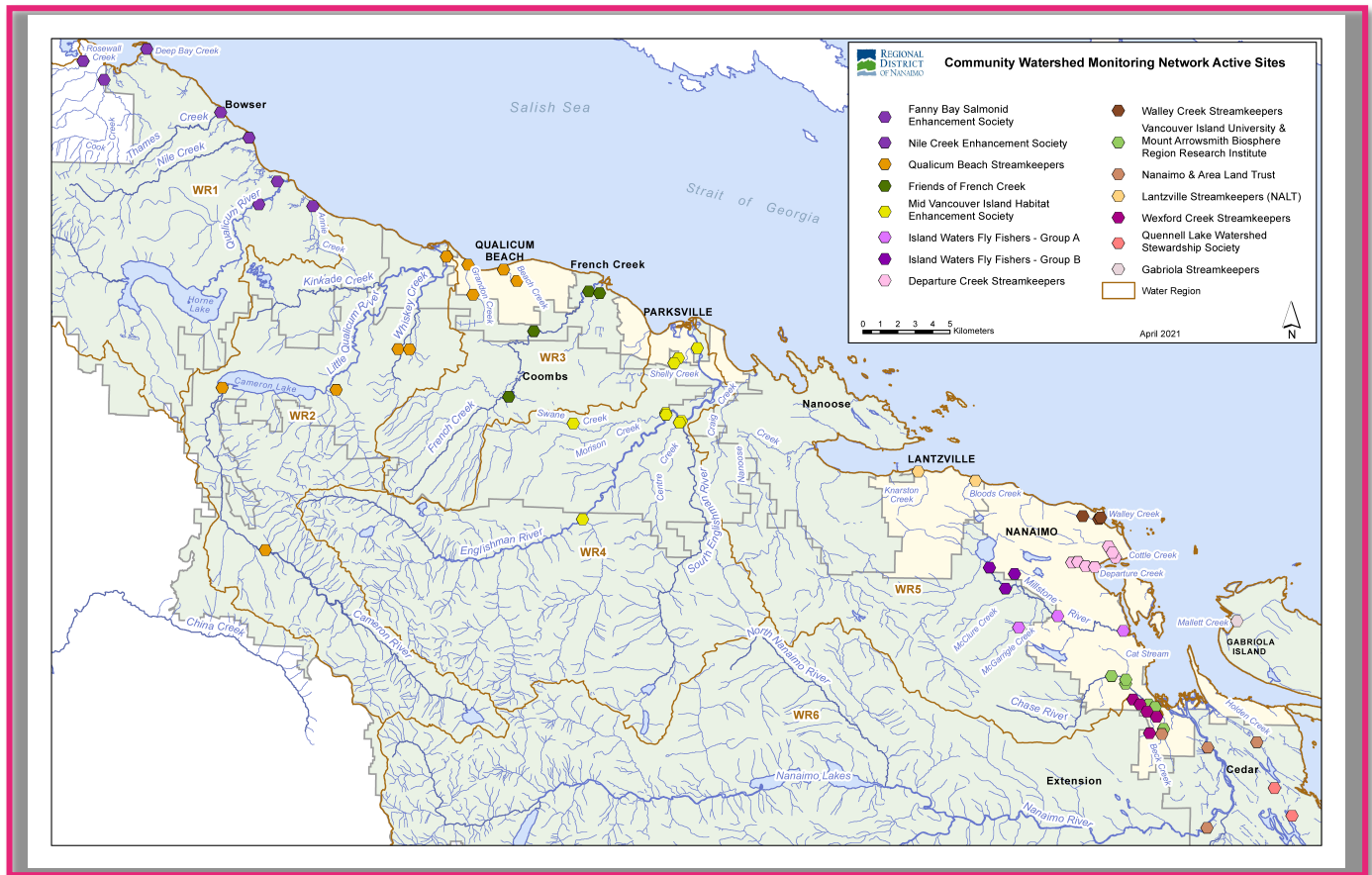


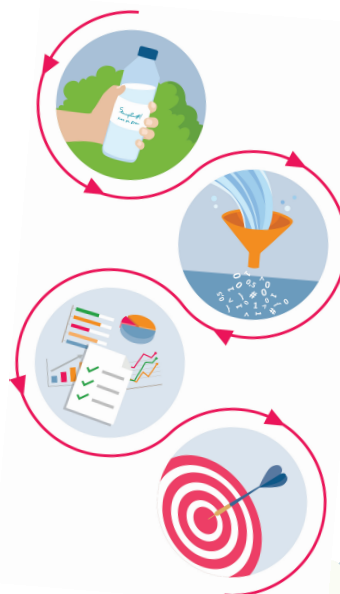
Community Watershed Monitoring Network 2020

Results by Water Region



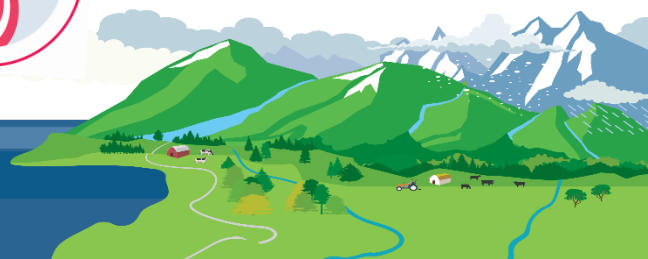
Included in your Water Region Package:

1. CWMN Sample Sites in Water Region (WR) 7
2. How to Interpret a Box Plot and Summer / Fall Exceedance Maps
3. Box Plot Comparison 2020 Data to Previous Years: *Graphs displayed per parameter (Temperature, Dissolved Oxygen, Turbidity, Conductivity) and per sample period (summer and fall)*
4. 2011-2020 Water Quality Trend Analysis Map
5. 2011-2020 Summer Exceedance Map
6. 2011-2020 Fall Exceedance Map
7. GSk Site Map



Water Region 7
sampled by:

**Gabriola
Streamkeepers (GSK)**

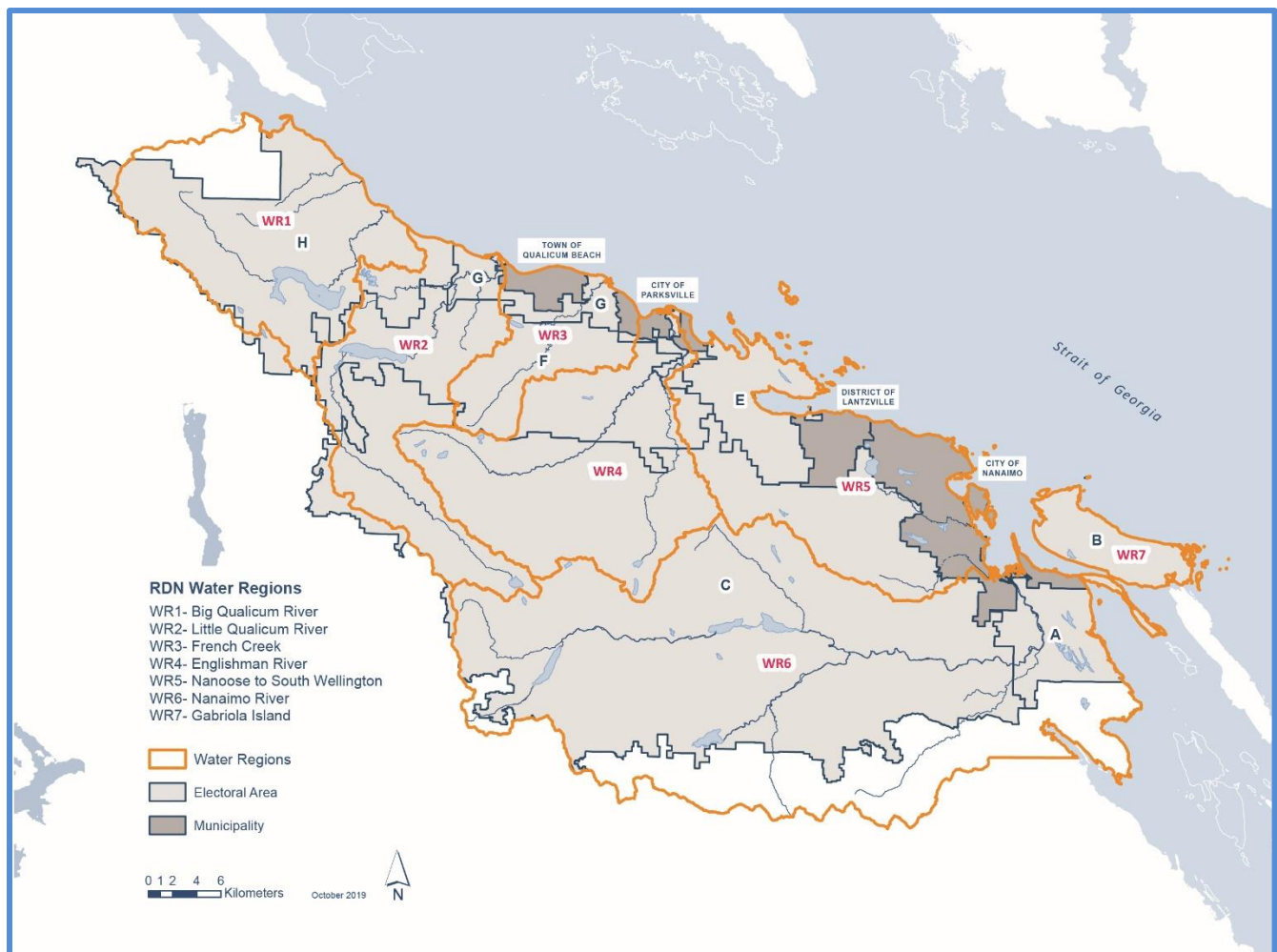


CWMN Sample Sites in WR 7:

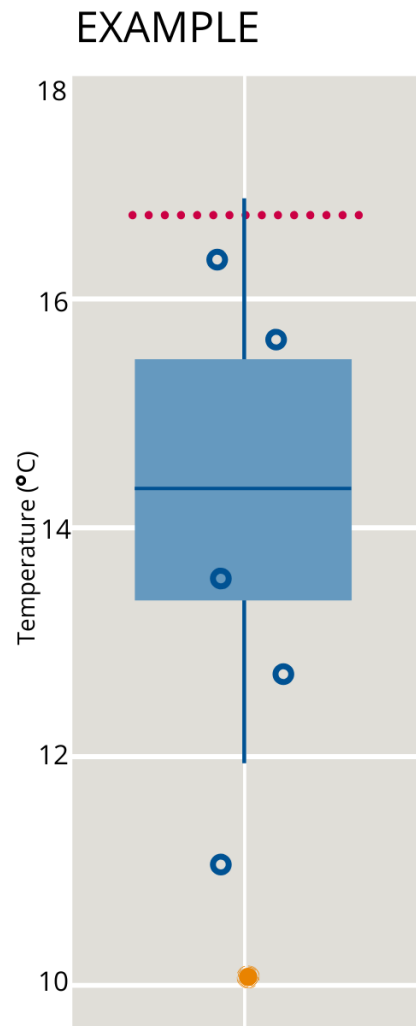
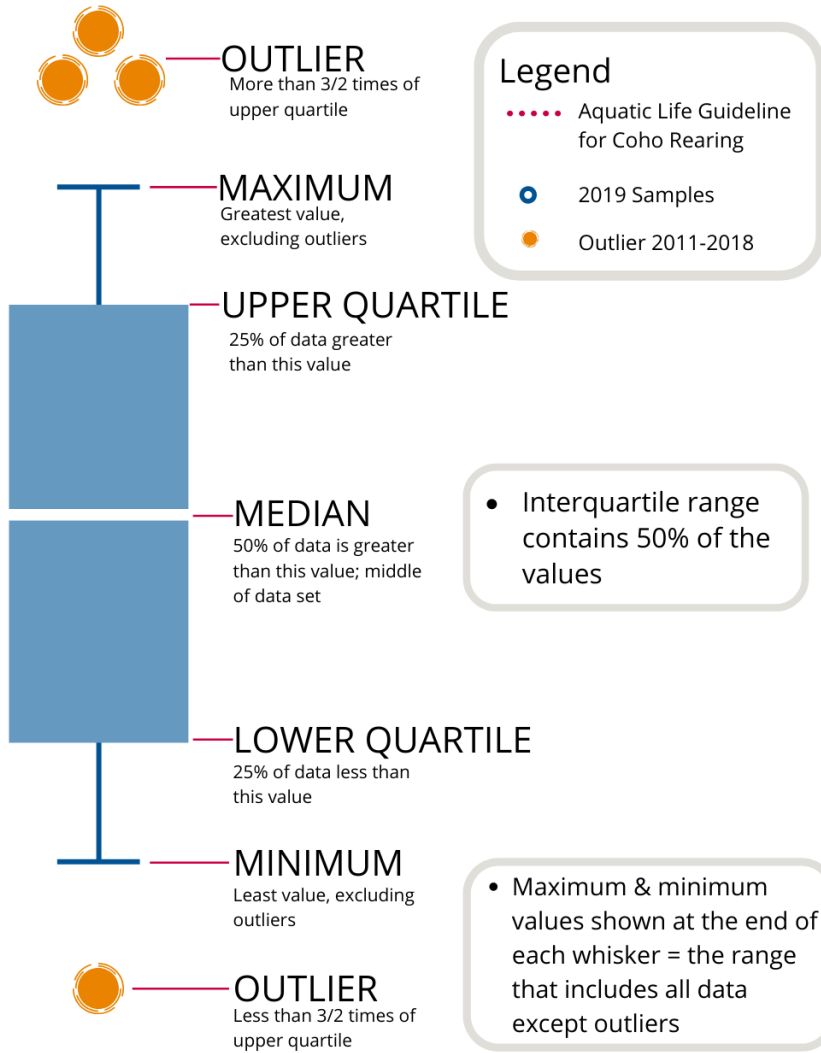
The table below shows the group and site monitored, as well as the number of years and which years a site was sampled. The number of years is important to keep in mind when interpreting the box plots as the plot for each site may contain a slightly different temporal range.

Group	EMS ID	Geographic Description	Years Sampled*	Years Monitored
GSk	E304070	Mallett Creek 40m upstream from Taylor Bay Rd	6	2015 - present

*The number of years sampled up to and including 2020.

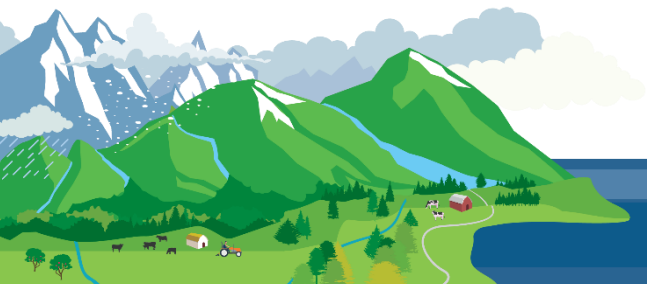


How to Interpret a Box Plot:

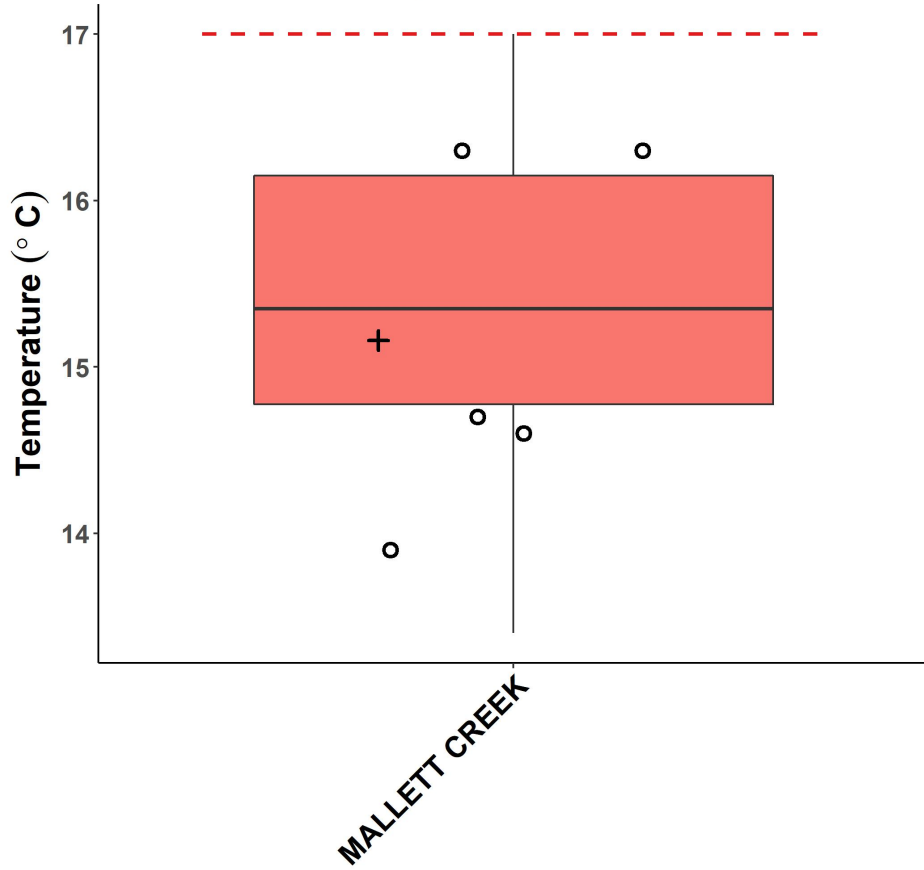


How to Interpret a Box Plot:

The summer and fall exceedance frequency maps included in this package express the number of sample periods (summer low-flow / fall flush) with exceedances for each site. There are four frequency categories for the number of sample periods with exceedances: no exceedance recorded (0), low (1 – 2), moderate (3 – 4), and high (5 or more). The exceedance categories are for the three parameters with aquatic water quality guidelines and objectives based on the following thresholds: temperature $\geq 17^{\circ}\text{C}$, dissolved oxygen $\leq 5\text{mg/L}$, summer turbidity $\geq 2\text{NTU}$, and fall turbidity $\geq 5\text{NTU}$.

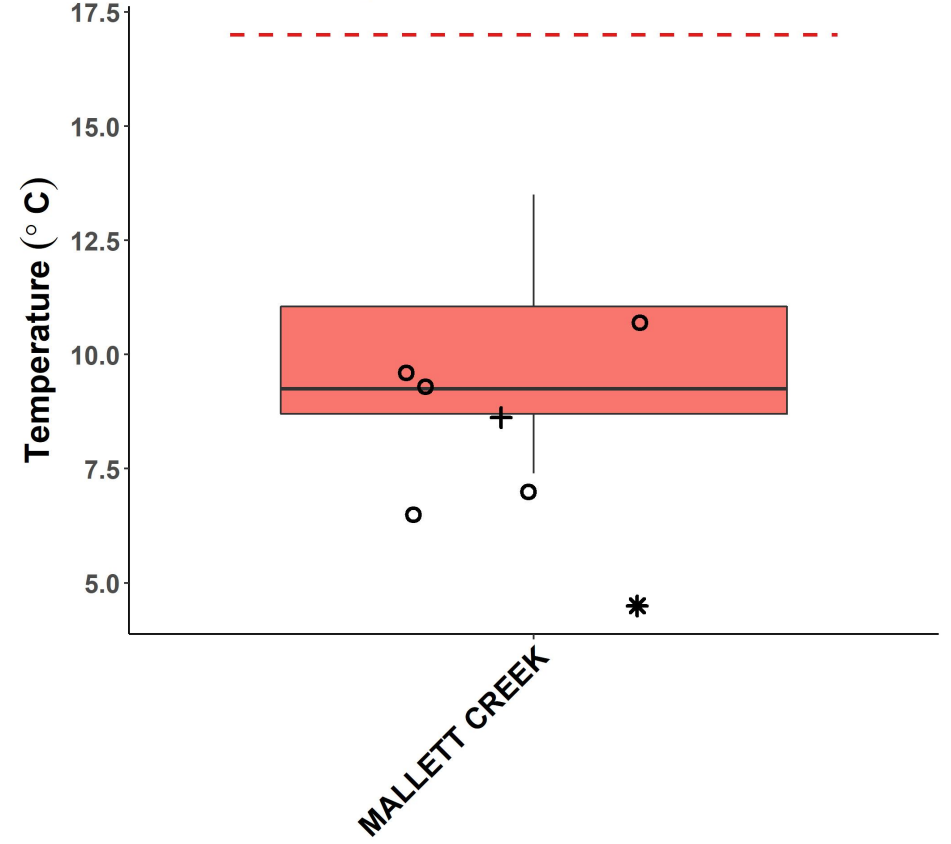


WR7 Summer Temperature



○ 2020 Samples Guideline
+ 2020 30 Day Avg - - - Aquatic Life Guideline for Coho Rearing (17°C)

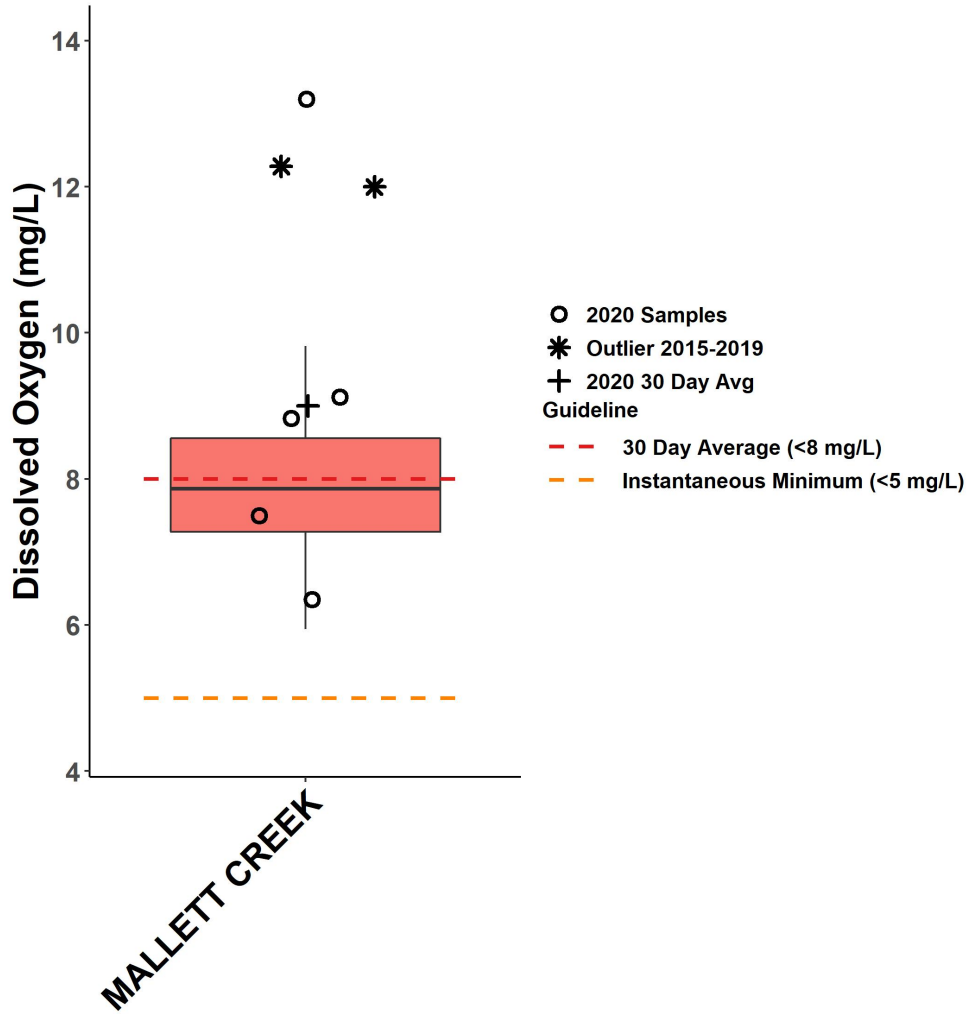
WR7 Fall Temperature



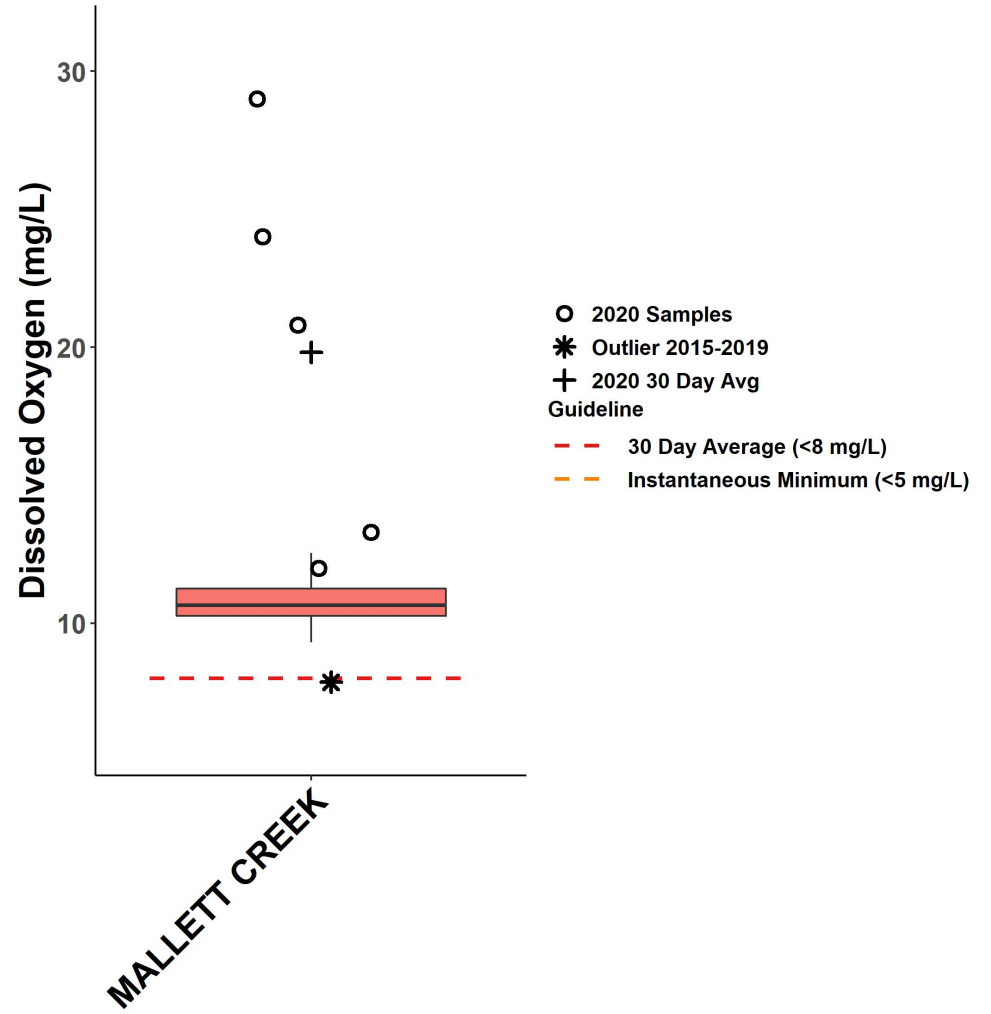
○ 2020 Samples Guideline
* Outlier 2015-2019 - - - Aquatic Life Guideline for Coho Rearing (17°C)
+ 2020 30 Day Avg



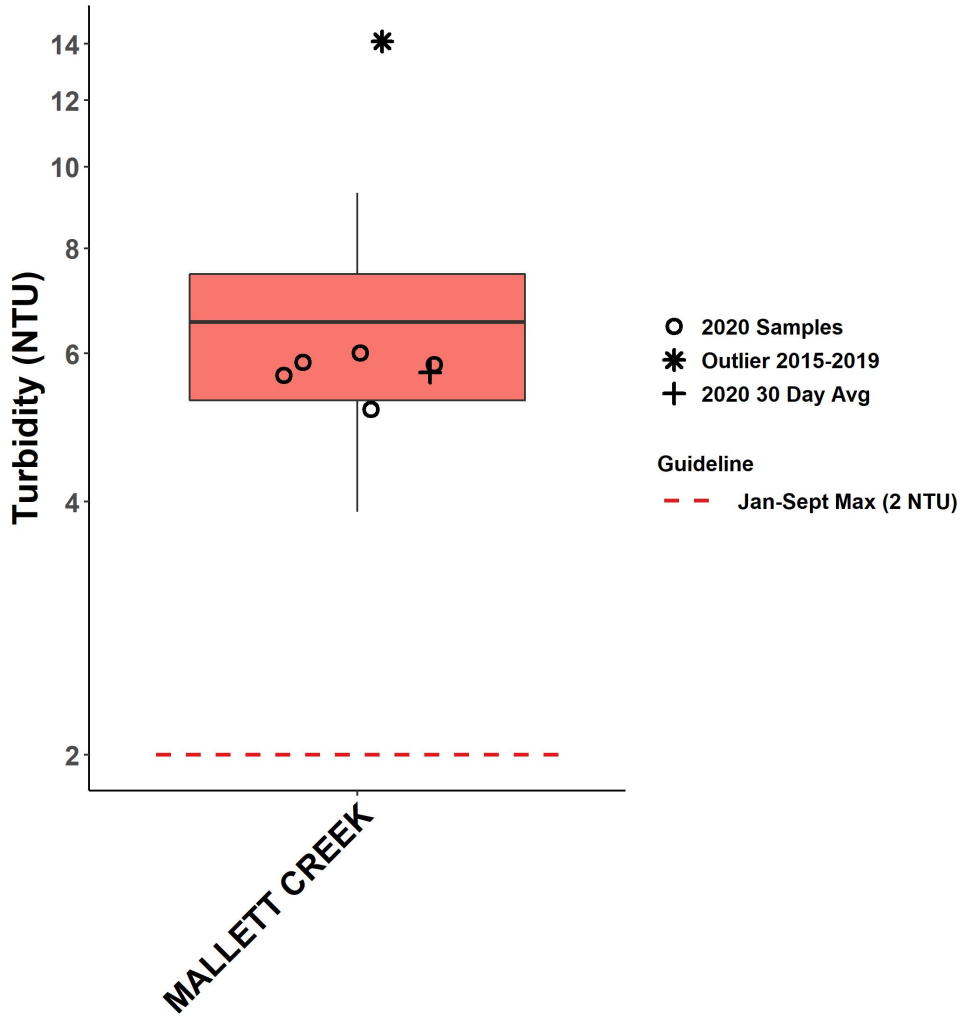
WR7 Summer Dissolved Oxygen



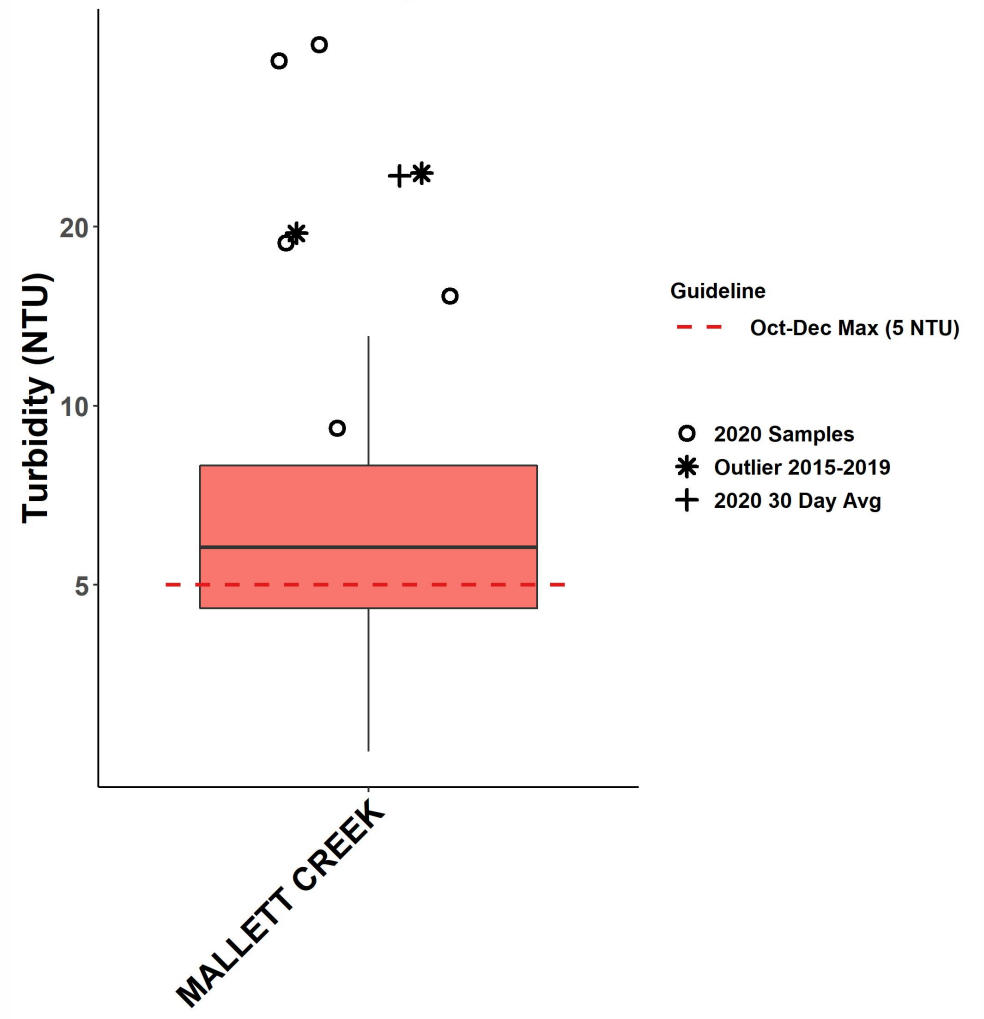
WR7 Fall Dissolved Oxygen



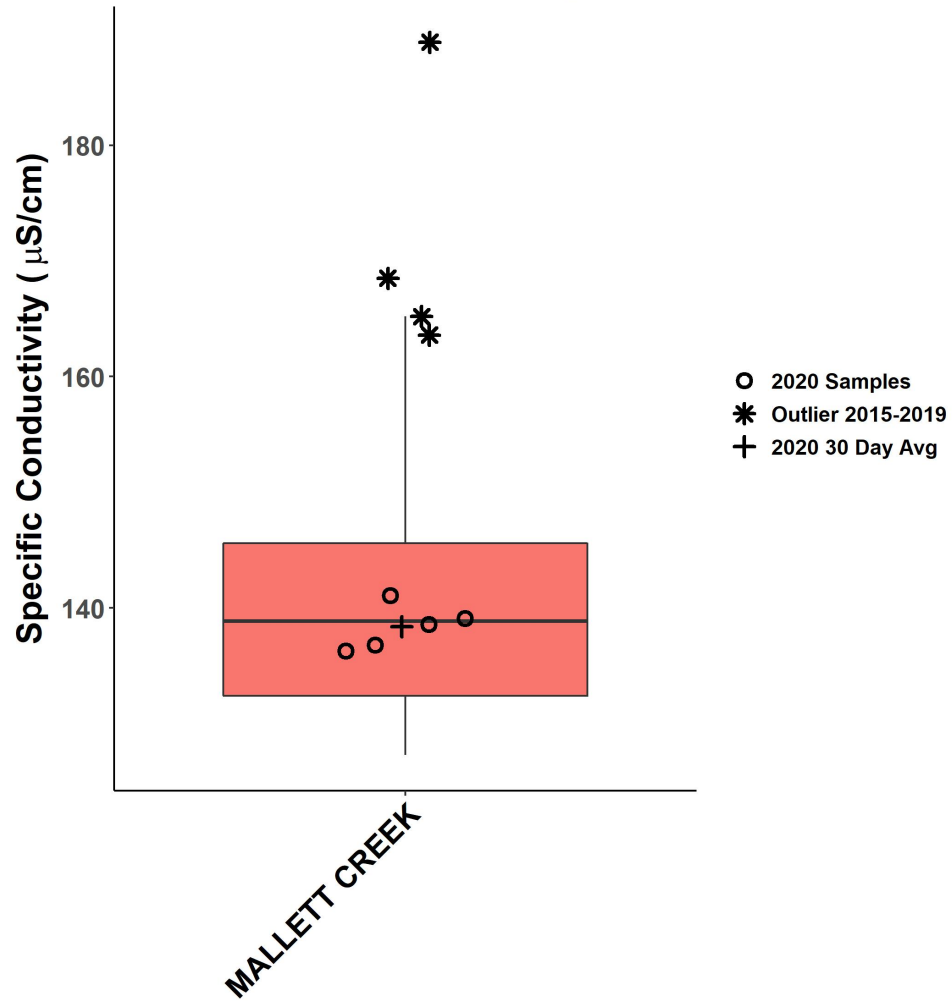
WR7 Summer Turbidity



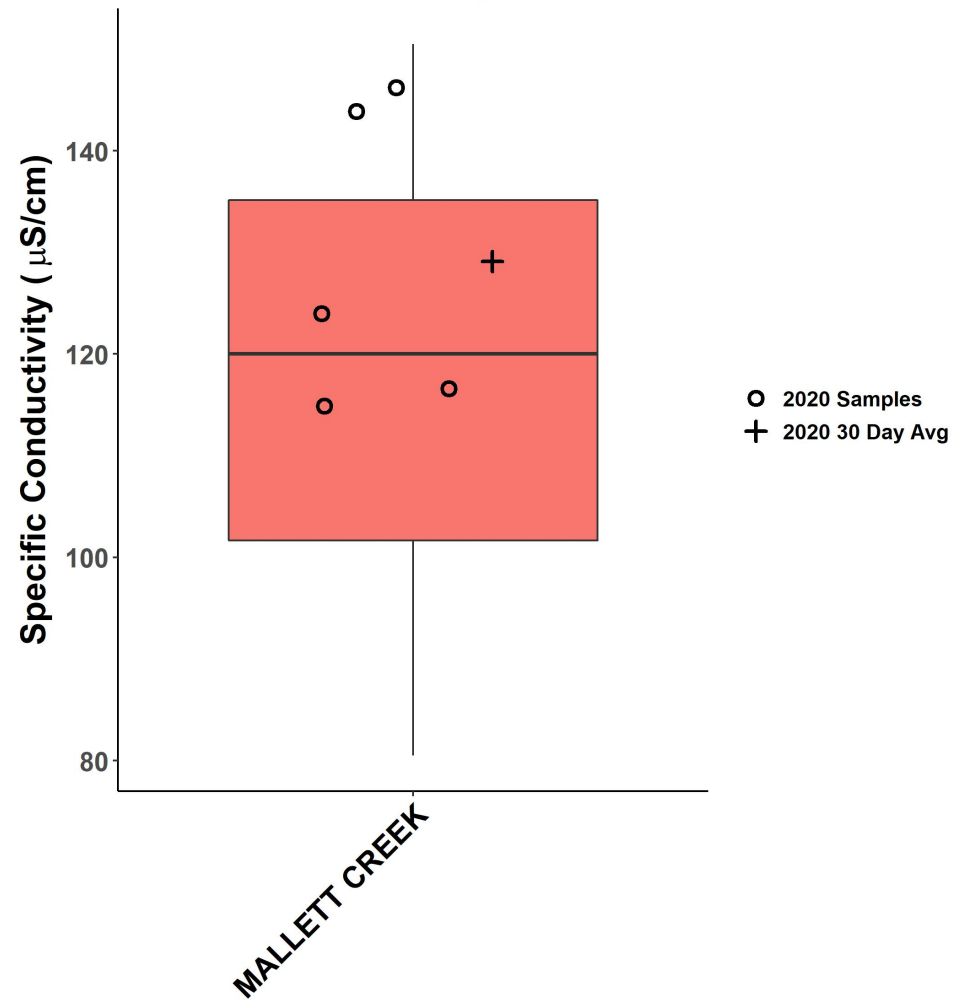
WR7 Fall Turbidity



WR7 Summer Conductivity



WR7 Fall Conductivity












Regional District of Nanaimo

CMMN Water Quality Trend Analysis 2011-2020

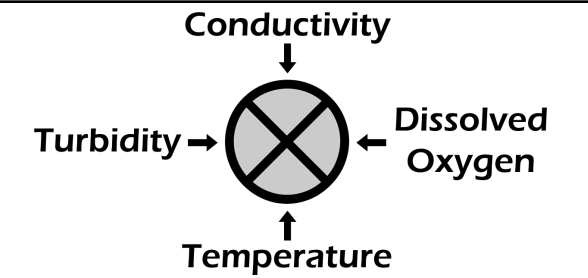
WR7: Gabriola Island

Location: Nanaimo, BC
Project No.: 21-3702
Prepared for: Regional District of Nanaimo
Prepared by: Ecoscape Environmental Consultants Ltd.
Coordinate System: NAD83-UTM Zone 10
Imagery: ESRI Canada

LEGEND

-  Sample Site - No Trend Assessed
-  Sample Site - Trend Assessed
-  Highway
-  Watershed
-  Water Region
-  Lake
- Trend Color Code**
 -  Improving
 -  Stable
 -  Degrading

SAMPLE SITE KEY



Conductivity can be influenced by factors such as groundwater and ocean spray that are not necessarily indicative of a degrading condition. For simplicity, an increase in conductivity is categorized here as degrading.

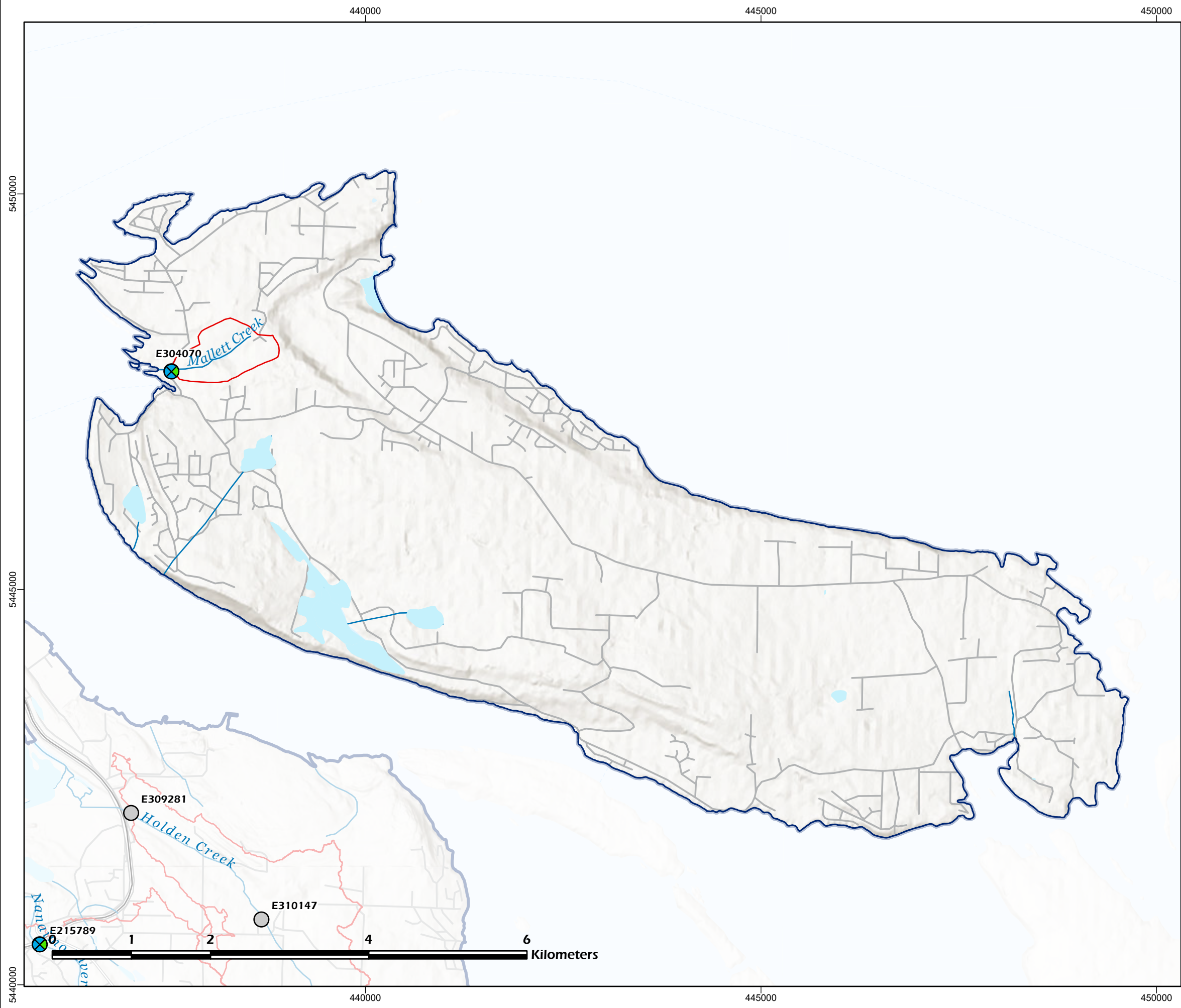
MAP INDEX

Solid blue lines indicate entire water region; extent of main view map may be scaled to better visualize sample -site-dense regions.



DISCLAIMER

The data displayed is for conceptual purposes only and should not be interpreted as a legal survey or for legal purposes. If discrepancies are found between the data portrayed in this report and that of a legal survey, the legal survey will superseded any data presented herein.



Regional District of Nanaimo

CMMN 2011-2020 Summer Exceedance Assessment

WR7: Gabriola Island

Location: Nanaimo, BC
Project No.: 21-3702
Prepared for: Regional District of Nanaimo
Prepared by: Ecoscape Environmental Consultants Ltd.
Coordinate System: NAD83-UTM Zone 10
Imagery: ESRI Canada

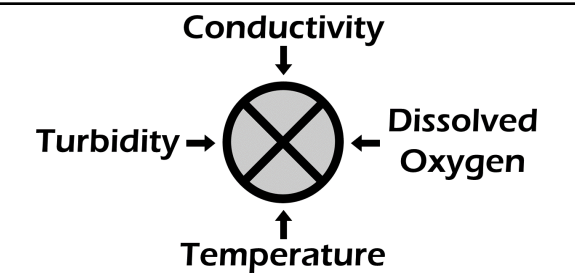
LEGEND

- ⊗ Sample Site
 - Highway
 - Stream
 - ▭ Watershed
 - ▭ Water Region
 - ▭ Lake
- Note the exceedance frequency categories are reflective of the number of sample periods with exceedances, not the number or values of the exceedances.*

Exceedance colour key

- ▭ No exceedance recorded
- ▭ Low exceedance frequency
- ▭ Moderate exceedance frequency
- ▭ High exceedance frequency

SAMPLE SITE KEY

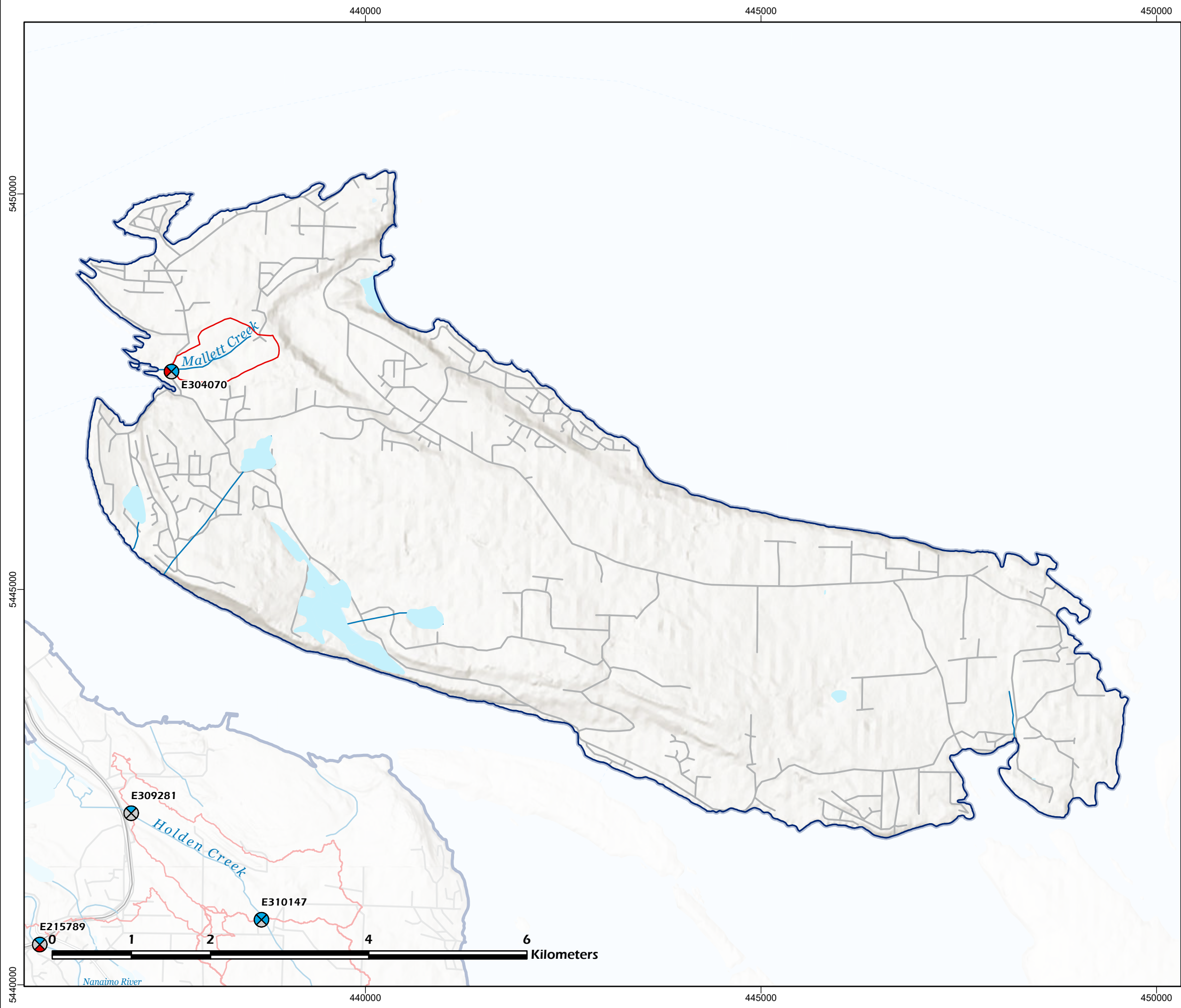


MAP INDEX



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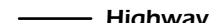



Regional District of Nanaimo

CMMN 2011-2020 Fall Exceedance Assessment

WR7: Gabriola Island





Location: Nanaimo, BC
Project No.: 21-3702
Prepared for: Regional District of Nanaimo
Prepared by: Ecoscape Environmental Consultants Ltd.
Coordinate System: NAD83-UTM Zone 10
Imagery: ESRI Canada

LEGEND

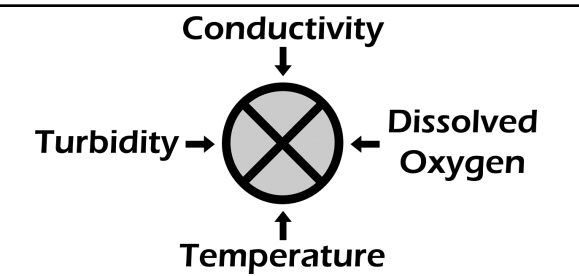
-  Sample Site
-  Stream
-  Highway
-  Watershed
-  Water Region
-  Lake

Note the exceedance frequency categories are reflective of the number of sample periods with exceedances, not the number or values of the exceedances.

Exceedance colour key

-  No exceedance recorded
-  Low exceedance frequency
-  Moderate exceedance frequency
-  High exceedance frequency

SAMPLE SITE KEY

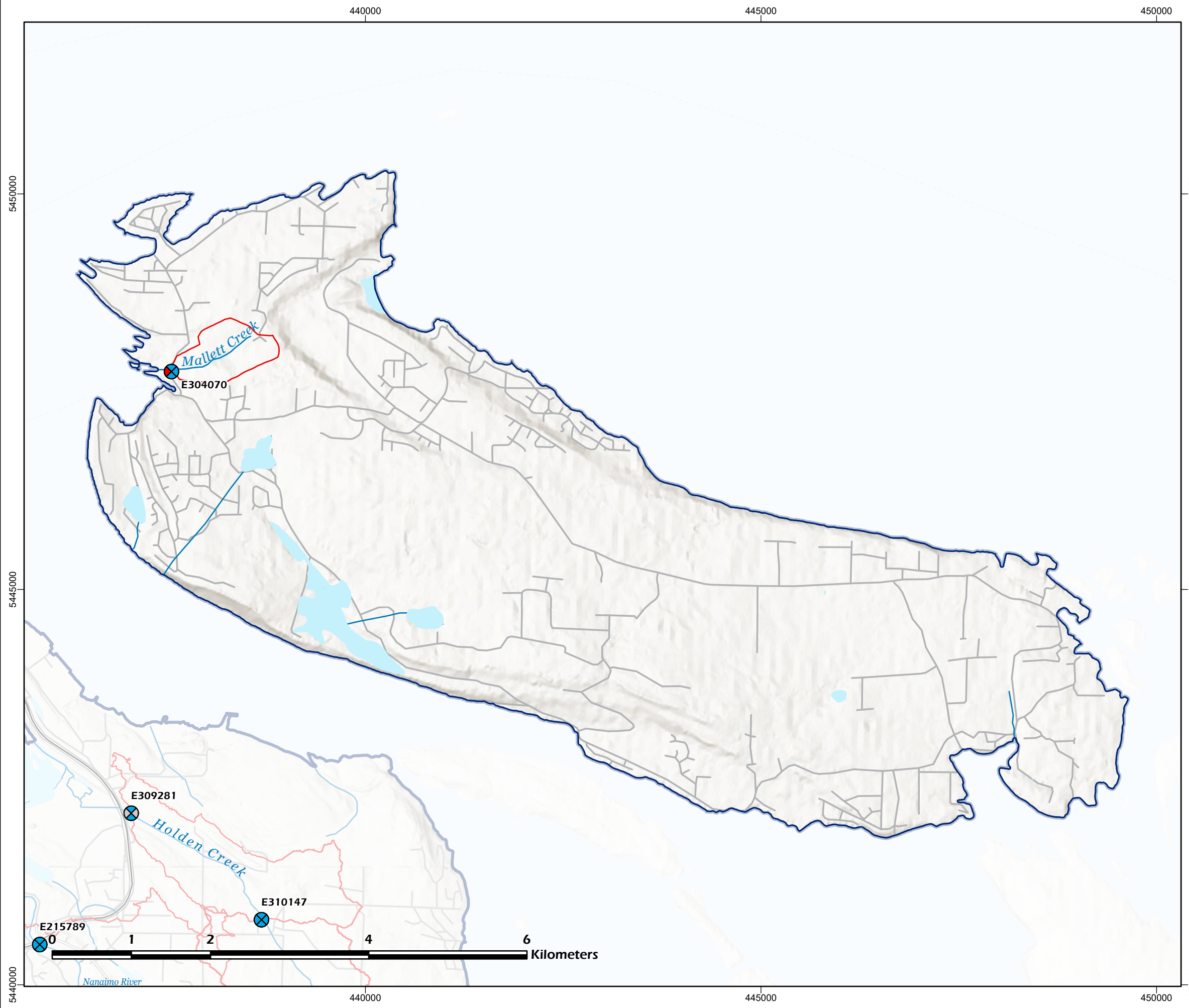


MAP INDEX



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**Gabriola Streamkeepers
2020 Monitoring Sites**

REGIONAL DISTRICT OF NANAIMO

Status	Community Park
Active	Regional Park
Not Active	Provincial Park
Watercourse (approximate location)	2018 Air Photo

0 150 300 600 Meters

July 2019