	12700	< 0.005
SW0650	Harriet Road, east of "Outfall" sign	2022-03-03	368	442	0.698	1.78	20.4	17.8		5.43	0.97	4.48	3.21	7200	< 0.01
		2022-03-03	128	2430	4.39	2.03	10.4	76.7		1.77	3.14	1.74	0.208	10700	0.014
SW0653	Cedar Shore Appts tennis courts	2021-03-30	177	262	0.299	3.26	18.8	38.9		0.919	1.33	1.46	0.169	8700	< 0.005
		2021-08-19	407	713	0.503	9.5	66.4	149		0.82	0.434	19.8	0.095	7040	< 0.01
SW0654	North of Cedar Shore Appts	2021-03-30	289	34.3	0.038	4.86	32.1	26.4		0.321	1.17	0.768	0.064	10300	< 0.005
SW0692	End of Portage Rd.	2021-04-26	108	97.7	0.0716	0.81	7.66	57.1	0.0077	0.362	0.604	0.46	0.092	9240	< 0.005
		2021-09-15	149	304	0.279	0.92	9.9	184		0.978	0.992	0.741	0.139	10400	< 0.005
SW0710	15 m south of Helmcken Rd Bridge	2022-02-15	106	798	0.74	0.53	6.65	35.1	< 0.0019	0.27	1.3	0.84	0.158	6160	0.014
SW0712	West of 712A, east of E&N railway	2022-02-15	133	60	0.0498	0.83	9.52	12.5		0.405	2.44	1.13	0.158	8980	< 0.005
SW0722	Under center of Craigflower Bridge	2021-03-17	200	38.3	0.0426	1.13	13	26		1.7	0.599	1.66	0.168	8340	< 0.005
		2021-09-16	279	2870	1.86	5.06	13.8	98.8		2.95	4.72	6.42	0.302	12400	0.063
		2022-02-15	201	78.3	0.192	0.78	12.4	37.8	< 0.019	1.03	0.756	1.45	0.131	7920	< 0.005
SW0722AA	SW corner of Craigflower Bridge	2022-02-15	185	646	1.31	1.05	13	48.8		0.977	1.32	1.48	0.121	7910	< 0.01
SW0727	Foot of Aral Rd.	2022-02-15	207	26.7	0.0666	1.42	17.8	3.32		0.405	0.519	0.674	0.078	10700	< 0.005
SW0736A	14-915 Glenvale, man-made stream	2022-02-15	189	95.1	0.123	0.51	11.8	16	< 0.0019	0.697	0.62	1.38	0.209	7080	< 0.01
SW0737	Foot of Garthland Rd.	2021-03-17	276	60	0.0322	2.22	26.5	19.2	0.0066	2.1	0.668	1.92	0.359	9430	< 0.005
		2021-08-19	362	82.7	0.0705	4.75	39.6	19.3	< 0.019	3.96	0.349	7.07	0.751	10700	< 0.005
		2022-07-20	304	368	0.662	2.68	31.4	19.6	< 0.0019	2.88	1	3.68	0.639	9880	0.036
SW0742	Foot of Sioux Pl.	2021-03-17	135	1200	0.112	0.62	11.7	302		0.462	2.33	1.53	0.143	7410	< 0.01
		2021-08-05	303	1140	0.114	3.47	41.6	355		0.552	1.41	10	0.102	9140	< 0.01
		2022-02-17	136	859	0.107	0.73	12.3	279		0.291	1.39	1.61	0.086	7830	< 0.01
SW0742-2A	Craigflower Rd culvert at Gorge Vale Golf Course	2021-05-12	190	73	0.0648	1.23	12.1	29		0.566	1.03	1.23	0.089	8450	< 0.005
SW0742-2B	Craigflower Rd culvert at Gorge Vale Golf Course	2021-05-12	133	2050	0.18	< 0.5	11.3	282	0.0094	0.37	2.11	1.44	0.098	7770	< 0.01
		2021-08-05	172	80700	9.36	3.6	14.6	5710		0.82	17.7	1.9	0.42	22000	0.078
SW0742-2C	Craigflower and Shirley Rd, on golf course	2021-08-05	158	2540	0.537	< 0.5	14.1	1430	< 0.0019	0.669	2.86	1.92	0.146	9150	< 0.01
SW0742B	SW of Kinsmen Gorge Park parking area	2022-02-17	68.6	674	0.158	0.62	6.47	87.8		0.152	0.838	0.619	0.051	5070	0.0055
SW0744	Gorge-Esquamalt Park, Creek main flow	2021-03-17	145	482	0.3	1.63	13.4	133		0.458	1.45	1.31	0.097	8020	0.0072

Table 5, Continued

			Hardness (CaCO ₃)	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silicon	Silver
			mg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L
BC Marine Aquatic Life Guidelines		max	-	-	140	-	-	-	-	-	-	-	-	-	3
		average	-	-	2	-	-	-	0.02 ³	-	-	-	-	-	1.5
BC Freshwater Aquatic Life Guidelines		max	-	1000	81.6	-	-	-	-	-	-	-	-	-	0.1
		average	-	-	6.5	-	-	-	0.02 ³	-	-	-	-	-	0.05
Station ID		Sample Date													
		2021-08-05	142	712	0.683	1.73	13.5	162		1.25	2.45	2.57	0.137	7570	0.013
		2022-02-17	139	398	0.151	1.6	12.8	123		0.501	1.31	1.35	0.093	8570	< 0.005
SW0744A	Gorge-Esquimalt Park, E of nursery	2022-02-17	228	227	0.109	1.18	26.2	413		0.241	1.09	1.28	0.057	10100	< 0.01
SW0744B	Gorge-Esq. Park, across from 1034 Gosper Cres.	2022-01-28	223	350	0.213	2.87	24.4	305		1.37	1.6	2.02	0.126	9280	0.0061
		2022-02-17	231	418	0.237	3.83	26.3	300		1.24	1.74	3.46	0.146	10300	< 0.01
SW0749	South side of 306 Uganda	2022-03-04	172	101	0.151	3.48	19.8	20.7		1.18	1.43	2.17	0.185	8130	< 0.005
SW0758A	Below play area in Banfield Park	2021-04-27	253	434	0.591	4.47	30.5	133		1.47	3.52	7.37	0.145	9040	0.0092
SW0767	South of Johnson St. bridge, Ocean Pt Resort	2021-04-01	3150	193	< 0.4	84	613	98.9		6.8	< 2	193	< 0.8	3430	< 0.2
		2021-06-25	4840	1490	4.4	134	966	179		8.8	< 5	287	< 2	4570	< 0.5
SW0769	Foot of Cooperidge Place	2021-06-25	814	401	3.54	23.7	154	29.4		2.51	1.35	49.8	< 0.2	6700	< 0.05
SW0777A	Foot of Barnard Ave	2022-03-04	187	302	0.383	2.9	16.1	62.2		0.987	1.68	2.97	0.329	7880	0.0068
SW0779	531 West Bay Terrace, West Bay	2022-02-07	112	7350	11.5	4.47	9.61	236		0.335	9.8	3.37	0.185	11700	0.087
		2022-02-16	212	136	0.318	1.8	15.7	76.8		0.395	0.937	1.01	0.151	10000	< 0.005
SW0780	Below 537 Head St, West Bay	2021-04-01	133	110	0.309	0.64	7.65	9.17		1.51	0.59	1.51	0.152	6170	< 0.01
		2022-02-07	146	43.7	0.191	< 0.5	7.97	9.1		1.28	0.53	1.61	0.122	6670	< 0.005
SW0781	503 Head St, West Bay	2021-04-01	84	361	0.488	1.95	6.32	29.2		0.538	0.65	1.1	0.084	4020	< 0.01
		2021-08-25	29.8	442	0.526	< 0.5	2.27	33.9	0.0133	0.197	0.47	0.83	0.052	2540	< 0.01
		2022-02-07	149	419	0.143	0.99	11.8	85.9	0.0348	0.678	0.72	1.4	0.174	8230	< 0.005
SW0805	Kinver St beach access	2021-08-25	59.8	309	0.518	1.42	5.37	69.1	0.0134	0.755	1.09	3.77	0.139	5150	0.019
		2022-01-28	105	221	0.505	1.14	9.58	20.8	0.0025	4.32	1.05	2.98	0.323	6570	0.015
SW0806	10 m west of Kinver St beach access	2021-04-01	142	456	0.245	1.25	12.3	121	0.121	0.608	1.23	1.57	0.178	7210	< 0.01
		2021-08-25	113	903	0.864	2.31	10.6	212	0.25	0.845	2.95	7.21	0.307	8270	0.012
		2022-01-28	154	321	0.145	1.13	14	123	< 0.0019	0.602	1.25	1.97	0.159	6840	< 0.005
SW0814	Crack in rocks at foot of Grafton St.	2022-02-16	90.7	346	0.881	0.78	7.51	32.7		0.402	1.28	1.45	0.094	6930	0.0109
SW0854	Foot of Gate Rd off Admirals Rd	2021-03-31	137	334	0.6	1.23	8.74	47.7	0.0031	2.07	1.18	1.9	0.18	6990	0.031
		2021-06-25	247	973	0.368	3.38	25.7	330		2.72	1.22	7.76	0.147	7210	< 0.01
		2022-03-23	125	1240	1.37	1.08	8.08	61.5		1.36	4.51	1.57	0.131	7180	< 0.01
		2022-07-14	244	672	0.212	2.75	20.8	354		3.38	1.92	9.52	0.233	8730	0.006
SW0866	Portage Park, west of rocks	2021-03-31	131	226	0.127	< 0.5	8.72	86.7		0.367	1.09	1.01	0.079	5640	< 0.01
SW0874	Foot of Heddle Ave, Tovey Bay	2021-03-31	94.1	695	0.899	0.61	6.15	24.5		0.28	1.38	0.81	0.08	6110	0.043
SW0879	Creek on west side of Price Rd.	2021-06-04	100	192	0.044	< 0.5	5.43	41.4		0.286	0.486	0.298	0.107	5340	< 0.005
SW0882	North bank, east side of Parsons Bridge	2021-05-07	203	93.3	0.131	< 0.5	9.61	6.93		0.725	1.27	0.69	0.256	7800	< 0.01
		2021-08-12	165	34.5	0.0935	< 0.5	8.15	2.57	0.0021	0.467	0.386	0.747	0.142	8820	< 0.005
SW0934	Across from 3330 Ocean Blvd.	2021-04-27	141	2450	2.09	1.92	11.6	46.6	< 0.0019	0.347	3.57	1.03	0.205	14200	0.012
		2021-08-06	137	79.2	0.153	0.9	11.3	4.21		0.111	0.36	1.39	0.129	11400	< 0.01

Table 5, Continued

			Sodium	Strontium	Sulfur	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	Zirconium	Sample Comment
			mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
BC Marine Aquatic Life Guidelines		max	-	-	-	-	-	-	-	-	55	-	
		average	-	-	-	-	-	-	-	-	10	-	
BC Freshwater Aquatic Life Guidelines		max	-	-	-	-	-	-	-	-	40.5	-	
		average	-	-	-	-	-	-	-	-	15	-	
Station ID		Sample Date											
SW0209	Foot of San Jose Street	2022-01-26	55.6	260	15	0.0047	< 0.2	3.42	1.22	1.74	4.94	0.18	
SW0210	Foot of Lewis Street	2021-03-17	30.3	244	16.3	0.0031	< 0.2	< 0.5	1.76	0.98	2.29	< 0.1	
		2021-06-21	24.3	242	16.4	0.0028	< 0.2	< 0.5	2.05	0.96	6.46	< 0.1	
		2022-01-26	36.2	236	11.9	0.0056	< 0.2	0.53	1.36	0.92	2.18	< 0.1	
SW0211	≈ 270 m east of Finlayson Point	2022-01-27	26.4	125	6	0.003	0.89	7.06	0.541	2.1	0.66	0.37	
SW0212	Foot of Cook Street, beach access	2021-03-29	20.9	95.8	3.6	0.0027	< 0.2	6.9	0.22	1.16	2.3	0.41	no odour, clear, previous rain
		2021-06-21	36.9	182	12.7	0.0026	< 0.2	3.5	0.875	1	2.8	< 0.1	no odour, clear, no rain
		2022-01-26	28.6	109	4	0.0044	< 0.2	6.27	0.285	1.16	1.26	0.55	no odour, clear, no rain
SW0214	Clover Point	2022-01-26	28.3	172	8.4	0.0028	< 0.2	1.96	0.207	1.64	4.2	< 0.1	no odour, clear, no rain
SW0216	Foot of Eberts Street	2021-03-29	33.4	275	15.6	0.0032	< 0.2	5.7	0.754	1.96	8.1	0.23	no odour, clear, previous rain
		2021-06-21	46.2	232	12.9	0.0025	< 0.2	4.4	0.536	2.91	8.2	0.15	no odour, clear, no rain
		2022-01-26	41.3	255	15.7	0.0057	0.34	18.7	0.764	2.94	12.7	0.26	no odour, clear, no rain
SW0216-3	MH# D3640 @ Cook St. & May St.	2021-03-30	35.7	285	16.5	0.0247	0.33	154	0.818	12.4	34.7	0.65	no odour, clear, no rain
SW0218	Foot of Memorial Crescent	2021-03-30	84.1	298	20.7	0.0163	1.01	174	0.552	11.4	45.7	1.45	no odour, murky, no rain
		2021-06-21	844	995	92.4	0.009	< 0.4	168	1.17	5.5	25.2	5.07	no odour, clear, no rain
		2022-01-27	158	302	27.4	0.0066	0.21	50.3	0.433	4.47	8.6	0.42	no odour, clear, no rain
SW0222	Middle of Ross Bay Cemetery	2021-06-21	37.1	216	10.1	0.0055	0.21	22.4	0.328	3.01	22.4	0.25	no odour, clear, no rain
		2022-01-27	29.8	259	15.1	0.0028	< 0.2	3	0.963	1.54	4.4	0.2	no odour, clear, no rain
SW0227	Foot of Wildwood Crescent	2022-01-27	33.7	128	5.9	< 0.002	< 0.2	5.22	0.0753	1.37	3.31	0.19	no odour, clear, no rain
SW0228	Robertson Rd, Gonzales Bay	2022-02-24	13.8	139	< 3	0.0031	< 0.2	10.8	0.0852	1.78	5.4	0.12	no odour, clear, no rain
SW0228A	Robertson Street, west Gonzales Bay	2022-02-24	4.82	26.8	< 3	< 0.002	0.65	1.21	0.0129	0.33	10.9	< 0.1	no odour, clear, no rain
SW0229	Foot of Ross St, Gonzales Bay	2022-01-27	35.6	194	8.1	< 0.002	< 0.2	2.29	0.263	1.81	6.78	0.15	no odour, clear, no rain
SW0230	Foot of Foul Bay Rd, Gonzales Bay	2022-01-28	31.8	182	8.6	< 0.002	< 0.2	2.98	0.133	1.14	2.58	< 0.1	no odour, clear, no rain
SW0231	Foot of Marne St, Gonzales Bay	2022-01-28	38.6	134	4.4	0.0023	< 0.2	0.93	0.0259	0.78	3.24	0.12	no odour, clear, no rain
SW0236	Foot of Crescent Rd, Harling Pt.	2022-01-28	46.5	204	11.7	0.0021	< 0.2	1.28	0.271	1.68	9.02	< 0.1	no odour, clear, no rain
SW0237	Harling Pt.	2022-01-28	40.6	162	8.5	< 0.002	< 0.2	4.8	0.23	1.76	10.6	0.22	no odour, clear, no rain
SW0244	Across from 242 Beach Drive, McNeil Bay	2022-02-24	23.5	119	4.8	< 0.002	< 0.2	2.5	0.116	0.72	5	< 0.1	no odour, clear, no rain
		2022-07-04	28	189	8.5	< 0.002	< 0.2	2.05	0.29	1.28	8.71	0.12	no odour, clear, rain two days ago
SW0245	Foot of Monterey Ave, McNeill Bay	2021-03-29	26.7	202	7.6	0.0036	< 0.2	10.4	0.314	1.91	5.44	0.7	no odour, clear, previous rain
		2022-01-27	30.8	179	8	< 0.002	< 0.2	5.01	0.247	1.67	3.13	0.24	no odour, clear, no rain
		2022-07-04	34.4	212	8.8	0.0047	< 0.2	4.1	0.448	2.17	10.1	0.13	no odour, clear, rain two days ago
SW0249	Foot of Oliver, McNeill Bay	2022-01-27	58.1	243	10.4	< 0.002	< 0.2	6.5	0.786	2.13	6.5	0.28	no odour, clear, no rain
		2022-07-05	51.5	196	9.4	0.0034	< 0.2	11	0.545	3.24	7.04	0.31	no odour, clear, rain two days ago
SW0250	Foot of St. Patrick, McNeill Bay	2021-03-29	110	314	17.2	0.0031	< 0.2	11.2	0.906	2.28	7.6	0.46	no odour, clear, standing water, previous rain
		2021-09-16	8320	6210	724	< 0.1	< 10	< 25	2.71	< 10	18.6	< 5	no odour, clear, standing water, rain two days ago
		2022-01-27	4770	3930	423	< 0.04	< 4	< 10	1.95	< 4	4.6	< 2	no odour, clear, unknown flow, no rain
		2022-07-05	6160	5190	627	0.043	< 4	< 10	2.04	< 4	6.4	< 2	no odour, clear, pooled with unknown flow, rain two days ago
SW0257A	Foot of Radcliffe Lane	2022-02-24	5.86	19.3	< 3	< 0.002	< 0.2	0.8	0.0078	0.22	3.37	< 0.1	no odour, clear, no rain
		2022-07-05	137	71.7	13.3	0.0027	< 0.2	0.83	0.137	1.32	1.83	0.18	no odour, clear, rain two days ago
SW0304	End of Satellite Street	2022-02-24	28.1	87.8	4.6	0.0029	< 0.2	2.4	0.0405	1.26	55.2	< 0.1	no odour, clear, no rain
SW0306	South side of Oak Bay Marina	2021-03-29	207	612	25.2	0.0037	< 0.2	9.2	0.353	2.86	5.6	0.3	no odour, clear, previous rain
		2021-08-25	1800	1840	164	< 0.01	< 1	< 10	0.928	2.5	10.5	< 0.5	no odour, clear, some marine influence, no rain
SW0307	Oak Bay Marina	2021-03-29	34.2	140	3.3	< 0.002	< 0.2	6.89	0.132	1.09	6.01	0.17	slight sewer odour, clear, previous rain
		2021-06-22	19.4	70.6	< 3	0.0045	< 0.2	15.2	0.0499	1.98	11.6	0.12	no odour, clear, no rain
		2022-02-01	51.8	214	6.4	< 0.002	< 0.2	1.91	0.28	1.57	2.97	< 0.1	no odour, clear, rain yesterday
		2022-07-05	21.7	90.1	< 3	0.0043	< 0.2	2.48	0.0656	0.51	4.45	< 0.1	no odour, clear, rain two days ago
SW0309	End of Windsor Road	2022-02-01	27.7	119	5.3	< 0.002	< 0.2	1.29	0.215	0.58	0.66	< 0.1	no odour, clear, surge flow, rain yesterday
		2022-07-05	13.8	61.5	< 3	< 0.002	< 0.2	2.22	0.114	0.99	2.23	< 0.1	no odour, clear, rain two days ago
SW0310	End of Windsor Road	2022-02-01	31.3	227	10.9	0.0081	< 0.2	37.7	0.477	3.27	6.2	0.55	no odour, clear, rain yesterday
		2022-07-05	33.6	257	10.7	0.0025	< 0.2	4.85	0.415	2.14	5.45	0.14	no odour, clear, rain two days ago

Table 5, Continued

			Sodium	Strontium	Sulfur	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	Zirconium	Sample Comment
			mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
BC Marine Aquatic Life Guidelines		max	-	-	-	-	-	-	-	-	55	-	
		average	-	-	-	-	-	-	-	-	10	-	
BC Freshwater Aquatic Life Guidelines		max	-	-	-	-	-	-	-	-	40.5	-	
		average	-	-	-	-	-	-	-	-	15	-	
Station ID		Sample Date											
SW0310A	Foot of stairs, north of Windsor Road	2022-02-24	52.9	383	10.2	< 0.002	< 0.2	0.85	1.12	1.52	6.46	< 0.1	
		2022-07-05	60.5	622	17.3	0.0027	< 0.2	5.17	0.832	2.74	5.02	< 0.1	no odour, clear, rain two days ago
SW0316	South of Somass Drive	2022-02-24	88.8	147	5.1	0.0025	< 0.2	3.63	0.184	0.96	13.7	< 0.1	no odour, slightly murky, no rain
		2022-07-06	27.9	179	6.6	0.0026	1.83	7.7	0.24	1.72	8.1	< 0.1	no odour, clear, no rain prior
SW0317	End of Bowker Lane	2022-01-31	22.2	208	5.9	0.0026	< 0.2	0.81	0.0989	1.79	2.85	0.2	no odour, clear, suds in MH, rain
		2022-07-06	23.7	296	6.2	0.0062	< 0.2	< 0.5	0.244	2.59	1.85	0.14	no odour, clear, no rain prior
SW0318	End of Bowker Avenue	2022-01-31	15.3	91.5	3.3	< 0.002	< 0.2	4.51	0.128	1.02	6.61	0.14	no odour, murky grey, rain
		2022-07-06	8.37	70	< 3	0.0032	< 0.2	1.73	0.103	1.12	3.03	< 0.1	no odour, clear, no rain prior
SW0320	End of Dalhousie Street	2022-01-31	35.8	309	17.6	0.0259	1.47	99.5	0.646	7.26	23.7	3.79	no odour, murky grey, rain
SW0321	End of Estevan Ave.	2022-02-02	21	106	4.2	< 0.002	< 0.2	11.8	0.107	1.44	14.6	0.17	no odour, clear, rain yesterday
		2022-07-06	21.4	153	5.3	0.0023	< 0.2	3.12	0.128	1.87	8.22	< 0.1	no odour, clear, no rain prior
SW0321A	Foot of Estevan	2022-02-02	14.7	103	5.1	< 0.002	< 0.2	13.8	0.136	2.5	13.1	0.34	no odour, clear, rain yesterday
		2022-07-06	19	134	7	0.0041	< 0.2	5.58	0.196	3.06	15	0.17	no odour, clear, no rain prior
SW0322	End of Thorpe Place beach access	2022-02-02	17.7	153	6	0.0023	< 0.2	14.6	0.305	2.49	23.6	0.29	no odour, clear, rain yesterday
		2022-07-06	18.1	195	7.7	0.0038	< 0.2	4.82	0.41	3.16	11.2	0.14	no odour, clear, no rain prior
SW0323	North end of Esplanade	2022-02-01	16.1	133	5.4	< 0.002	< 0.2	9.39	0.149	1.56	6.13	0.22	no odour, clear, rain yesterday
		2022-07-06	16.5	141	6.9	< 0.002	< 0.2	1.57	0.176	1.22	3.28	< 0.1	no odour, clear, no rain prior
SW0323A	Stairs leading to Cattle Point	2022-02-02	8.6	47.1	< 3	< 0.002	< 0.2	5	0.025	0.91	27.6	0.56	no odour, murky brown, rain yesterday
SW0503	Hobbs Creek, Cadboro Bay	2022-02-02	75.4	176	6.8	0.0065	0.23	57	0.448	4.81	24.8	0.31	no odour, slightly brown, rain yesterday
SW0505	Gyro Park east, Cadboro Bay	2021-06-14	122	279	14.6	0.0025	< 0.2	5.03	0.963	2	3.78	< 0.1	no odour, clear, no rain
		2022-02-25	31	195	9	0.0033	< 0.2	2.45	0.776	1.6	3.07	< 0.1	no odour, clear, no rain
SW0505-4	MH between 2608/2604 Penrhyn St.	2021-02-26	13.2	93.9	< 3	< 0.002	< 0.2	5	0.0758	1.26	3.1	0.12	no odour, clear, rain yesterday
SW0505-6	MH; corner of Cadboro Bay/Penrhyn Rd	2021-02-26	45.8	12.4	< 3	0.0032	0.27	24.5	0.0159	2.62	43.4	0.48	no odour, clear, rain yesterday
SW0505-7	MH at driveway of 3844 Hobbs Street	2021-02-26	13.3	92.2	< 3	< 0.002	< 0.2	3.3	0.0653	1.18	2.2	0.13	no odour, clear, rain yesterday
SW0506	Foot of Telegraph Bay Rd, Cadboro Bay	2022-02-02	21.1	158	6.8	< 0.002	< 0.2	6.6	0.259	1.24	8.2	0.31	no odour, clear, rain yesterday
SW0507	Foot of Telegraph Bay Rd, Cadboro Bay	2022-02-02	24.9	183	6.8	< 0.002	< 0.2	11.8	0.075	1.94	7.2	0.1	no odour, clear, rain yesterday
SW0508	Foot of Telegraph Bay Rd, diffuser	2022-02-02	19.1	102	4.2	< 0.002	< 0.2	2.42	0.0597	0.87	12.7	< 0.1	no odour, clear, rain yesterday
SW0513	Ten Mile Point, 2893 Sea View Rd	2022-03-01	16.3	122	10.9	0.0025	< 0.2	0.5	0.161	1.06	9.28	0.19	no odour, clear, light rain previous
SW0516	2977 Sea View Rd, Ten Mile Point	2022-02-02	18.2	106	5.6	< 0.002	< 0.2	5.54	0.0192	0.91	3.06	< 0.1	no odour, clear, rain yesterday
SW0518	3895 Tudor Ave, Ten Mile Point	2022-02-02	19.6	125	6.1	< 0.002	< 0.2	2.87	0.0586	1.18	2.87	< 0.1	no odour, clear, rain yesterday
SW0520	3905 Tudor Ave, Ten Mile Point	2022-02-25	31.1	175	9.4	0.0032	< 0.2	0.59	0.0367	0.66	2.11	< 0.1	no odour, clear, no rain
SW0522	Foot of McAnally, Smugglers Cove	2022-02-03	30	106	6.4	< 0.002	< 0.2	4.5	0.0352	1.44	8.6	0.31	no odour, clear with iron oxide bacteria, rain yesterday
SW0530	Phyllis/ Mt Bakerview Rd, Ten Mile Point	2022-03-01	21.4	71.8	4.2	0.0027	< 0.2	< 2	0.0188	0.8	1.4	0.4	no odour, clear, light rain previous
SW0540	4035 Larcono Lane, Finnerty Cove	2022-03-02	14.6	118	4.5	< 0.002	< 0.2	1.91	0.172	1.17	2.73	0.11	no odour, clear, no rain in past two days
SW0550	Balmacarra Rd / Leynes beach access	2022-02-03	10.9	71.9	< 3	< 0.002	< 0.2	1.19	0.0222	0.49	1.7	0.12	no odour, clear, rain yesterday
SW0554	W of Balmacarra Rd/Leynes beach access	2022-02-03	19.2	136	5.1	0.0035	< 0.2	28	0.0651	5.27	10.7	0.17	no odour, clear, rain yesterday
SW0557	East of Mt Douglas Park beach access	2022-02-03	11.5	123	5	< 0.002	< 0.2	4.14	0.053	1.27	5.3	0.12	no odour, clear, rain yesterday
SW0558	East of Mt Douglas beach access	2022-02-03	12.4	113	3.2	< 0.002	< 0.2	6.86	0.105	1.62	7.47	0.33	no odour, clear, rain yesterday
SW0560	West of Mt Douglas Park beach access	2022-03-02	21.1	75	< 3	< 0.002	< 0.2	8.41	0.0116	1.22	2.16	0.11	no odour, clear, no rain in past two days
SW0564	4649 Cordova Bay Rd	2022-02-10	11.7	109	5.8	0.0029	< 0.2	8.7	0.0646	0.94	3.8	0.17	no odour, clear, no rain
SW0567	South side of 4771 Timber Place	2022-02-10	15.2	175	6.6	0.014	< 0.2	186	0.342	13.9	22.9	0.82	no odour, brown, no rain
SW0574	4915 Cordova Bay Rd	2022-02-10	15.8	138	6	< 0.002	< 0.2	0.92	0.0653	0.49	2.93	< 0.1	no odour, clear, no rain
SW0576A	4989 Cordova Bay Rd, south of access	2022-02-10	15.8	121	6.3	< 0.002	< 0.2	4.9	0.238	2.09	6	< 0.1	no odour, clear, no rain
SW0578	5091 Cordova Bay Rd	2022-02-25	14.1	130	6.5	< 0.002	< 0.2	0.85	0.228	1.54	1.54	< 0.1	no odour, clear, no rain
SW0580	20 m south of Agate Park	2022-02-10	16.1	111	4.6	< 0.002	< 0.2	1.34	0.0338	1.08	2.75	< 0.1	no odour, clear, no rain
SW0589	Burnham Brook, south of Parker Park	2021-04-09	17	197	4.6	0.0049	< 0.2	38.4	0.21	2.47	3.6	0.14	no odour, clear, previous rain
SW0592	Noble Creek	2021-08-24	17	148	6.5	0.0031	< 0.2	16.5	0.39	3.31	3.4	0.1	no odour, clear, no rain
		2022-02-10	17.8	168	11.8	0.0065	< 0.2	40	0.787	5.88	10	0.24	no odour, murky brown, no rain
SW0603	20 m south of James Bay Anglers	2021-03-30	34	230	7.9	0.0022	< 0.2	5.3	0.578	1.79	27.3	0.23	strong sewer odour with toilet paper, no rain
		2021-08-20	33.4	156	10.9	0.0039	0.32	7.1	0.461	2.97	21.2	0.28	no odour, clear, geese present, light rain previous

Table 5, Continued

			Sodium	Strontium	Sulfur	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	Zirconium	Sample Comment
			mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
BC Marine Aquatic Life Guidelines		max	-	-	-	-	-	-	-	-	55	-	
		average	-	-	-	-	-	-	-	-	10	-	
BC Freshwater Aquatic Life Guidelines		max	-	-	-	-	-	-	-	-	40.5	-	
		average	-	-	-	-	-	-	-	-	15	-	
Station ID		Sample Date											
SW0613	Government St. and Belleville	2022-01-31	42.8	176	5.4	0.0033	< 0.2	13.9	0.241	2	43	0.13	
SW0614	Humboldt/Wharf and Government	2021-04-30	128	286	16.9	0.0022	0.31	4.5	0.417	3.81	38.1	< 0.1	no odour, clear, light rain previous
		2021-06-24	580	691	65	< 0.01	2.6	< 10	0.648	3.5	30.7	< 0.5	no odour, clear, no rain
		2022-01-31	94.6	176	10.8	0.0032	0.26	12.6	0.205	2.25	41.5	0.14	low tide odour, murky, rain
SW0620	North side of Johnson St. Bridge	2021-03-17	85.7	389	11.3	0.0038	0.38	9.1	0.492	2.72	39.2	0.12	slight sewer odour, murky, no rain
		2021-06-24	145	355	21.3	0.0071	< 0.2	3.2	0.493	3.75	48.8	0.12	no odour, clear, no rain
		2022-07-15	102	219	11.5	0.0032	< 0.2	< 2	0.387	2.43	155	< 0.1	organic odour, brown, no rain prior
SW0626	Behind 2122 Government St, Rock Bay	2021-06-24	190	448	23.3	0.0047	0.38	6.6	0.812	3.93	22	0.23	no odour, clear, no rain
SW0627	South side of Ocean Cement, Rock Bay	2021-06-24	120	288	13.8	0.0035	< 0.2	7.8	0.326	1.71	42.6	0.14	no odour, clear, no rain
SW0629	East of foot of Bridge St, Rock Bay	2022-03-23	104	517	45.7	0.0938	5.74	669	0.591	36.8	1670	2.66	sewer odour, very turbid, rain
SW0629-2	MH D3017 @ 540 John St; Boyd Auto Glass	2021-03-05	37.3	207	4	0.0042	5.76	70.7	0.219	4.43	82.8	1.88	no odour, slight amber flow, no rain
SW0629-8	MH D3033 Hillside/Rockbay Ave	2021-03-05	22.7	21.5	< 3	0.0142	39.8	68.1	0.0297	3.53	442	6.2	no odour, clear, no rain
SW0630	Foot of Bridge St., Rock Bay	2022-03-22	24.6	195	< 6	0.038	2.78	568	0.586	47.7	180	1.19	no odour, turbid, rain
SW0633	Under south side of Bay St. Bridge	2021-08-17	39.5	156	11	0.022	2.54	271	0.434	28.9	268	1.35	sewer odour, very turbid, light rain
		2022-03-23	361	312	14.7	0.0069	0.93	90.7	0.887	8.54	122	1.19	strong sewer odour, sudsy, rain prior two days
SW0643	Foot of Washington Ave.	2022-03-03	106	250	5.4	0.0043	< 0.2	6.6	0.127	1.92	7.2	0.96	no odour, clear, no rain in past two days
SW0645	Carrol St. easement	2022-03-03	24.3	149	5.7	0.0028	< 0.2	7.5	0.118	1.5	7.3	0.14	no odour, murky, no rain in past two days
SW0645A	Prince Charles Appts/Gorge Rd	2022-03-03	43.5	301	6.4	< 0.002	< 0.2	0.68	0.215	1.36	2	< 0.1	no odour, clear, no rain in past two days
SW0646	20 m east of large concrete outfall	2022-03-03	244	1040	6.7	0.0034	< 0.2	< 2	0.23	0.41	14	< 0.1	no odour, clear, no rain in past two days
SW0649	Gorge Rd. Hospital, head of channel	2021-01-22	129	278	7.1	0.002	< 0.2	8.2	0.22	1.85	8.9	0.1	no odour, clear, no rain
		2021-08-19	37.1	193	7.7	0.0021	< 0.2	2.05	0.146	3.05	7.61	3.7	no odour, clear, light rain previous
		2022-03-03	34.2	189	3.4	< 0.002	< 0.2	2.3	0.155	1.04	9.76	< 0.1	no odour, clear, no rain in past two days
SW0650	Harriet Road, east of "Outfall" sign	2022-03-03	61.3	425	50.5	0.0043	< 0.2	16.7	1.18	2.81	5.5	0.13	no odour, clear, no rain in past two days, sampled during surge flow
		2022-03-03	20.4	141	6.9	0.0115	< 0.2	72.7	0.289	5.94	15.6	0.18	no odour, slight brown, no rain in past two days
SW0653	Cedar Shore Appts tennis courts	2021-03-30	30.2	171	7.3	0.0025	< 0.2	7.54	0.425	2.08	9.52	2.38	strong sewage odour, solid sewage, no rain
		2021-08-19	550	672	52.3	< 0.004	< 0.4	3.1	0.115	1.36	5.27	< 0.2	no odour, clear, light rain previous
SW0654	North of Cedar Shore Appts	2021-03-30	47.8	274	8.6	0.0034	< 0.2	0.84	0.469	1.86	4.34	< 0.1	no odour, clear, no rain
SW0692	End of Portage Rd.	2021-04-26	13.6	107	5.4	0.0021	< 0.2	0.8	0.0522	0.85	3.95	< 0.1	no odour, clear, rain previous
		2021-09-15	18.3	150	9.7	< 0.002	< 0.2	5.28	0.223	1.46	14.3	0.15	no odour, clear, no rain
SW0710	15 m south of Helmcken Rd Bridge	2022-02-15	21.9	105	4.3	0.0036	< 0.2	24.9	0.0615	2.4	6.1	0.17	no odour, clear, no rain
SW0712	West of 712A, east of E&N railway	2022-02-15	26	158	6.3	< 0.002	< 0.2	0.84	0.0401	0.6	6.03	0.13	no odour, clear, no rain
SW0722	Under center of Craigflower Bridge	2021-03-17	28.4	234	12	0.0031	< 0.2	0.86	1	0.98	3.58	< 0.1	no odour, clear, no rain
		2021-09-16	24.6	386	33.1	0.0215	2.79	160	3.48	8.28	88.5	1.47	no odour, murky grey, rain previous
		2022-02-15	29.7	219	11.1	0.0031	< 0.2	1.13	0.77	0.93	4.72	< 0.1	chemical odour, clear with some suds, surge flow, no rain
SW0722AA	SW corner of Craigflower Bridge	2022-02-15	29.9	202	13.2	0.004	0.24	16.6	0.684	2.14	14.8	< 0.1	no odour, clear, no rain
SW0727	Foot of Aral Rd.	2022-02-15	39.1	221	8.1	< 0.002	< 0.2	0.66	0.189	1.21	2.93	< 0.1	no odour, clear, no rain
SW0736A	14-915 Glenvale, man-made stream	2022-02-15	31.6	193	7.4	0.002	< 0.2	3.1	0.178	1.18	5.5	< 0.1	no odour, clear, no rain
SW0737	Foot of Garthland Rd.	2021-03-17	47.9	269	18.6	0.0029	< 0.2	0.66	0.792	1.45	3.69	< 0.1	no odour, clear, no rain
		2021-08-19	155	465	34.9	0.0035	< 0.2	< 0.5	1.39	2.34	5.16	0.16	no odour, turbid, light rain previous
		2022-07-20	55.2	266	28.1	0.0055	< 0.2	11.5	1.35	3.1	9.6	0.18	strong sewer odour from pipe, clear, no rain prior
SW0742	Foot of Sioux Pl.	2021-03-17	16.6	145	5.4	0.0021	< 0.2	6	0.139	1.01	3.6	0.39	no odour, clear with suds, no rain
		2021-08-05	263	397	22.7	0.0022	< 0.2	3.8	0.0966	0.83	4.1	0.17	no odour, clear, no rain
		2022-02-17	21.3	152	5.9	< 0.002	< 0.2	4.2	0.097	0.62	2.7	0.18	no odour, clear, no rain
SW0742-2A	Craigflower Rd culvert at Gorge Vale Golf Course	2021-05-12	11	165	8.3	< 0.002	< 0.2	1.98	0.165	1.03	2.5	< 0.1	no odour, clear, light rain
SW0742-2B	Craigflower Rd culvert at Gorge Vale Golf Course	2021-05-12	15.5	147	3.3	0.0023	< 0.2	7.7	0.0634	0.91	2.4	0.23	no odour, iron oxide bacteria, light rain
		2021-08-05	29.4	200	< 15	0.043	< 1	261	0.273	28.1	80.8	5.15	muddy, no rain
SW0742-2C	Craigflower and Shirley Rd, on golf course	2021-08-05	13.8	178	< 3	0.0042	< 0.2	21.5	0.106	2.02	6.3	0.34	no odour, clear, pooled water, no rain
SW0742B	SW of Kinsmen Gorge Park parking area	2022-02-17	13.2	76.1	< 3	< 0.002	< 0.2	7.56	0.0383	1.31	3.44	< 0.1	no odour, clear, unknown flow, no rain
SW0744	Gorge-Esquamalt Park, Creek main flow	2021-03-17	24.7	175	5.2	< 0.002	< 0.2	4.67	0.16	1.12	9.18	0.11	no odour, clear, no rain
		2021-08-05	30.9	172	4.3	0.0024	< 0.2	9.7	0.139	2.04	9.5	0.18	no odour, clear, no rain

Table 5, Continued

			Sodium	Strontium	Sulfur	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	Zirconium	Sample Comment
			mg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
BC Marine Aquatic Life Guidelines		max	-	-	-	-	-	-	-	-	55	-	
		average	-	-	-	-	-	-	-	-	10	-	
BC Freshwater Aquatic Life Guidelines		max	-	-	-	-	-	-	-	-	40.5	-	
		average	-	-	-	-	-	-	-	-	15	-	
Station ID		Sample Date											
		2022-02-17	25.8	163	4.8	< 0.002	< 0.2	2.05	0.138	0.88	11.8	0.11	
SW0744A	Gorge-Esquamalt Park, E of nursery	2022-02-17	40.4	275	3.7	0.0041	< 0.2	< 2	0.027	0.64	19.9	< 0.1	no odour, clear, no rain
SW0744B	Gorge-Esq. Park, across from 1034 Gosper Cres.	2022-01-28	42.8	267	8.2	< 0.002	< 0.2	4.92	0.323	1.9	7.02	< 0.1	sewer odour, murky, no rain
		2022-02-17	45.3	283	8.8	0.0028	< 0.2	5.6	0.396	2.05	9.9	0.59	sewer odour, murky grey, no rain
SW0749	South side of 306 Uganda	2022-03-04	62.5	182	9.1	< 0.002	< 0.2	4.57	0.16	3.18	4.25	0.25	no odour, clear, no rain
SW0758A	Below play area in Banfield Park	2021-04-27	158	321	16.2	0.0035	< 0.2	11.1	0.27	2.27	7.5	0.23	no odour, clear, rain previous
SW0767	South of Johnson St. bridge, Ocean Pt Resort	2021-04-01	5030	4460	501	< 0.04	< 4	< 40	1.94	< 4	< 20	< 2	no odour, clear, no rain
		2021-06-25	7640	6540	750	< 0.1	< 10	< 100	2.28	< 10	< 50	< 5	no odour, clear, no rain
SW0769	Foot of Cooperidge Place	2021-06-25	1240	1110	119	0.01	< 1	< 10	0.526	2.1	14.6	< 0.5	no odour, clear, no rain
SW0777A	Foot of Barnard Ave	2022-03-04	35.8	220	7.3	0.0025	< 0.2	6.8	0.324	1.76	7.92	0.2	sewer odour, murky, no rain
SW0779	531 West Bay Terrace, West Bay	2022-02-07	19.7	129	6.1	0.0278	0.24	190	0.369	18.1	91.5	0.44	perfume odour, brown, potential surge flow event, no rain
		2022-02-16	30	251	12.4	< 0.002	< 0.2	1.78	0.372	1.48	2.9	< 0.1	no odour, clear, no rain
SW0780	Below 537 Head St, West Bay	2021-04-01	26.3	172	7.9	< 0.002	< 0.2	2.5	0.518	1.92	8.2	0.1	no odour, clear, no rain
		2022-02-07	32	210	8	0.0022	< 0.2	0.88	0.415	1.55	8.2	0.12	no odour, clear, no rain
SW0781	503 Head St, West Bay	2021-04-01	44.3	120	7.9	< 0.002	< 0.2	4.7	0.16	1.24	11.2	< 0.1	no odour, clear, no rain
		2021-08-25	7.05	35	< 3	< 0.002	< 0.2	5.3	0.0317	0.61	13.5	< 0.1	sewer odour, silty, no rain
		2022-02-07	35.3	178	6.1	< 0.002	< 0.2	1.91	0.216	0.88	6.28	< 0.1	creosote odour, clear, no rain
SW0805	Kinver St beach access	2021-08-25	15.4	58.2	3.1	0.0029	0.25	15.3	0.0447	1.28	15	0.39	slight sewer odour, clear, no recent rain
		2022-01-28	28.1	113	6.6	0.0023	0.34	5.2	1.21	1.91	12	0.11	sewer odour, murky, no rain
SW0806	10 m west of Kinver St beach access	2021-04-01	26.4	170	6.4	< 0.002	< 0.2	8.8	0.166	1.31	9.3	0.12	sewer odour, clear, no rain
		2021-08-25	31.1	123	6.5	0.0068	0.35	37	0.111	3.85	29.5	3.04	slight sewer odour, clear, no recent rain
		2022-01-28	42.4	187	6.1	< 0.002	< 0.2	4.63	0.189	0.99	6.43	0.15	sewer odour, murky, no rain
SW0814	Crack in rocks at foot of Grafton St.	2022-02-16	27.2	106	5.9	0.0037	< 0.2	13.7	0.144	1.63	9.36	0.27	no odour, clear, no rain
SW0854	Foot of Gate Rd off Admirals Rd	2021-03-31	28.7	164	8.9	0.0025	< 0.2	8	0.375	1.78	17.9	0.28	sewer odour, turbid, paper in discharge
		2021-06-25	174	360	22.3	0.0033	0.34	2.9	0.243	2.35	16.1	0.1	sewer odour, murky with toilet paper, no rain
		2022-03-23	25.8	149	5.3	0.0035	0.23	27.9	0.248	3.06	24.1	0.59	sewer odour, murky grey, light rain previous two days
		2022-07-14	121	380	17.8	0.0045	< 0.2	2.56	0.871	2.06	11.7	< 0.1	slight organic odour, slight amber, no rain prior
SW0866	Portage Park, west of rocks	2021-03-31	19.8	152	5.9	< 0.002	< 0.2	3.5	0.0535	0.58	14.8	0.16	no odour, clear, no rain
SW0874	Foot of Heddle Ave, Tovey Bay	2021-03-31	28.8	104	6.7	0.0031	< 0.2	25	0.0233	2.06	23.2	< 0.1	no odour, clear, no rain
SW0879	Creek on west side of Price Rd.	2021-06-04	8.31	73.8	3.2	< 0.002	< 0.2	1.33	0.0229	0.34	3.28	< 0.1	no odour, clear, no rain
SW0882	North bank, east side of Parsons Bridge	2021-05-07	17.1	130	12	< 0.002	0.4	2.1	0.108	1.2	15.4	< 0.1	no odour, clear, very light rain last night
		2021-08-12	14.8	106	8.1	< 0.002	< 0.2	0.68	0.0559	1.65	6.84	< 0.1	no odour, clear, no rain
SW0934	Across from 3330 Ocean Blvd.	2021-04-27	15.6	101	4.9	0.0068	0.26	113	0.172	7.42	17.4	0.13	no odour, clear, light rain
		2021-08-06	14.8	93	5	< 0.002	< 0.2	2.4	0.0905	1.76	7	< 0.1	no odour, clear, no rain

Notes:
All metals are as total state.
British Columbia approved and working water quality guidelines for protection of freshwater or marine aquatic life were used for comparison.
Although aquatic life guidelines would not apply to stormdrains, as they are not viable habitat for aquatic life, these comparisons indicate potential impacts to the marine environment.
a hardness of 100 mg/L CaCO3 was used to calculate hardness dependant water quality parameters.

- 1 interim guideline
- 2 Cr(IV) / Cr (III)
- 3 guideline If methylmercury is 5% of the total mercury; methyl mercury was not measured in these samples.
background concentrations of mercury in Vancouver Island streams ranged from less than 0.001 to 0.046 mg/L in a 2014 study.

xx	value exceeds the provincial guideline for protection of freshwater aquatic life.
xx	value exceeds the provincial guideline for protection of marine aquatic life.
xx	value exceeds the provincial guideline for the marine <u>and</u> freshwater aquatic life.
xx	italicized value exceeds a guideline which is only partially applicable. Further investigation is needed.

Table 6, Continued

BC Guidelines	Freshwater	1-Methyl-naphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Acridine	Anthracene	Benzo(B)Fluoranthene + Benzo(J)Fluoranthene	Benzo(K)Fluoranthene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[ghi]perylene	Chrysene	dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-C,D)Pyrene	Naphtthalene	Phenanthrene	Pyrene	Quinoline	High Molecular Weight PAH's	Low Molecular Weight PAH's	Total PAH
	Marine	1	1	6						0.1	0.01				4	12		1	0.3	0.02 ¹				
Station	Sample Date			6							0.01		0.1			12		1						
SW0749	04/03/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0767	01/04/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
	25/06/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0777A	04/03/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0779	07/02/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	0.05	<0.02	<0.02	<0.05	<0.1	<0.1
	16/02/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0780	01/04/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
	07/02/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0781	01/04/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	0.028	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	0.11
	25/08/2021	<0.05	<0.1	0.06	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	0.058	<0.05	<0.05	<0.1	0.084	<0.02	0.035	0.058	0.26	0.32
	07/02/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	0.16	<0.02	<0.02	<0.05	<0.1	<0.1
SW0805	28/01/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0806	28/01/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0814	16/02/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0854	23/03/2022	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	0.0091	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	0.021	<0.02	<0.05	<0.1	<0.1
SW0874	31/03/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0882	07/05/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
	12/08/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
SW0934	27/04/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1
	06/08/2021	<0.05	<0.1	<0.05	<0.05	<0.05	<0.01	<0.03	<0.05	<0.01	<0.005	<0.05	<0.02	<0.003	<0.02	<0.05	<0.05	<0.1	<0.05	<0.02	<0.02	<0.05	<0.1	<0.1

Notes
Concentrations are in µg/L.
PAH = polycyclic aromatic hydrocarbons
HMW = High Molecular Weight, LMW = Low Molecular Weight
Guidelines are BC ENV for protection of aquatic life maximums. The freshwater guideline is a chronic guideline.
The guideline for methylated naphthalene was used for 1-methylnaphthalene and 2-methylnaphthalene.
¹ The guideline for pyrene is based on a phototoxic exposure.

XX means the value is above the BC water quality guideline for aquatic life.

APPENDIX F
WATERCOURSE MONITORING DATA

Table 1 Summary Table for 5 in 30 Water Quality Data Collected for Colquitz Creek and Colwood Creek

		Alkalinity	Aluminum		Antimony		Arsenic		Barium		Beryllium		Bismuth		Boron		Cadmium	
		mg/L	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
		TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute		100			20 ¹		5									0.32 - 1.23 ²	
	chronic		50	46-600						1,000 ¹		0.13 ¹					0.14 - 0.33 ²	
Colquitz Creek																		
SW0690D-2																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	51	4.11	55.1	0.152	0.122	0.624	0.555	9.07	8.6	0.01	0.01	0.005	0.01	29	27	0.005	0.0055
	Max	52	16	392	0.41	0.444	0.886	1.15	13.2	16.4	0.01	0.015	0.005	0.038	36	38	0.0083	0.0153
	Mean	52	11	250	0.26	0.303	0.733	0.83	11.1	13.9	0.01	0.011	0.005	0.0156	34	32	0.006	0.0101
	StdDev	1	5.3	167	0.10	0.140	0.119	0.22	1.7	3.1	0.00	0.002	0.00	0.01	3	5	0.001	0.0038
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	78	3.51	118	0.108	0.108	0.905	1.03	8.6	9.65	0.01	0.01	0.005	0.005	31	20	0.005	0.005
	Max	82	5.56	725	0.127	0.148	1.17	1.31	9.67	14.5	0.01	0.016	0.005	0.01	116	110	0.005	0.0123
	Mean	80	4.42	259	0.116	0.125	1.05	1.22	9.1	11.4	0.01	0.01	0.005	0.01	68	64	0.005	0.0070
	StdDev	2	0.9	262	0.007	0.018	0.11	0.11	0.4	1.9	0.00	0.00	0.00	0.00	38	39	0.000	0.0030
SW0690D-3																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	48	3.79	20.1	0.21	0.202	0.704	0.691	8.98	12	0.01	0.01	0.005	0.01	34	31	0.005	0.005
	Max	86	14.7	313	0.508	0.558	1.03	1.05	17.9	19.1	0.01	0.01	0.005	0.024	53	49	0.0083	0.0182
	Mean	67	10.65	128	0.3364	0.367	0.81	0.83	13.6	15.2	0.01	0.01	0.005	0.01	44	40	0.006	0.0094
	StdDev	27	4.9	120	0.118	0.152	0.13	0.13	3.2	3.1	0.00	0.00	0.00	0.01	8	7	0.002	0.0055
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	130	2.09	96.8	0.119	0.129	1.31	1.4	6.6	7.79	0.01	0.01	0.005	0.005	31	30	0.005	0.005
	Max	150	28.6	155	0.163	0.155	1.69	1.69	9.3	11.3	0.01	0.01	0.005	0.005	44	45	0.005	0.005
	Mean	140	7.71	117	0.1444	0.145	1.53	1.57	8.2	9.7	0.01	0.01	0.005	0.01	38	37	0.005	0.0050
	StdDev	10	11.7	23	0.016	0.011	0.14	0.12	1.1	1.5	0.00	0.00	0.00	0.00	5	6	0.000	0.0000
SW0690D-4																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	38	3.84	52.3	0.139	0.13	0.583	0.635	8.09	10.1	0.01	0.01	0.005	0.01	26	26	0.005	0.0052
	Max	38	17.8	431	0.309	0.35	0.781	0.978	11	13.5	0.01	0.011	0.005	0.01	34	34	0.0068	0.0155
	Mean	38	10.58	252	0.2068	0.227	0.66	0.79	9.6	12.4	0.01	0.01	0.005	0.01	30	29	0.006	0.0099
	StdDev	0	6.0	171	0.081	0.094	0.08	0.12	1.2	1.4	0.00	0.00	0.00	0.00	3	4	0.001	0.0044
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	74	4.18	123	0.082	0.089	0.876	0.991	9.17	11.1	0.01	0.01	0.005	0.005	25	20	0.005	0.005
	Max	79	36.7	334	0.097	0.108	1.09	1.23	10.3	12.1	0.013	0.012	0.005	0.01	31	33	0.005	0.006
	Mean	76	11.11	211	0.089	0.098	0.99	1.13	9.6	11.6	0.0106	0.01	0.005	0.01	29	28	0.005	0.0055
	StdDev	2	14.3	78	0.007	0.007	0.08	0.10	0.4	0.4	0.00	0.00	0.00	0.00	2	5	0.000	0.0005
SW0690D-5A																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	37	8.45	44.1	0.191	0.183	0.768	1.1	6.82	10.9	0.01	0.01	0.005	0.01	19	19	0.005	0.0055
	Max	60	36.4	2270	0.477	0.797	1.32	1.45	16.5	24.4	0.01	0.026	0.005	0.6	73	71	0.0113	0.0585
	Mean	49	26.03	581	0.2994	0.423	1.08	1.27	12.2	17.4	0.01	0.01	0.005	0.13	50	49	0.008	0.0204
	StdDev	16	13.0	951	0.118	0.247	0.20	0.15	4.7	4.9	0.00	0.01	0.00	0.26	21	20	0.003	0.0218
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	130	4.71	38	0.134	0.163	0.786	0.839	9.32	10.8	0.01	0.01	0.005	0.005	64	60	0.005	0.005
	Max	170	7.61	71.8	0.237	0.249	1.26	1.27	13.4	14.5	0.01	0.01	0.005	0.0057	85	80	0.0072	0.007
	Mean	152	6.47	55	0.2066	0.215	1.10	1.15	12.1	13.0	0.01	0.01	0.005	0.01	75	71	0.005	0.0058
	StdDev	15	1.1	15	0.043	0.033	0.19	0.18	1.7	1.4	0.00	0.00	0.00	0.00	8	8	0.001	0.0008
SW0690D-8																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	63	1.4	22.2	0.124	0.1	1	0.942	9.97	10.7	0.01	0.01	0.005	0.005	23	20	0.005	0.005
	Max	65	4.95	39.6	0.136	0.137	1.25	1.6	13.1	16.1	0.01	0.01	0.005	0.01	27	26	0.0085	0.005
	Mean	64	2.29	28.8	0.1288	0.122	1.09	1.30	12.2	13.9	0.01	0.01	0.005	0.01	25	24	0.006	0.0050
	StdDev	1	1.5	7	0.005	0.014	0.10	0.24	1.3	2.0	0.00	0.00	0.00	0.00	2	2	0.002	0.0000

Table 1, continued

		Alkalinity	Aluminum		Antimony		Arsenic		Barium		Beryllium		Bismuth		Boron		Cadmium	
		mg/L	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
		TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute		100			20 ¹		5									0.32 - 1.23 ²	
	chronic		50	46-600						1,000 ¹		0.13 ¹					0.14 - 0.33 ²	
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	59	3.18	24.5	0.081	0.083	1.11	1.13	12.1	12.8	0.01	0.01	0.005	0.005	21	22	0.005	0.005
	Max	64	10	103	0.096	0.102	1.16	1.39	13	14.9	0.01	0.01	0.005	0.01	27	25	0.005	0.005
	Mean	61	5.77	46	0.092	0.090	1.13	1.22	12.6	13.6	0.01	0.01	0.005	0.01	25	23	0.005	0.0050
	StdDev	2	2.7	32	0.007	0.007	0.02	0.10	0.3	0.9	0.00	0.00	0.00	0.00	2	1	0.000	0.0000
SW0690D-8A																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	48	1.83	45.2	0.164	0.141	0.328	0.354	6.17	9.46	0.01	0.01	0.005	0.005	17	16	0.005	0.005
	Max	51	21.2	5020	0.349	0.825	0.475	2.34	9.78	60.8	0.01	0.082	0.005	0.07	26	24	0.0062	0.0797
	Mean	50	10.97	1130	0.2692	0.363	0.41	0.84	8.1	20.3	0.01	0.02	0.005	0.02	23	22	0.005	0.0215
	StdDev	2	7.9	2178	0.084	0.271	0.07	0.85	1.4	22.7	0.00	0.03	0.00	0.03	4	3	0.001	0.0326
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	130	2.85	60.3	0.112	0.104	0.48	0.501	7.68	8.19	0.01	0.01	0.005	0.005	26	24	0.005	0.005
	Max	130	9.64	172	0.163	0.168	0.512	0.587	8.35	11.7	0.01	0.01	0.005	0.005	30	30	0.006	0.005
	Mean	130	4.36	110	0.1266	0.128	0.49	0.54	8.1	9.5	0.01	0.01	0.005	0.01	28	27	0.005	0.0050
	StdDev	0	3.0	40	0.021	0.025	0.01	0.03	0.3	1.4	0.00	0.00	0.00	0.00	1	3	0.000	0.0000
SW0690D-9																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	46	2.92	20.5	0.106	0.107	0.586	0.64	9.82	10.1	0.01	0.01	0.005	0.005	24	22	0.005	0.005
	Max	58	14.8	113	0.172	0.177	0.916	1.06	15.3	16.9	0.01	0.01	0.005	0.01	36	34	0.0051	0.0053
	Mean	52	6.92	50	0.1338	0.136	0.71	0.80	11.9	12.6	0.01	0.01	0.005	0.01	28	26	0.005	0.0051
	StdDev	8	5.0	37	0.029	0.028	0.14	0.17	2.1	2.8	0.00	0.00	0.00	0.00	5	5	0.000	0.0001
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	65	2.32	13.2	0.046	0.041	0.745	0.896	14.1	15.1	0.01	0.01	0.005	0.005	27	23	0.005	0.005
	Max	67	3.35	38.2	0.106	0.11	1.27	1.33	17.6	19.7	0.01	0.01	0.005	0.01	37	38	0.005	0.005
	Mean	66	2.85	20.1	0.0604	0.061	1.06	1.13	15.5	16.3	0.01	0.01	0.005	0.01	30	27	0.005	0.0050
	StdDev	1	0.4	10	0.026	0.028	0.19	0.16	1.3	1.9	0.00	0.00	0.00	0.00	4	6	0.000	0.0000
Colwood Creek																		
SW0916																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	33	3.62	19.2	0.107	0.102	0.231	0.252	4.08	5.65	0.01	0.01	0.005	0.005	21	19	0.005	0.005
	Max	67	30.3	789	0.313	0.833	0.547	0.599	8.06	13.3	0.01	0.011	0.005	0.042	27	27	0.0057	0.0119
	Mean	50	12.19	221	0.176	0.283	0.33	0.40	6.3	8.3	0.01	0.01	0.005	0.01	23	23	0.005	0.0065
	StdDev	24	10.5	326	0.085	0.312	0.13	0.16	1.7	3.2	0.00	0.00	0.00	0.02	3	3	0.000	0.0030
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	73	4.82	40.9	0.028	0.037	0.264	0.325	4.98	6	0.01	0.01	0.005	0.005	16	18	0.005	0.005
	Max	73	7.36	378	0.04	0.052	0.324	0.515	7.1	10.1	0.01	0.01	0.005	0.01	45	39	0.005	0.011
	Mean	73	6.59	155	0.036	0.042	0.30	0.38	6.0	7.4	0.01	0.01	0.005	0.01	26	23	0.005	0.0066
	StdDev	0	1.0	152	0.005	0.006	0.02	0.08	0.8	1.6	0.00	0.00	0.00	0.00	11	9	0.000	0.0026
SW0916-1A																		
fall	n	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Min	30	2.95	16.8	0.094	0.1	0.225	0.247	4.08	5.08	0.01	0.01	0.005	0.005	18	17	0.005	0.005
	Max	30	17.4	383	0.219	0.539	0.261	0.341	10.5	13.4	0.01	0.01	0.005	0.027	26	26	0.0097	0.0149
	Mean	30	9.14	118	0.15875	0.241	0.24	0.27	7.5	9.2	0.01	0.01	0.005	0.01	22	21	0.006	0.0075
	StdDev	na	6.0	177	0.063	0.204	0.02	0.04	2.7	3.4	0.00	0.00	0.00	0.01	3	4	0.002	0.0050
summer	dry																	
SW0916-1B																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	23	3.6	13.1	0.046	0.051	0.201	0.278	3.67	6.53	0.01	0.01	0.005	0.005	10	10	0.005	0.005
	Max	40	28.4	743	0.256	0.627	0.35	0.378	10.3	10.5	0.01	0.014	0.005	0.054	26	25	0.0107	0.021
	Mean	32	16.02	207	0.1422	0.258	0.27	0.32	7.2	9.4	0.01	0.01	0.005	0.02	20	19	0.007	0.0098
	StdDev	12	10.7	305	0.092	0.247	0.06	0.04	2.7	1.6	0.00	0.00	0.00	0.02	6	6	0.003	0.0067

Table 1, continued

		Alkalinity	Aluminum		Antimony		Arsenic		Barium		Beryllium		Bismuth		Boron		Cadmium	
		mg/L	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
		TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute		100			20 ¹		5									0.32 - 1.23 ²	
	chronic		50	46-600						1,000 ¹		0.13 ¹					0.14 - 0.33 ²	
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	60	1.59	19.5	0.052	0.058	0.185	0.285	7.9	8.46	0.01	0.01	0.005	0.005	27	30	0.005	0.005
	Max	64	3.23	24.3	0.063	0.068	0.301	0.359	8.78	10.3	0.01	0.01	0.005	0.005	35	40	0.005	0.005
	Mean	63	2.59	22.2	0.0568	0.064	0.23	0.32	8.3	9.1	0.01	0.01	0.005	0.01	32	33	0.005	0.0050
	StdDev	2	0.7	2	0.004	0.004	0.04	0.03	0.3	0.8	0.00	0.00	0.00	0.00	3	4	0.000	0.0000
SW0916-2																		
fall	n	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	66	0.87	3.45	0.027	0.022	0.243	0.188	10.1	8.61	0.01	0.01	0.005	0.005	19	13	0.005	0.005
	Max	66	4.88	7.1	0.037	0.032	0.356	0.363	13.8	13.6	0.01	0.01	0.005	0.01	35	21	0.005	0.005
	Mean	66	2.36	5.1	0.0314	0.028	0.28	0.28	11.6	11.5	0.01	0.01	0.005	0.01	23	19	0.005	0.0050
	StdDev	0	1.6	1	0.004	0.004	0.04	0.06	1.5	2.0	0.00	0.00	0.00	0.00	7	3	0.000	0.0000
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	60	0.7	6.03	0.026	0.032	0.255	0.304	10.9	12.3	0.01	0.01	0.005	0.005	17	18	0.005	0.005
	Max	61	2.17	15.6	0.036	0.04	0.314	0.339	13.8	14.4	0.01	0.01	0.005	0.005	24	27	0.005	0.005
	Mean	60	1.65	9.2	0.034	0.04	0.29	0.32	12.3	13.5	0.01	0.01	0.005	0.01	20	21	0.005	0.0050
	StdDev	0	0.6	3.8	0.004	0.00	0.02	0.01	1.1	1.0	0.00	0.00	0.00	0.00	3	4	0.000	0.0000

Table 1, continued

		Calcium		Chloride	Chromium		Cobalt		Conductivity	Copper		Oxygen	E. Coli	Flow Rate	Hardness (CaCO3)	Iron	
		mg/L		mg/L	µg/L		µg/L		µS/cm	µg/L		mg/L	CFU/100 mL	L/min	mg/L	µg/L	
		DIS	TOT	DIS	DIS	TOT	DIS	TOT	NoRs	DIS	TOT	DIS	TOT	NoRs	DIS	DIS	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute					1 / 8.9 ^{1,3}				0.9 - 39.6 ⁴		5 ⁵	400 ⁶			350	1,000
	chronic									0.2 - 6.8 ⁴		8 ⁵	200 ⁶				
Colquitz Creek																	
SW0690D-2																	
fall	n	5	5	2	5	5	5	5	5	5	5	5	4	5	5	5	5
	Min	16.6	17.6	16	0.1	0.3	0.0695	0.089	173.6	0.959	1.19	8.78	53	5000	59.2	75.2	222
	Max	28.6	28.9	18	0.32	1.13	0.132	0.417	333.9	5.78	7.45	12.47	4900	5000	104	141	816
	Mean	23.6	23.04	17	0.2	0.7	0.095	0.262	261.2	3.01	4.13	10.63	492	5000	85	113.6	539
	StdDev	4.71	4.06	1	0.1	0.4	0.026	0.147	63.5	1.87	2.50	1.62		0.00	17	27.5	280
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	24.2	23.4	21	0.1	0.16	0.0592	0.145	239.3	1.08	1.33	6.88	55	35	85.7	24.5	362
	Max	30.2	31.1	370	0.11	1.29	0.0835	0.57	1302	1.3	2.87	8.68	95	1000	195	94.3	1270
	Mean	27.2	26.4	171	0.1	0.5	0.0684	0.25	745	1.19	1.81	7.60	79	807	136	51.2	580
	StdDev	2.6	2.9	155	0.0	0.5	0.0094	0.18	518	0.09	0.62	0.78		432	50	26.8	388
SW0690D-3																	
fall	n	5	5	2	5	5	5	5	5	5	5	5	4	5	5	5	5
	Min	17	17.5	17	0.15	0.28	0.0733	0.085	188.9	1.68	1.65	7.07	46	500	63.5	60.7	122
	Max	35.6	34.2	29	0.48	0.87	0.141	0.369	400.7	5.31	6.53	9.43	3300	2000	132	198	546
	Mean	29.7	29.3	23	0.3	0.6	0.1120	0.21	316	3.07	3.94	8.46	306	1200	109	108.3	323
	StdDev	7.6	6.8	8	0.1	0.3	0.0293	0.12	88	1.54	2.01	0.92		570	27	60.6	184
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5
	Min	32.5	32.9	26	0.1	0.25	0.113	0.175	353.6	0.823	1.07	2.09	42	35	125	24	217
	Max	42.2	41.2	34	0.12	0.33	0.191	0.264	3007.1	1.1	1.43	3.5	320	40	163	185	302
	Mean	37.9	37.9	29.6	0.1	0.3	0.1628	0.24	912	0.93	1.18	2.58	108	38.75	145	62.9	269
	StdDev	3.9	3.3	3	0.0	0.0	0.0295	0.04	1172	0.11	0.15	0.60		3	15	68.5	35
SW0690D-4																	
fall	n	5	5	2	5	5	5	5	5	5	5	5	4	1	5	5	5
	Min	13.1	13.8	13	0.1	0.22	0.0669	0.098	141.1	0.886	1.18	8.37	74	5000	46	81.4	231
	Max	25.5	25.3	14	0.3	0.95	0.103	0.398	275.1	5.02	6.34	12.17	5200	5000	91.4	143	831
	Mean	20.1	20.6	13.5	0.2	0.6	0.0866	0.25	217	2.56	3.52	10.27	353		71	116.7	527
	StdDev	5.0	5.1	1	0.1	0.3	0.0160	0.13	65	1.74	2.18	1.70			18	23.3	257
summer	n	5	5	5	5	5	5	5	5	5	5	5	5		5	5	5
	Min	21.7	22.6	19	0.1	0.22	0.0485	0.159	207.8	0.852	1.24	5.02	40		77.1	40.7	380
	Max	24.8	24.6	21	0.12	0.57	0.094	0.285	242.1	1.07	1.85	7.43	510		89	224	645
	Mean	23.5	23.3	20	0.1	0.4	0.0719	0.22	226	0.94	1.53	6.31	148		83	87.7	493
	StdDev	1.2	0.8	1	0.0	0.1	0.0165	0.06	13	0.08	0.24	0.87			4	77.2	110
SW0690D-5A																	
fall	n	5	5	2	5	5	5	5	5	5	5	5	4	5	5	5	5
	Min	9.99	11.1	17	0.21	0.33	0.0842	0.241	167.5	2.26	3	7.74	340	300	34.4	98.7	241
	Max	56.4	59.6	25	0.55	5.2	0.245	1.93	528.9	10.3	17.1	10.52	5000	5000	199	234	3630
	Mean	33.8	35.0	21	0.4	1.6	0.1542	0.68	338	4.96	8.35	9.48	977	1540	119	142.7	1043
	StdDev	21.2	21.4	6	0.2	2.1	0.0629	0.70	169	3.17	5.97	1.26		1962	77	55.0	1453
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5
	Min	41.7	38.6	43	0.15	0.19	0.0962	0.229	410.2	3.15	3.62	5.02	120	30	154	32.7	185
	Max	55.9	58.7	58	0.3	0.42	0.279	0.386	560.7	5.34	6.27	8.27	480	40	205	61.6	340
	Mean	50.0	48.5	51.6	0.2	0.3	0.1850	0.30	467	4.05	4.78	6.68	272	36.25	182	42.6	257
	StdDev	5.8	7.4	6	0.1	0.1	0.0713	0.07	67	0.89	1.06	1.16		5	20	13.2	72
SW0690D-8																	
fall	n	5	5	2	5	5	5	5	5	5	5	5	4	5	5	5	5
	Min	18.5	16.4	15	0.1	0.1	0.0166	0.028	154	0.172	0.285	9.21	2	2000	63.7	4.8	91.3
	Max	19.7	20.8	16	0.1	0.17	0.0269	0.0597	183.8	0.368	0.39	12.32	16	5000	67.9	16.4	172
	Mean	19.2	18.8	15.5	0.1	0.1	0.0205	0.04	177	0.25	0.34	11.02	9	4200	66	9.2	121
	StdDev	0.5	1.6	1	0.0	0.0	0.0043	0.01	13	0.07	0.04	1.62		1304	2	4.8	38
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	18.4	17.2	15	0.1	0.1	0.0191	0.0403	162.9	0.113	0.26	5.57	4	75	64	17	138
	Max	19.4	19	15	0.1	0.16	0.0307	0.073	184.3	0.233	0.502	6.85	78	1500	66.4	63.7	258
	Mean	18.9	18.5	15	0.1	0.1	0.0242	0.05	179	0.18	0.37	6.17	11	1015	65	41.2	179
	StdDev	0.5	0.8	0	0.0	0.0	0.0046	0.01	9	0.04	0.09	0.55		582	1	22.9	47

Table 1, continued

		Calcium		Chloride	Chromium		Cobalt		Conductivity	Copper		Oxygen	E. Coli	Flow Rate	Hardness (CaCO3)	Iron	
		mg/L		mg/L	µg/L		µg/L		µS/cm	µg/L		mg/L	CFU/100 mL	L/min	mg/L	µg/L	
		DIS	TOT	DIS	DIS	TOT	DIS	TOT	NoRs	DIS	TOT	DIS	TOT	NoRs	DIS	DIS	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute					1 / 8.9 ^{1,3}				0.9 - 39.6 ⁴		5 ⁵	400 ⁶			350	1,000
	chronic									0.2 - 6.8 ⁴		8 ⁵	200 ⁶				
SW0690D-8A																	
fall	n	5	5	2	5	5	5	5	5	5	5	5	4	5	5	5	5
	Min	15.5	17.7	16	0.1	0.24	0.0612	0.089	163.4	1.28	1.54	7.38	37	60	56.2	20.5	128
	Max	42.4	44.2	21	0.41	8.47	0.0948	4.05	460.9	4.5	19.7	11.55	7000	2000	159	151	9300
	Mean	26.9	27.5	18.5	0.3	2.1	0.0766	0.95	310	3.02	6.72	10.38	636	568	98	88.1	2139
	StdDev	12.3	12.3	4	0.1	3.6	0.0128	1.74	131	1.37	7.46	1.75		813	47	56.6	4010
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min	43	39.9	46	0.1	0.15	0.0834	0.121	419.2	1.17	1.57	5.37	75	20	154	16.3	139
	Max	46.9	46.5	56	0.13	0.36	0.0966	0.224	454.3	1.52	2.54	5.87	1100	1000	169	46.7	466
	Mean	44.7	43.2	51.2	0.1	0.2	0.0871	0.16	434	1.33	1.81	5.67	386	216	163	28.1	276
	StdDev	1.5	2.4	4	0.0	0.1	0.0055	0.04	14	0.14	0.41	0.19		438	6	11.3	121
SW0690D-9																	
fall	n	5	5	2	5	5	5	5	5	5	5	5	4		5	5	5
	Min	16.6	16.8	18	0.1	0.1	0.0276	0.04	167.2	0.429	0.53	3.03	16		58.8	45	152
	Max	20.6	21.6	23	0.16	0.33	0.0839	0.137	211.4	1.61	1.94	7.51	410		72.4	194	472
	Mean	19.2	19.3	20.5	0.1	0.2	0.0443	0.07	188	0.79	0.98	5.52	101		67	106	261
	StdDev	1.6	1.7	4	0.0	0.1	0.0229	0.04	18	0.52	0.62	2.15			5	60.6	137
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	1	5	5	5
	Min	19.1	18.3	15	0.1	0.1	0.0657	0.0884	190.7	0.135	0.201	0.87	26	20	66.7	143	615
	Max	22.7	21.9	18	0.1	0.2	0.112	0.131	216.6	0.247	0.405	4.19	320	20	78.7	296	984
	Mean	20.3	20.1	16.2	0.1	0.1	0.0937	0.11	198	0.17	0.30	1.63	61	20	71	218	767
	StdDev	1.4	1.3	1	0.0	0.0	0.0196	0.02	11	0.04	0.09	1.43			5	56	139
Colwood Creek																	
SW0916																	
fall	n	5	5	2	5	5	5	5	5	5	5	5	4	5	5	5	5
	Min	14.1	14.5	14	0.14	0.25	0.0348	0.0473	120	1.07	1.33	8.86	23	200	48.5	54.2	139
	Max	30.9	32.2	30	1.86	3.73	0.105	0.624	297.4	3.5	7.52	12.62	5000	3000	111	169	1430
	Mean	22.0	22.6	22	0.7	1.3	0.0564	0.21	231	2.13	3.28	11.22	377	1340	77	94.4	503
	StdDev	6.5	6.7	11	0.7	1.4	0.0298	0.24	72	0.91	2.48	1.45		1038	24	45.4	533
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5
	Min	27.3	25.9	29	0.11	0.19	0.0348	0.107	178.5	0.373	0.624	5.96	26	75	97.5	70.3	358
	Max	29.9	30.1	140	0.23	0.96	0.0943	0.395	569.7	0.489	1.84	8.72	900	75	133	205	1150
	Mean	28.2	27.6	52	0.2	0.5	0.0732	0.20	297	0.44	1.02	7.51	103	75	106	168	602
	StdDev	1.0	1.6	49	0.1	0.3	0.0225	0.13	158	0.04	0.53	1.12		0	15	56	345
SW0916-1A																	
fall	n	4	4	1	4	4	4	4	3	4	4	3	3	5	4	4	4
	Min	11.2	11.9	12	0.1	0.23	0.0319	0.0464	128.3	1.12	1.46	9.12	42	0	39.2	44.2	142
	Max	24.8	26	12	2.11	3.38	0.0886	0.389	234.9	2.72	5.65	10.12	660	1500	84.9	90.8	799
	Mean	19.0	19.7	12	0.8	1.2	0.0471	0.14	188	1.97	3.01	9.46	153	756	66	71.2	318
	StdDev	5.8	5.8		0.9	1.5	0.0277	0.17	55	0.71	1.92	0.57		707	20	19.5	321
summer	dry																
SW0916-1B																	
fall	n	5	5	2	5	5	5	5	4	5	5	4	4		5	5	5
	Min	1.96	2.25	9.7	0.1	0.14	0.0374	0.063	102.1	0.707	0.89	7.32	65		6.24	55.9	315
	Max	26.5	27.5	17	1.4	3.22	0.116	0.685	241.8	7.42	12.8	8.67	7000		91.4	189	1240
	Mean	16.1	16.3	13.35	0.5	1.0	0.0658	0.24	184	3.43	5.32	8.11	1189		56	118	520
	StdDev	10.6	10.6	5	0.6	1.3	0.0325	0.26	63	3.01	5.35	0.57			37	49.5	403
summer	n	5	5	5	5	5	5	5	5	5	5	5	5		5	5	5
	Min	27.4	26.5	32	0.1	0.1	0.0276	0.0938	200.8	0.487	0.671	3.65	59		93.8	12.5	534
	Max	29.4	29.5	35	0.14	0.19	0.0937	0.13	297.3	0.584	0.834	4.61	400		98.4	215	844
	Mean	28.6	27.8	33.8	0.1	0.2	0.0759	0.11	270	0.55	0.76	4.19	123		96	110	679
	StdDev	0.8	1.1	1	0.0	0.0	0.0281	0.01	41	0.04	0.06	0.38			2	76	127

Table 1, continued

		Calcium		Chloride	Chromium		Cobalt		Conductivity	Copper		Oxygen	E. Coli	Flow Rate	Hardness (CaCO3)	Iron	
		mg/L		mg/L	µg/L		µg/L		µS/cm	µg/L		mg/L	CFU/100 mL	L/min	mg/L	µg/L	
		DIS	TOT	DIS	DIS	TOT	DIS	TOT	NoRs	DIS	TOT	DIS	TOT	NoRs	DIS	DIS	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute					1 / 8.9 ^{1,3}				0.9 - 39.6 ⁴		5 ⁵	400 ⁶			350	1,000
	chronic									0.2 - 6.8 ⁴		8 ⁵	200 ⁶				
SW0916-2																	
fall	n	5	5	2	5	5	5	5	4	5	5	4	4		5	5	5
	Min	21.8	17.2	16	0.1	0.1	0.0268	0.036	197.6	0.356	0.35	5.14	58		79.1	61	172
	Max	26.4	26.9	20	0.1	0.16	0.0544	0.0594	223.2	0.498	0.451	6.81	3700		90.7	467	693
	Mean	24.5	22.8	18	0.1	0.1	0.0415	0.04	215	0.42	0.41	6.15	326		86	286	419
	StdDev	1.8	3.6	3	0.0	0.0	0.0126	0.01	12	0.07	0.04	0.71			5	200	242
summer	n	5	5	5	5	5	5	5	5	5	5	5	5	1	5	5	5
	Min	20.9	20.5	16	0.1	0.1	0.0156	0.0455	191.3	0.231	0.374	0.04	17	1000	74.9	56.5	395
	Max	21.9	21.7	17	0.1	0.1	0.041	0.0747	206.2	0.426	0.608	2.8	460	1000	77.8	202	556
	Mean	21.5	21.1	16.6	0.1	0.1	0.0347	0.05	201	0.32	0.44	1.77	103		76	157	453
	StdDev	0.4	0.5	1	0.0	0.0	0.0109	0.01	6	0.07	0.10	1.06			1	59	61

Table 1, continued

		Lead		Lithium		Magnesium		Manganese		Mercury	Molybdenum		Nh3 (as N)	No2 (as N)	No3 (as N)	Nickel		O Carbon	Phosphorus
		µg/L		µg/L		mg/L		µg/L		µg/L	µg/L		mg/L	mg/L	mg/L	µg/L		mg/L	mg/L
		DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	TOT	DIS	TOT	TOT	DIS	DIS	DIS	DIS	TOT	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute		39-204 ²					1157-2799 ²					6.7-21 ⁷	0.06	32.8	25 -110 ^{1,2}			0.01 ⁸
	chronic		4.8-10.1 ²					851-1405 ²					1.04-1.9 ⁷	0.02	3				0.005 ⁸
Colquitz Creek																			
SW0690D-2																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.0285	0.146	0.5	0.5	4.29	4.94	13.1	30.3	0.0019	0.497	0.478	0.015	0.0039	0.176	0.605	0.73	7.5	0.0723
	Max	0.104	0.782	0.73	0.89	7.93	7.67	195	353	0.0023	1.03	0.953	0.16	0.0183	0.801	1.17	1.62	11	0.214
	Mean	0.074	0.48	0.6	0.7	6.23	6.07	60	118	0.0020	0.73	0.725	0.06	0.0102	0.3920	0.89	1.28	8.9	0.124
	StdDev	0.033	0.30	0.1	0.2	1.4	1.01	76	134	0.0002	0.20	0.176	0.06	0.0062	0.2462	0.23	0.38	1.3	0.062
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.0149	0.258	0.53	0.5	6.11	5.72	18.7	54.8	0.0019	0.553	0.478	0.018	0.003	0.135	0.595	0.771	5	0.097
	Max	0.0464	1.31	3.25	3.7	29.6	29	150	224	0.0019	0.761	0.701	0.049	0.007	0.254	0.781	1.56	10	0.14
	Mean	0.028	0.51	2.1	1.9	16.494	16.01	61	125		0.63	0.604	0.03	0.005	0.182	0.67	1.00	7.5	0.12
	StdDev	0.012	0.45	1.1	1.5	10.6	9.97	52	77		0.09	0.096	0.01	0.002	0.048	0.07	0.32	2.1	0.02
SW0690D-3																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.0292	0.07	0.93	0.93	5.14	5.56	3.6	27.4	0.0019	0.618	0.569	0.026	0.0108	0.427	1.05	1.07	9.3	0.0723
	Max	0.186	0.567	1.17	1.36	10.4	9.35	205	397	0.019	1.23	1.29	0.12	0.0288	0.577	1.33	1.55	14	0.214
	Mean	0.090	0.31	1.0	1.1	8.418	8.17	66	130	0.0053	0.87	0.861	0.07	0.0182	0.4694	1.14	1.38	11.1	0.124
	StdDev	0.063	0.22	0.1	0.2	2.0	1.51	80	154	0.0076	0.27	0.302	0.04	0.0076	0.0630	0.11	0.19	1.8	0.062
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.0083	0.118	1.05	0.96	10.6	10.9	181	245	0.0019	0.554	0.541	0.015	0.0031	0.0768	0.89	1.08	6	0.42
	Max	0.15	0.235	2.51	1.55	13.9	13.5	496	584	0.0019	0.765	0.765	0.034	0.005	0.231	1.52	1.73	12	0.51
	Mean	0.043	0.18	1.5	1.3	12.22	12.00	372	470		0.68	0.694	0.02	0.004	0.142	1.18	1.36	8.6	0.48
	StdDev	0.060	0.04	0.6	0.3	1.4	1.05	124	145		0.08	0.090	0.01	0.001	0.059	0.28	0.27	2.2	0.04
SW0690D-4																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.0241	0.088	0.5	0.5	3.21	3.67	20.2	33.4	0.0019	0.565	0.57	0.019	0.003	0.137	0.542	0.66	7.1	0.0565
	Max	0.102	0.666	0.5	0.72	6.74	6.76	89.7	208	0.0036	0.714	0.673	0.25	0.0128	0.85	1.07	1.38	9.7	0.13
	Mean	0.060	0.39	0.5	0.6	5.154	5.27	41	89	0.0022	0.63	0.621	0.07	0.0065	0.3474	0.73	1.10	8.1	0.088
	StdDev	0.030	0.27	0.0	0.1	1.4	1.29	28	69	0.0008	0.07	0.049	0.10	0.0047	0.2920	0.21	0.33	1.1	0.031
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.0194	0.216	0.5	0.5	5.53	5.33	13	59.7	0.0019	0.413	0.45	0.015	0.002	0.14	0.559	0.776	6.2	0.067
	Max	0.162	0.361	0.87	0.93	6.56	6.51	58.7	89.3	0.0019	0.526	0.525	0.024	0.0068	0.246	0.68	1.16	14	0.094
	Mean	0.050	0.28	0.6	0.6	6	6.10	44	77		0.48	0.478	0.02	0.0043	0.1786	0.60	0.97	8.4	0.08
	StdDev	0.062	0.06	0.2	0.2	0.4	0.45	19	13		0.04	0.029	0.00	0.0020	0.0413	0.05	0.15	3.2	0.01
SW0690D-5A																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.0221	0.083	0.5	0.9	2.29	3.42	10.9	73.5	0.0019	0.499	0.719	0.081	0.0113	0.258	0.657	1.53	4.9	0.343
	Max	0.302	5.41	1.79	1.85	14.6	15.1	64.4	230	0.019	1.34	1.38	0.14	0.0373	2.75	1.74	4.75	14	0.444
	Mean	0.152	1.40	1.2	1.4	8.37	8.74	39	117	0.0058	0.94	1.009	0.10	0.0239	1.1094	1.41	2.38	11.2	0.383
	StdDev	0.134	2.27	0.6	0.4	5.8	5.45	20	66	0.0074	0.32	0.244	0.02	0.0106	0.9989	0.45	1.35	3.7	0.043
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.0106	0.0986	1.79	1.65	12.1	11.3	41	97.3	0.0019	0.623	0.644	0.025	0.0047	0.465	0.772	0.988	5.3	0.16
	Max	0.0481	0.275	2.16	2.26	15.8	15.3	109	139	0.0019	1.13	1.12	0.14	0.0191	0.761	1.25	1.23	12	0.21
	Mean	0.022	0.16	2.0	1.9	13.82	13.32	77	121		0.98	0.962	0.06	0.0097	0.6160	0.99	1.09	7.9	0.19
	StdDev	0.016	0.07	0.2	0.3	1.4	1.50	31	17		0.21	0.190	0.05	0.0060	0.1247	0.17	0.10	2.9	0.02
SW0690D-8																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.005	0.089	0.5	0.5	4.26	3.6	0.276	27.4	0.0019	0.41	0.371	0.023	0.0029	0.0207	0.2	0.27	6.3	0.0269
	Max	0.0192	0.283	0.97	0.5	4.71	4.57	5.81	130	0.0019	0.452	0.51	0.083	0.0112	0.104	0.704	0.39	7.1	0.036
	Mean	0.009	0.16	0.6	0.5	4.408	4.31	2	72	0.0019	0.43	0.444	0.05	0.0070	0.0715	0.32	0.30	6.7	0.031
	StdDev	0.006	0.08	0.2	0.0	0.2	0.40	2	44	0.0000	0.02	0.052	0.03	0.0031	0.0316	0.21	0.05	0.4	0.004
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.0196	0.143	0.5	0.5	4.24	3.86	1.69	53.1	0.0019	0.339	0.312	0.034	0.0031	0.0699	0.196	0.242	6.9	0.014
	Max	0.0523	0.485	0.5	0.5	4.51	4.51	12.3	83	0.0019	0.413	0.386	0.055	0.015	0.132	0.244	0.33	13	0.043
	Mean	0.038	0.24	0.5	0.5	4.382	4.26	6	62		0.37	0.343	0.04	0.0073	0.0962	0.22	0.27	9.2	0.03
	StdDev	0.014	0.14	0.0	0.0	0.1	0.24	4	12		0.03	0.029	0.01	0.0056	0.0275	0.02	0.03	2.4	0.01

Table 1, continued

		Lead		Lithium		Magnesium		Manganese		Mercury	Molybdenum		Nh3 (as N)	No2 (as N)	No3 (as N)	Nickel		O Carbon	Phosphorus
		µg/L		µg/L		mg/L		µg/L		µg/L	µg/L		mg/L	mg/L	mg/L	µg/L		mg/L	mg/L
		DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	TOT	DIS	TOT	TOT	DIS	DIS	DIS	DIS	TOT	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute		39-204 ²					1157-2799 ²					6.7-21 ⁷	0.06	32.8	25 -110 ^{1,2}		DIS	0.01 ⁸
	chronic		4.8-10.1 ²					851-1405 ²					1.04-1.9 ⁷	0.02	3				0.005 ⁸
SW0690D-8A																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.0069	0.054	0.5	0.57	4.26	4.87	16.2	32.3	0.0019	0.96	0.941	0.015	0.002	0.12	0.562	0.8	5.1	0.0272
	Max	0.11	5.63	0.92	3.03	12.9	12.5	51.5	2600	0.0036	2.84	3.37	0.055	0.0076	0.709	0.884	7.91	9.6	0.414
	Mean	0.053	1.32	0.6	1.2	7.576	7.84	33	589	0.0024	1.85	1.954	0.03	0.0047	0.3146	0.73	2.39	6.3	0.133
	StdDev	0.045	2.42	0.2	1.0	4.0	3.50	15	1126	0.0008	0.73	0.909	0.02	0.0026	0.2282	0.12	3.09	1.9	0.188
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.005	0.0628	0.77	0.6	11.3	10.7	65.2	82.8	0.0019	2.13	2.13	0.015	0.002	0.0461	0.666	0.814	4.7	0.044
	Max	0.0084	0.205	0.97	1.03	13	12.4	76.1	156	0.0019	2.87	2.71	0.025	0.005	0.133	0.787	1.02	16	0.056
	Mean	0.007	0.13	0.9	0.8	12.36	11.60	68	109		2.56	2.460	0.02	0.0032	0.0963	0.74	0.89	8.3	0.05
	StdDev	0.002	0.06	0.1	0.2	0.6	0.78	4	30		0.27	0.211	0.00	0.0016	0.0336	0.05	0.08	4.7	0.00
SW0690D-9																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.0131	0.054	0.5	0.5	4.21	4.26	6.91	21.6	0.0019	0.42	0.41	0.024	0.0032	0.1	0.317	0.35	6.2	0.0396
	Max	0.0562	0.224	0.5	0.5	5.11	5.05	33.9	69.4	0.0019	0.548	0.61	0.082	0.0075	0.267	0.572	0.668	9.1	0.114
	Mean	0.032	0.12	0.5	0.5	4.694	4.72	19	38	0.0019	0.46	0.492	0.04	0.0052	0.1586	0.39	0.47	7.5	0.062
	StdDev	0.020	0.07	0.0	0.0	0.3	0.35	10	21	0.0000	0.05	0.079	0.03	0.0021	0.0711	0.11	0.13	1.4	0.035
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.0115	0.0434	0.5	0.5	4.61	4.11	153	161	0.0019	0.227	0.213	0.13	0.002	0.002	0.299	0.306	6.2	0.075
	Max	0.0155	0.095	0.5	0.5	5.31	5.26	389	427	0.0019	0.497	0.525	0.17	0.005	0.02	0.447	0.656	11	0.11
	Mean	0.014	0.06	0.5	0.5	4.882	4.60	317	346		0.33	0.332	0.15	0.0035	0.0100	0.35	0.42	8.0	0.09
	StdDev	0.001	0.02	0.0	0.0	0.3	0.41	101	113		0.13	0.132	0.02	0.0015	0.0093	0.06	0.14	2.3	0.02
Colwood Creek																			
SW0916																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.0171	0.052	0.5	0.5	3.2	3.33	6.13	16.2	0.0019	0.181	0.201	0.018	0.0086	0.562	0.257	0.35	3.3	0.0147
	Max	0.11	1.13	0.5	0.58	8.17	8.43	79.5	120	0.0029	0.684	0.843	0.15	0.0207	2.47	0.501	1.9	11	0.069
	Mean	0.046	0.34	0.5	0.5	5.316	5.47	27	57	0.0021	0.42	0.464	0.06	0.0126	1.0888	0.36	0.78	5.6	0.041
	StdDev	0.037	0.45	0.0	0.0	1.9	1.90	30	42	0.0004	0.22	0.267	0.06	0.0053	0.7842	0.11	0.64	3.1	0.025
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.0051	0.0755	0.5	0.5	6.92	6.32	6.27	183	0.0019	0.17	0.167	0.023	0.0025	1.1	0.193	0.261	1.7	0.027
	Max	0.0201	0.642	1.2	1.22	14.1	14	236	389	0.0019	0.294	0.287	0.037	0.0055	1.13	0.241	0.73	5.3	0.046
	Mean	0.013	0.26	0.6	0.6	8.636	8.30	155	231		0.21	0.204	0.03	0.0040	1.1180	0.22	0.41	2.7	0.03
	StdDev	0.006	0.24	0.3	0.3	3.1	3.21	87	89		0.05	0.048	0.01	0.0012	0.0110	0.02	0.21	1.5	0.01
SW0916-1A																			
fall	n	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Min	0.018	0.0519	0.5	0.5	2.74	2.76	3.93	10.2	0.0019	0.209	0.22	0.035	0.0085	0.478	0.244	0.31	2.7	0.0151
	Max	0.0902	0.722	0.5	0.5	5.57	5.88	35.7	51.3	0.0019	0.37	0.455	0.078	0.0153	0.842	0.479	1.15	4.5	0.0463
	Mean	0.042	0.25	0.5	0.5	4.51	4.60	18	31	0.0019	0.29	0.295	0.06	0.0126	0.6943	0.33	0.55	3.9	0.029
	StdDev	0.033	0.32	0.0	0.0	1.2	1.32	14	20	0.0000	0.08	0.110	0.02	0.0033	0.1610	0.10	0.40	0.8	0.013
summer	dry																		
SW0916-1B																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.0121	0.0441	0.5	0.5	0.327	0.66	15.6	41.5	0.0019	0.155	0.172	0.019	0.0038	0.121	0.31	0.348	2.2	0.0157
	Max	0.14	1.53	0.5	0.5	6.18	6.2	35.7	75.2	0.0025	0.506	0.542	0.3	0.0127	1.1	0.597	1.56	6.8	0.0996
	Mean	0.063	0.45	0.5	0.5	3.7994	3.84	29	56	0.0021	0.31	0.330	0.10	0.0075	0.5722	0.39	0.72	4.4	0.043
	StdDev	0.059	0.63	0.0	0.0	2.6	2.46	8	13	0.0003	0.14	0.145	0.12	0.0038	0.3774	0.12	0.51	1.6	0.038
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.005	0.0735	0.5	0.5	5.64	5.29	0.763	140	0.0019	0.198	0.183	0.026	0.0062	1.73	0.198	0.245	1.8	0.026
	Max	0.0164	0.111	0.5	0.5	6.17	6.04	206	225	0.0019	0.264	0.254	0.086	0.0121	1.91	0.263	0.296	4	0.033
	Mean	0.009	0.09	0.5	0.5	6.008	5.65	148	185		0.23	0.219	0.05	0.0085	1.8220	0.25	0.26	2.7	0.028
	StdDev	0.005	0.01	0.0	0.0	0.2	0.31	85	35		0.02	0.026	0.03	0.0023	0.0835	0.03	0.02	0.9	0.003

Table 1, continued

		Lead		Lithium		Magnesium		Manganese		Mercury	Molybdenum		Nh3 (as N)	No2 (as N)	No3 (as N)	Nickel		O Carbon	Phosphorus
		µg/L		µg/L		mg/L		µg/L		µg/L	µg/L		mg/L	mg/L	mg/L	µg/L		mg/L	mg/L
		DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	TOT	DIS	TOT	TOT	DIS	DIS	DIS	DIS	TOT	TOT
BC ENV Freshwater Aquatic Life Guidelines	acute		39-204 ²					1157-2799 ²					6.7-21 ⁷	0.06	32.8	25 -110 ^{1,2}			0.01 ⁸
	chronic		4.8-10.1 ²					851-1405 ²					1.04-1.9 ⁷	0.02	3				0.005 ⁸
SW0916-2																			
fall	n	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	Min	0.005	0.015	0.5	0.5	5.92	3.98	84.2	119	0.0019	0.141	0.111	0.015	0.002	0.0123	0.183	0.16	3.7	0.0156
	Max	0.022	0.031	2.46	0.5	6.1	6	527	533	0.0019	0.18	0.363	0.093	0.0063	0.211	0.23	0.26	5.2	0.0233
	Mean	0.012	0.02	0.9	0.5	6.01	5.47	273	288	0.0019	0.16	0.199	0.05	0.0046	0.1302	0.21	0.22	4.6	0.0188
	StdDev	0.007	0.01	0.9	0.0	0.1	0.86	182	167	0.0000	0.01	0.098	0.03	0.0019	0.0998	0.02	0.04	0.6	0.0034
summer	n	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5
	Min	0.005	0.0219	0.5	0.5	5.35	4.61	0.732	396	0.0019	0.146	0.146	0.032	0.002	0.0178	0.169	0.211	4.4	0.017
	Max	0.0077	0.0837	0.5	0.5	5.67	5.52	427	522	0.0019	0.268	0.262	0.044	0.005	0.023	0.204	0.258	7	0.022
	Mean	0.006	0.04	0.5	0.5	5.52	5.21	320	440		0.19	0.180	0.04	0.0032	0.0200	0.19	0.22	5.4	0.020
	StdDev	0.001	0.03	0.0	0.0	0.1	0.37	180	51		0.05	0.047	0.00	0.0016	0.0019	0.01	0.02	1.0	0.002

Table 1, continued

			pH pH	Potassium mg/L		Selenium µg/L		Silicon µg/L		Silver µg/L		Sodium mg/L		Strontium µg/L		Sulfur mg/L		Sulphate mg/L
			NoRs	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
BC ENV Freshwater		acute	6.5-9 ⁹				2				0.1-3.0 ²							
Aquatic Life Guidelines		chronic									0.05 ²							
Colquitz Creek																		
SW0690D-2																		
fall	n		6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		7.12	2.15	1.69	0.042	0.04	1610	1950	0.005	0.01	10.1	10.6	67	70.3	4	4.1	11
	Max		7.45	2.91	3.03	0.105	0.12	3320	3430	0.005	0.01	29.5	29.6	127	129	9.7	9.7	29
	Mean		7.31	2.48	2.39	0.066	0.08	2332	2694	0.005	0.01	17.5	16.9	101	97	6	5.8	20
	StdDev		0.13	0.38	0.56	0.027	0.03	694	606	0.000	0.00	7.6	8.1	22	21	2	2.4	13
summer	n		7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		7.51	1.3	1.31	0.04	0.04	2200	2220	0.005	0.005	14.2	13.3	106	103	3	3	6.3
	Max		7.84	8.37	8.53	0.081	0.066	2980	3620	0.005	0.01	199	204	249	243	18.4	18.8	120
	Mean		7.63	4.56	4.53	0.05	0.05	2540	2896	0.005	0.01	97.4	97.4	173	168	10	9.6	43
	StdDev		0.14	3.23	3.21	0.02	0.01	313	499	0.000	0.00	85.5	85.7	64	62	7	7.0	48
SW0690D-3																		
fall	n		6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		7.02	2.33	2.29	0.056	0.062	2600	2680	0.005	0.005	10.7	11.3	72.6	79.1	5	5.5	16
	Max		7.46	3.1	3.29	0.078	0.103	3980	3990	0.005	0.012	34.8	35.8	167	167	11	10.9	35
	Mean		7.25	2.79	2.73	0.07	0.08	3248	3274	0.005	0.009	21.8	21.0	141	137	7	7.1	26
	StdDev		0.17	0.29	0.43	0.01	0.02	577	500	0.000	0.003	8.7	9.0	39	35	2	2.2	13
summer	n		7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		7.43	1.96	2.01	0.064	0.055	6540	6030	0.005	0.005	17.5	17.9	153	155	3	3	3.4
	Max		8.12	2.74	2.9	0.099	0.072	7740	8590	0.0093	0.005	24.2	22.8	200	200	5.1	3.2	11
	Mean		7.64	2.35	2.44	0.08	0.06	7126	7212	0.00586	0.005	20.5	20.4	178	180	3	3.0	6
	StdDev		0.28	0.38	0.38	0.01	0.01	537	1020	0.002	0.000	2.7	2.2	20	19	1	0.1	3
SW0690D-4																		
fall	n		6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		6.81	2.05	1.99	0.04	0.045	1040	1660	0.005	0.01	8.22	8.31	51.1	53.1	3.4	3.4	9.4
	Max		7.42	2.83	2.83	0.111	0.102	2990	3060	0.005	0.01	21.6	21.5	104	107	7.7	7.3	23
	Mean		7.16	2.35	2.34	0.06	0.07	2002	2428	0.005	0.01	14.1	13.9	82	83	5	5.1	16
	StdDev		0.22	0.39	0.43	0.03	0.02	823	624	0.000	0.00	5.8	5.8	22	21	2	1.6	10
summer	n		7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		7.43	1.31	1.33	0.04	0.04	2070	2110	0.005	0.005	12	12.3	93.6	98.7	3	3	5.4
	Max		7.91	1.54	1.62	0.068	0.136	2770	3310	0.005	0.01	14	13.5	111	108	3.2	3	7.8
	Mean		7.59	1.44	1.48	0.05	0.07	2322	2630	0.005	0.006	12.9	13.0	103	104	3	3.0	6
	StdDev		0.19	0.09	0.12	0.01	0.04	285	434	0.000	0.002	0.7	0.5	7	4	0	0.0	1
SW0690D-5A																		
fall	n		6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		7.02	1.85	2.06	0.04	0.082	1240	2320	0.005	0.01	10.5	11.1	45	50	3	3	16
	Max		7.6	4.85	4.95	0.211	0.22	9210	9530	0.005	0.021	29.5	28.2	252	253	20.3	20.3	56
	Mean		7.26	3.86	3.93	0.11	0.12	5234	6040	0.005	0.012	20.7	20.5	153	155	12	12.3	36
	StdDev		0.23	1.19	1.16	0.06	0.06	3697	2840	0.000	0.005	8.3	7.6	96	95	7	7.4	28
summer	n		7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		7.75	1.45	1.44	0.075	0.079	8160	6890	0.005	0.005	24.2	23.2	186	183	5.7	3.3	14
	Max		8.19	2.24	2.24	0.126	0.097	10400	11800	0.008	0.005	32.7	30.9	268	270	7	7	21
	Mean		7.89	1.87	1.87	0.10	0.09	9092	8880	0.0056	0.005	28.9	28.0	225	224	6	5.3	18
	StdDev		0.16	0.29	0.29	0.02	0.01	1024	2018	0.001	0.000	3.1	2.9	30	33	1	1.3	3
SW0690D-8																		
fall	n		6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		7.32	1.82	1.68	0.04	0.04	68	151	0.005	0.005	9.36	7.92	74	59.1	3	3	4.8
	Max		7.74	2.05	1.97	0.04	0.045	357	445	0.005	0.01	10.5	10	80.8	82.1	3	3	5.3
	Mean		7.57	1.92	1.83	0.04	0.04	193	277.8	0.005	0.01	9.8	9.4	77	75	3	3.0	5
	StdDev		0.19	0.10	0.11	0.00	0.00	128	124	0.000	0.00	0.4	0.8	3	9	0	0.0	0
summer	n		7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		7.51	1.67	1.64	0.04	0.04	191	221	0.005	0.005	9.47	9.08	76.4	69.9	3	3	4.1
	Max		7.83	1.75	1.75	0.044	0.04	302	439	0.0056	0.01	11.3	9.88	83	84.6	3.3	3	5.3
	Mean		7.60	1.70	1.69	0.04	0.04	245	289	0.00512	0.01	10.1	9.5	80	78	3	3.0	5
	StdDev		0.11	0.04	0.05	0.00	0.00	51	86	0.000	0.00	0.7	0.3	2	6	0	0.0	0

Table 1, continued

			pH	Potassium		Selenium		Silicon		Silver		Sodium		Strontium		Sulfur		Sulphate
			pH	mg/L		µg/L		µg/L		µg/L		mg/L		µg/L		mg/L		mg/L
			NoRs	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
BC ENV Freshwater		acute	6.5-9 ⁹				2				0.1-3.0 ²							
Aquatic Life Guidelines		chronic									0.05 ²							
SW0690D-8A																		
fall	n		6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		7.25	1.32	1.23	0.052	0.057	2900	4020	0.005	0.005	10.2	10.6	66.9	73.7	3	3	19
	Max		7.84	2.2	2.3	0.1	0.174	9360	10900	0.005	0.037	35	34.9	175	173	9.3	9.6	25
	Mean		7.50	1.65	1.70	0.07	0.10	5862	7476	0.005	0.013	23.9	23.3	111	111	7	7.2	22
	StdDev		0.22	0.41	0.52	0.02	0.05	2879	2815	0.000	0.014	11.3	10.8	49	47	3	2.6	4
summer	n		7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		7.66	0.881	0.874	0.059	0.049	9030	7300	0.005	0.005	24.2	23.2	169	165	3.5	3	9.7
	Max		8.17	1.1	1.08	0.106	0.075	10400	11200	0.0057	0.005	27.8	25.2	191	185	4.2	3.6	11
	Mean		7.90	0.97	0.96	0.07	0.07	9840	9474	0.00514	0.005	26.0	24.0	181	175	4	3.2	11
	StdDev		0.17	0.09	0.08	0.02	0.01	613	1603	0.000	0.000	1.4	0.9	9	9	0	0.3	1
SW0690D-9																		
fall	n		6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		6.59	1.88	1.89	0.04	0.04	583	629	0.005	0.005	10.1	10.1	66.6	66.6	3	3	9.6
	Max		7.05	7.27	7.23	0.055	0.051	2610	2780	0.005	0.01	12	11.7	85.6	86.9	4.9	5	15
	Mean		6.92	3.54	3.52	0.04	0.04	1151.4	1241.8	0.005	0.008	10.7	10.7	78	76	3	3.5	12
	StdDev		0.18	2.25	2.23	0.01	0.00	842	896	0.000	0.003	0.8	0.7	7	8	1	0.9	4
summer	n		7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		6.7	1.13	1.12	0.04	0.04	1170	1270	0.005	0.005	10.5	9.7	83.6	73.4	3	3	2.8
	Max		7.61	1.49	1.46	0.059	0.269	1860	2200	0.005	0.01	13.9	12.4	87.8	93.9	4.8	4.6	13
	Mean		7.04	1.39	1.37	0.04	0.09	1534	1598	0.005	0.006	11.7	10.4	85	83	3	3.3	6
	StdDev		0.34	0.15	0.14	0.01	0.10	261	356	0.000	0.002	1.5	1.1	2	7	1	0.7	4
Colwood Creek																		
SW0916																		
fall	n		6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		7.01	1.07	0.98	0.04	0.04	2960	3220	0.005	0.005	7.81	7.8	41.1	42.3	4	4.1	14
	Max		7.65	3.62	3.68	0.074	0.086	8020	8350	0.005	0.01	31	31.5	101	95.9	11.4	9.8	36
	Mean		7.42	1.67	1.68	0.05	0.06	5582	5956	0.005	0.008	16.5	16.3	65	64	6	6.3	25
	StdDev		0.23	1.10	1.13	0.02	0.02	1955	1849	0.000	0.003	8.7	9.0	22	20	3	2.2	16
summer	n		8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		6.92	0.719	0.71	0.04	0.04	9430	7660	0.005	0.005	13.5	12.7	81.7	79.7	3.9	3.5	12
	Max		7.94	2.78	3.01	0.044	0.073	11000	11300	0.005	0.01	72.6	71.6	128	133	10.8	9.6	30
	Mean		7.54	1.14	1.18	0.04	0.05	10218	9906	0.005	0.007	26.1	25.2	94	94	6	5.0	16
	StdDev		0.31	0.92	1.02	0.00	0.01	623	1492	0.000	0.003	26.0	25.9	20	22	3	2.6	8
SW0916-1A																		
fall	n		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1
	Min		6.9	0.931	0.931	0.04	0.04	2510	2430	0.005	0.005	7.63	6.92	33.1	34.6	3.8	3.6	10
	Max		7.21	1.13	1.05	0.041	0.056	6320	6330	0.005	0.01	14.7	14.6	62	68.9	5.6	6.6	10
	Mean		7.09	1.01	0.99	0.04	0.05	4940	5027.5	0.005	0.008	12.1	11.6	53	53	5	5.1	10
	StdDev		0.14	0.09	0.05	0.00	0.01	1670	1772	0.000	0.003	3.1	3.3	13	14	1	1.3	
summer	dry																	
SW0916-1B																		
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		6.77	0.661	0.71	0.04	0.04	304	1180	0.005	0.005	5.94	5.88	7.05	7.94	3	3	10
	Max		7.13	1.77	1.79	0.088	0.069	7580	7350	0.005	0.012	15.3	15	70.4	71	7.5	6.7	20
	Mean		6.97	1.02	1.00	0.05	0.05	4164.8	4260	0.005	0.007	11.7	11.2	45	45	5	5.2	15
	StdDev		0.16	0.45	0.46	0.02	0.01	3268	2945	0.000	0.003	3.5	3.4	28	27	2	1.7	7
summer	n		8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		6.92	0.704	0.73	0.04	0.04	8830	7640	0.005	0.005	18.1	17.3	82.2	83.9	6.3	6.1	19
	Max		7.54	0.797	0.804	0.04	0.041	9890	10200	0.005	0.005	19.2	18.6	89.7	87.8	7	6.9	22
	Mean		7.16	0.77	0.77	0.04	0.04	9270	8750	0.005	0.005	18.6	17.9	86	86	7	6.4	20
	StdDev		0.26	0.04	0.03	0.00	0.00	392	1135	0.000	0.000	0.4	0.6	3	1	0	0.3	1

Table 1, continued

			pH	Potassium		Selenium		Silicon		Silver		Sodium		Strontium		Sulfur		Sulphate
			pH	mg/L		µg/L		µg/L		µg/L		mg/L		µg/L		mg/L		mg/L
			NoRs	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT	DIS
BC ENV Freshwater		acute	6.5-9 ⁹				2				0.1-3.0 ²							
Aquatic Life Guidelines		chronic									0.05 ²							
SW0916-2																		
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2
	Min		7.08	0.631	0.6	0.04	0.04	4230	4180	0.005	0.005	9.43	6.42	63.8	43.2	5	3.6	14
	Max		7.32	2.04	1.98	0.04	0.046	6720	6510	0.005	0.01	10.7	10.4	70.7	67.6	5.4	5.7	14
	Mean		7.16	1.02	0.91	0.04	0.04	5748	5228	0.005	0.007	10.1	9.0	66	60	5	4.8	14
	StdDev		0.10	0.58	0.60	0.00	0.00	1225	1174	0.000	0.003	0.6	1.5	3	10	0	0.8	0
summer	n		8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		6.97	0.469	0.455	0.04	0.04	2680	2580	0.005	0.005	9.36	8.75	58.9	59.7	3.9	3.4	11
	Max		7.66	0.55	0.56	0.04	0.041	3230	3220	0.005	0.005	10	9.6	63.7	64.4	5.8	4	14
	Mean		7.22	0.52	0.52	0.04	0.04	2982	2948	0.005	0.005	9.7	9.2	61	62	4	3.7	12
	StdDev		0.26	0.03	0.04	0.00	0.00	217	256	0.000	0.000	0.3	0.4	2	2	1	0.2	1

Table 1, continued

			Temperature	Thallium		Tin		Titanium		Sus. Solids	Turbidity	Uranium		Vanadium		Zinc		Zirconium	
			°C	µg/L		µg/L		µg/L		mg/L	NTU	µg/L		µg/L		µg/L		µg/L	
			NoRs	DIS	TOT	DIS	TOT	DIS	TOT	TOT	NoRs	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
BC ENV Freshwater		acute								26 ¹¹	9 ¹²		8.5 ¹				33-39 ²		
Aquatic Life Guidelines		chronic	17 ¹⁰	0.8						6 ¹¹	3 ¹²						7.5-76.5 ²		
Colquitz Creek																			
SW0690D-2																			
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		4.2	0.002	0.002	0.2	0.2	0.5	2	1	2.57	0.0253	0.035	0.21	0.48	1.25	4	0.1	0.1
	Max		11.3	0.0025	0.0072	0.2	0.23	0.91	15.1	18	17.9	0.0699	0.0757	1.33	2.3	9.33	17.6	0.1	0.63
	Mean		7.6	0.002	0.003	0.2	0.206	0.6	9	9	11	0.046	0.06	0.77	1.4	5.13	10	0.1	0.2
	StdDev		3.4	0.000	0.002	0.0	0.0	0.2	6	8	7	0.020	0.02	0.44	0.7	3.28	5	0.0	0.2
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		14.7	0.002	0.002	0.2	0.2	0.5	4.87	4.4	6.44	0.0628	0.0521	0.91	1.39	0.77	1.96	0.1	0.1
	Max		18.3	0.002	0.002	0.2	0.2	0.5	27.8	31	23.7	0.101	0.123	1.25	2.94	2.37	7.7	0.1	0.23
	Mean		17.3	0.002	0.002	0.2	0.2	0.5	10	11	11	0.079	0.08	1.13	1.9	1.22	4	0.1	0.1
	StdDev		1.5	0.000	0.000	0.0	0.0	0.0	10	11	7	0.018	0.03	0.15	0.6	0.66	2	0.0	0.1
SW0690D-3																			
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		4.9	0.002	0.002	0.2	0.2	0.5	2	1	1.07	0.0282	0.0369	0.38	0.56	1.69	4.1	0.1	0.1
	Max		11.2	0.002	0.0054	0.2	0.2	0.87	14.3	7.6	14.9	0.0967	0.118	1.31	1.7	7.03	11.9	0.1	0.26
	Mean		7.8	0.002	0.003	0.2	0.2	0.6	6	4	7	0.069	0.09	0.88	1.2	4.52	8	0.1	0.2
	StdDev		3.0	0.000	0.002	0.0	0.0	0.1	5	3	5	0.031	0.03	0.37	0.5	2.19	4	0.0	0.1
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		13.5	0.002	0.002	0.2	0.2	0.5	4.67	2.4	3.91	0.0854	0.092	1.16	1.43	0.67	1.36	0.1	0.1
	Max		16.2	0.0033	0.002	0.2	0.2	0.99	6.78	6	5.94	0.2	0.182	1.4	1.62	1.82	3.29	0.1	0.23
	Mean		15.5	0.002	0.002	0.2	0.2	0.6	6	5	5	0.140	0.14	1.28	1.5	1.12	2	0.1	0.2
	StdDev		1.1	0.001	0.000	0.0	0.0	0.2	1	2	1	0.044	0.04	0.11	0.1	0.53	1	0.0	0.1
SW0690D-4																			
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		4.3	0.002	0.002	0.2	0.2	0.5	2	1	2.46	0.015	0.0248	0.2	0.53	1.25	3.6	0.1	0.1
	Max		11.3	0.002	0.0057	0.2	0.2	1.17	16.1	27	14.5	0.0413	0.0604	1.27	2.04	5.02	11.3	0.1	0.12
	Mean		7.6	0.002	0.003	0.2	0.2	0.6	9	10	9	0.026	0.04	0.71	1.3	3.43	8	0.1	0.1
	StdDev		3.4	0.000	0.002	0.0	0.0	0.3	6	11	5	0.011	0.01	0.43	0.7	1.62	3	0.0	0.0
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		15.7	0.002	0.002	0.2	0.2	0.5	6.08	2.4	6.69	0.0398	0.0461	0.96	1.35	0.53	2.31	0.1	0.1
	Max		17.7	0.002	0.0031	0.2	0.2	1.19	17	11	11.8	0.0479	0.0565	1.17	2.02	1.4	3.67	0.1	0.5
	Mean		17.1	0.002	0.002	0.2	0.2	0.6	10	7	9	0.045	0.05	1.07	1.6	0.74	3	0.1	0.2
	StdDev		0.8	0.000	0.000	0.0	0.0	0.3	5	3	2	0.004	0.00	0.09	0.3	0.37	0	0.0	0.2
SW0690D-5A																			
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		7.1	0.002	0.002	0.2	0.2	0.5	2.6	1	3.01	0.0284	0.0486	0.54	0.95	2.93	5.9	0.1	0.13
	Max		12	0.0027	0.0094	0.2	0.77	1.39	88.4	81	98.4	0.385	0.407	2	8.49	11.5	55.5	0.18	0.73
	Mean		9.3	0.002	0.004	0.2	0.314	1.0	23	19	26	0.143	0.22	1.29	3.1	8.21	21	0.1	0.3
	StdDev		2.4	0.000	0.003	0.0	0.3	0.4	37	35	41	0.143	0.17	0.61	3.1	3.67	20	0.0	0.3
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		16.9	0.002	0.002	0.2	0.2	0.5	2.4	2.4	2.59	0.209	0.196	0.75	0.91	1.23	2.5	0.1	0.1
	Max		18.9	0.0023	0.0022	0.2	0.22	0.5	4.75	5.2	7.09	0.293	0.3	0.95	1.02	8.49	9.35	0.1	0.1
	Mean		17.9	0.002	0.002	0.2	0.204	0.5	3	4	5	0.252	0.25	0.86	1.0	3.10	5	0.1	0.1
	StdDev		0.8	0.000	0.000	0.0	0.0	0.0	1	1	2	0.038	0.04	0.08	0.1	3.05	3	0.0	0.0
SW0690D-8																			
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		5.4	0.002	0.002	0.2	0.2	0.5	0.7	2.8	1.74	0.003	0.0045	0.2	0.43	0.11	1	0.1	0.1
	Max		13.6	0.002	0.002	0.2	0.2	0.5	2.27	8.4	6.19	0.0143	0.0083	0.41	0.94	0.51	2.2	0.1	0.1
	Mean		8.6	0.002	0.002	0.2	0.2	0.5	2	5	5	0.007	0.01	0.31	0.6	0.26	2	0.1	0.1
	StdDev		3.8	0.000	0.000	0.0	0.0	0.0	1	2	2	0.004	0.00	0.07	0.2	0.15	1	0.0	0.0
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		21.1	0.002	0.002	0.2	0.2	0.5	1.3	4.4	2.74	0.0046	0.0051	0.48	0.6	0.1	0.7	0.1	0.1
	Max		23.5	0.002	0.002	0.2	0.2	0.62	4.7	8.4	5	0.0066	0.0079	0.66	0.94	0.32	1.5	0.1	0.1
	Mean		22.9	0.002	0.002	0.2	0.2	0.5	2	5	3	0.006	0.01	0.55	0.8	0.20	1	0.1	0.1
	StdDev		1.0	0.000	0.000	0.0	0.0	0.1	1	2	1	0.001	0.00	0.07	0.1	0.10	0	0.0	0.0

Table 1, continued

			Temperature °C	Thallium µg/L		Tin µg/L		Titanium µg/L		Sus. Solids mg/L	Turbidity NTU	Uranium µg/L		Vanadium µg/L		Zinc µg/L		Zirconium µg/L	
			NoRs	DIS	TOT	DIS	TOT	DIS	TOT	TOT	NoRs	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
BC ENV Freshwater Aquatic Life Guidelines		acute chronic	17 ¹⁰	0.8						26 ¹¹ 6 ¹¹	9 ¹² 3 ¹²		8.5 ¹				33-39 ² 7.5-76.5 ²		
SW0690D-8A																			
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		6.6	0.002	0.002	0.2	0.2	0.5	1.94	1	2.09	0.0127	0.0194	0.2	0.43	0.7	2.3	0.1	0.1
	Max		12.1	0.002	0.0219	0.2	0.54	1.16	173	230	154	0.0733	0.131	0.68	14.1	4.54	79.8	0.1	0.63
	Mean		9.2	0.002	0.006	0.2	0.268	0.7	40	50	36	0.032	0.07	0.51	3.5	2.74	20	0.1	0.2
	StdDev		2.4	0.000	0.009	0.0	0.2	0.3	75	101	66	0.025	0.05	0.20	5.9	1.71	33	0.0	0.2
summer	n		5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5
	Min		13.6	0.002	0.002	0.2	0.2	0.5	2.47	1.6	3.5	0.108	0.102	0.5	0.69	0.68	1.57	0.1	0.1
	Max		16.5	0.0021	0.002	0.2	0.2	0.5	7.7	10	5.15	0.118	0.115	0.6	0.99	0.95	3.73	0.1	0.1
	Mean		15.8	0.002	0.002	0.2	0.2	0.5	5	5	4	0.113	0.11	0.55	0.8	0.77	3	0.1	0.1
	StdDev		1.2	0.000	0.000	0.0	0.0	0.0	2	3	1	0.004	0.01	0.04	0.1	0.11	1	0.0	0.0
SW0690D-9																			
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		4.5	0.002	0.002	0.2	0.2	0.5	2	1	1.67	0.0077	0.0087	0.26	0.41	0.38	1	0.1	0.1
	Max		11.7	0.002	0.0021	0.2	0.2	0.96	4.66	6.4	6.67	0.0146	0.0163	0.73	1.07	1.42	2.74	0.1	0.1
	Mean		7.5	0.002	0.002	0.2	0.2	0.6	3	4	4	0.011	0.01	0.47	0.7	0.82	2	0.1	0.1
	StdDev		3.4	0.000	0.000	0.0	0.0	0.2	1	2	2	0.003	0.00	0.22	0.3	0.45	1	0.0	0.0
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		17.3	0.002	0.002	0.2	0.2	0.5	0.66	2.8	1.77	0.0028	0.005	0.2	0.23	0.1	0.36	0.1	0.1
	Max		18.3	0.002	0.002	0.2	0.2	0.59	2	5.6	3.33	0.0419	0.0096	0.28	0.47	0.35	1.2	0.1	0.1
	Mean		17.9	0.002	0.002	0.2	0.2	0.5	1	4	3	0.012	0.01	0.24	0.3	0.22	1	0.1	0.1
	StdDev		0.4	0.000	0.000	0.0	0.0	0.0	1	1	1	0.017	0.00	0.03	0.1	0.09	0	0.0	0.0
Colwood Creek																			
SW0916																			
fall	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		5.5	0.002	0.002	0.2	0.2	0.5	0.87	1	1.02	0.0042	0.0112	0.2	0.45	0.92	2.5	0.1	0.1
	Max		10.7	0.002	0.0046	0.2	0.6	1.38	40	20	43.8	0.0114	0.02	0.73	3.02	5.82	25.2	0.1	0.79
	Mean		7.9	0.002	0.003	0.2	0.28	0.7	11	7	12	0.009	0.01	0.50	1.2	2.62	9	0.1	0.3
	StdDev		2.3	0.000	0.001	0.0	0.2	0.4	16	8	18	0.003	0.00	0.19	1.0	1.88	10	0.0	0.3
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		12.8	0.002	0.002	0.2	0.2	0.5	1.86	1	2.86	0.01	0.01	0.75	1.01	0.42	1.49	0.1	0.1
	Max		16.5	0.002	0.002	0.2	0.2	0.5	19.1	15	4.79	0.0207	0.0344	0.96	2.56	0.97	7.6	0.1	0.1
	Mean		15.4	0.002	0.002	0.2	0.2	0.5	8	5	4	0.013	0.02	0.84	1.5	0.76	4	0.1	0.1
	StdDev		1.6	0.000	0.000	0.0	0.0	0.0	8	6	1	0.004	0.01	0.09	0.7	0.22	3	0.0	0.0
SW0916-1A																			
fall	n		3	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4
	Min		5.5	0.002	0.002	0.2	0.2	0.5	1.13	1	1.23	0.0041	0.0067	0.2	0.4	1.76	4.8	0.1	0.1
	Max		10.9	0.002	0.0025	0.2	0.45	0.64	17.3	13	5.13	0.0117	0.0172	0.43	1.6	18	35	0.1	0.41
	Mean		7.7	0.002	0.002	0.2	0.2625	0.5	6	4	3	0.007	0.01	0.34	0.8	6.93	14	0.1	0.2
	StdDev		2.8	0.000	0.000	0.0	0.1	0.1	8	6	2	0.003	0.00	0.10	0.6	7.46	14	0.0	0.2
summer	dry																		
SW0916-1B																			
fall	n		4	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5
	Min		7	0.002	0.002	0.2	0.2	0.5	0.5	1.6	1.58	0.0027	0.0055	0.2	0.44	1.06	3.2	0.1	0.1
	Max		11.3	0.002	0.0029	0.2	0.58	1.01	31.7	26	43.9	0.0067	0.0167	0.77	2.75	29.4	44.5	0.1	0.34
	Mean		9.1	0.002	0.002	0.2	0.276	0.6	10	8	12	0.004	0.01	0.48	1.2	11.30	19	0.1	0.2
	StdDev		2.0	0.000	0.000	0.0	0.2	0.2	13	10	18	0.002	0.00	0.21	0.9	12.46	19	0.0	0.1
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		13.4	0.002	0.002	0.2	0.2	0.5	0.68	1.2	4.56	0.0062	0.0087	0.58	0.94	0.56	1.84	0.1	0.1
	Max		17.1	0.002	0.002	0.2	0.2	0.5	1.05	4	5.4	0.0102	0.0489	0.8	1.12	1.28	2.93	0.1	0.1
	Mean		16.2	0.002	0.002	0.2	0.2	0.5	1	2	5.0	0.008	0.02	0.67	1.0	1.06	2	0.1	0.1
	StdDev		1.6	0.000	0.000	0.0	0.0	0.0	0	1	0.3	0.001	0.02	0.08	0.1	0.29	0	0.0	0.0

Table 1, continued

			Temperature	Thallium		Tin		Titanium		Sus. Solids	Turbidity	Uranium		Vanadium		Zinc		Zirconium	
			°C	µg/L		µg/L		µg/L		mg/L	NTU	µg/L		µg/L		µg/L		µg/L	
			NoRs	DIS	TOT	DIS	TOT	DIS	TOT	TOT	NoRs	DIS	TOT	DIS	TOT	DIS	TOT	DIS	TOT
BC ENV Freshwater		acute								26 ¹¹	9 ¹²		8.5 ¹				33-39 ²		
Aquatic Life Guidelines		chronic	17 ¹⁰	0.8						6 ¹¹	3 ¹²						7.5-76.5 ²		
SW0916-2																			
fall	n		4	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5
	Min		7.8	0.002	0.002	0.2	0.2	0.5	0.5	1	0.81	0.0022	0.0026	0.2	0.2	0.21	1	0.1	0.1
	Max		12.8	0.002	0.002	0.2	0.2	0.5	2	16	2.63	0.0052	0.0056	0.29	0.28	4.5	3.08	0.1	0.1
	Mean		10.6	0.002	0.002	0.2	0.2	0.5	1	4	1.9	0.004	0.00	0.23	0.2	1.46	2	0.1	0.1
	StdDev		2.6	0.000	0.000	0.0	0.0	0.0	1	6	0.8	0.001	0.00	0.04	0.0	1.80	1	0.0	0.0
summer	n		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Min		17.1	0.002	0.002	0.2	0.2	0.5	0.5	2.4	1.76	0.0041	0.0049	0.2	0.21	0.1	0.48	0.1	0.1
	Max		23.3	0.002	0.002	0.2	0.2	0.5	0.5	4	2.44	0.0053	0.0087	0.23	0.28	0.38	1.54	0.1	0.1
	Mean		21.6	0.002	0.002	0.2	0.2	0.5	1	3	2.1	0.005	0.01	0.21	0.2	0.25	1	0.1	0.1
	StdDev		2.6	0.000	0.000	0.0	0.0	0.0	0	1	0.2	0.000	0.00	0.01	0.0	0.10	0	0.0	0.0

Notes:

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Where values were not detected, the detection limit was used to calculate statistics.
BC ENV approved water quality guidelines for protection of freshwater aquatic life applied unless otherwise stated.
DIS = dissolved state, TOT = total state.
BC ENV working water quality guideline.
Hardness-dependant guideline.
Cr(IV) / Cr (III)
Site specific BC Biotic Ligand Model guidelines for dissolved copper.
If more than one of five samples or average of the five samples exceed chronic guideline, station has exceeded.
Guidelines are minimum (rather than maximum) values for dissolved oxygen.
Average guideline is a geomean of 200 CFU/100 mL; E.coli values in the "Average" row are geomeans.
Dependant on pH and temperature.
Draft Vancouver Island Objective, applies to monthly samples collected June to September; our data was collected 5 times in 30 days.
Optimum pH range.
Draft objective proposed to protect juvenile Coho (the most sensitive species); average weekly temperature at any location in the creeks.
25 and 5 mg/L over ambient levels of 2 mg/L in the upper Sooke River watersheds.
Max: 9 NTU (8NTU above ambient levels in the upper Sooke River watershed) at any time during clear flow periods, and average 3 NTU (2NTU above ambient levels during clear flow periods).

Value exceeds the provincial guideline protective for aquatic life.

Italicized value exceeds a guideline/objective which is only partially applicable. Further investigation is needed.

APPENDIX G

CRD PUBLIC HEALTH AND ENVIRONMENTAL CONCERN RATING SYSTEM

STORMWATER DISCHARGE RATING SYSTEM

The Capital Regional District (CRD) evaluates stormwater discharges for public health and environmental concerns using a rating system for stormwater discharges developed by the CRD titled *Stormwater Discharge Rating System for the Capital Regional District* (Drinnan, 1997). As part of the rating system, the following study was used to determine levels of public use, coastline habitat sensitivity and flushing characteristics of the marine receiving waters:

- *An Evaluation of the Coastline Sensitivity Associated with Stormwater Discharges on the Saanich Peninsula* (Drinnan, 1997)

Public shoreline use ratings indicate the potential for public contact with stormwater. These ratings were updated in 2010.

The rating of discharges allows the jurisdictions involved to better manage limited funds and undertake remedial measures where necessary. A copy of the rating system and the coastline sensitivity evaluations are available upon request from the CRD. A brief explanation of the stormwater discharge rating system follows.

1.1 Public Health Concern

CRD staff rate each discharge as a high, moderate or low level of concern for public health based on the level of bacterial contamination in the stormwater and the potential for human contact. The parameters used to assess the level of concern for public health are:

- *Escherichia coli* (*E.coli*) concentrations in the stormwater discharge
- discharge flow rate
- location of the discharge (e.g., below high-water line)
- public use of the shoreline (uses such as swimming, fishing, or kayaking)

The level of contamination is used to assign a bacterial rating. Public shoreline use ratings are used to indicate the potential for public contact with stormwater and depends on the type of activities carried out on the shoreline. Table 1 shows criteria for the bacterial and public shoreline use ratings.

Table 1 Fecal Coliform and Public Shoreline Use Rating Criteria

Rating	Bacterial Rating Criteria	Rating	Public Shoreline Use Rating Criteria
1	No flow measured or <i>E.coli</i> count consistently under 200 CFU/100 mL	1	Low contact (e.g., inaccessible, beach walking)
2	<i>E.coli</i> count between 200 and 5,000 CFU/100 mL	2	Secondary contact (e.g., kayaking)
3	<i>E.coli</i> count greater than 5,000 CFU/100 mL	3	Primary contact (e.g., swimming, scuba diving)

Note: *E.coli* counts above 200 CFU/100 mL (on average) indicate the potential to cause adverse public health effects from primary recreational activities such as swimming or diving.

1.2 Environmental Concern

Environmental concerns are based on a contaminant rating of discharge sediments. The contaminant rating is determined by comparing the sediment concentration of each of 8 metals and 2 groups of organic contaminants (Cn) with the CRD MSQG to obtain a ratio (Cn/MSQG). To account for potential additive effects, these ratios are summed to calculate the toxic equivalent unit (TEU). Table 2 provides the criteria for determining the contaminant rating.

Table 2 Criteria for Determining the Contaminant Rating

Contaminant Rating	Criteria for Determining the Contaminant Rating
Low	Sum of the individual ratios of Cn/MSQG (TEU) is less than 1.0
Moderate	Sum of the individual ratios of Cn/MSQG (TEU) is greater than or equal to 1.0, but no individual parameter exceeds, or is equal to, a value of 0.75
High	The ratio Cn/MSQG is greater than, or equal to, 0.75 for any single parameter

Discharges evaluated are located near environmentally sensitive areas, in creeks or near heavily settled areas where there is an increased probability of pollution. All discharges sampled for environmental concern are sampled for at least two years to confirm the contaminant concentrations and contaminant(s) of concern. Only a small number of discharges can be sampled each year due to budgetary constraints; therefore, each discharge selected for sampling can only be sampled once per year.

Discharges with a confirmed high contaminant rating are investigated to determine the source(s) of contamination. The priority in which high-rated discharges are investigated and problems mitigated is determined by calculating a habitat rating (high, moderate or low). The habitat rating is based on the habitat sensitivity, discharge flow and marine flushing characteristics. The following briefly describes the rating criteria for the habitat rating.

Table 3 Criteria for Determining Ratings for Habitat Sensitivity, Discharge Flow and Marine Flushing

Habitat Sensitivity Rating		Discharge Flow Rating		Marine Flushing Ratings	
Rating	Criteria	Rating	Criteria	Rating	Criteria
1	Low productivity; less diverse habitats	0.5	Less than 50 L/minute	0.5	Open shoreline; high flushing
2	Moderate productivity; diverse habitats	1	Between 50 to 500 L/minute	1	Partially enclosed area; moderate flushing
3	High productivity or endangered or protected habitats	1.5	Greater than 500 L/minute	1.5	Enclosed area; poor flushing

These three ratings (habitat sensitivity, discharge flow and marine flushing) are summed to determine a habitat rating as shown in Table 4. The habitat rating assigned to each discharge will allow limited resources to be spent in a prioritized manner.

Table 4 Criteria for Establishing the Habitat Rating

Habitat Rating and Mitigative Priority	Sum of Criteria (Habitat + Flow + Flushing)
Low	2.0-3.0
Moderate	3.5-4.5
High	5.0-6.0

OTHER CONCERNS

There are a number of other concerns that have been jointly reviewed and discussed by staff from the CRD and the other jurisdictions involved. This review and discussion assists in setting priorities for remediation of discharges with a high level of concern for public health and the environment. These include:

- the cost of remediation
- the likelihood that remediation will be successful
- compatibility with the priorities of the jurisdictions
- public interest