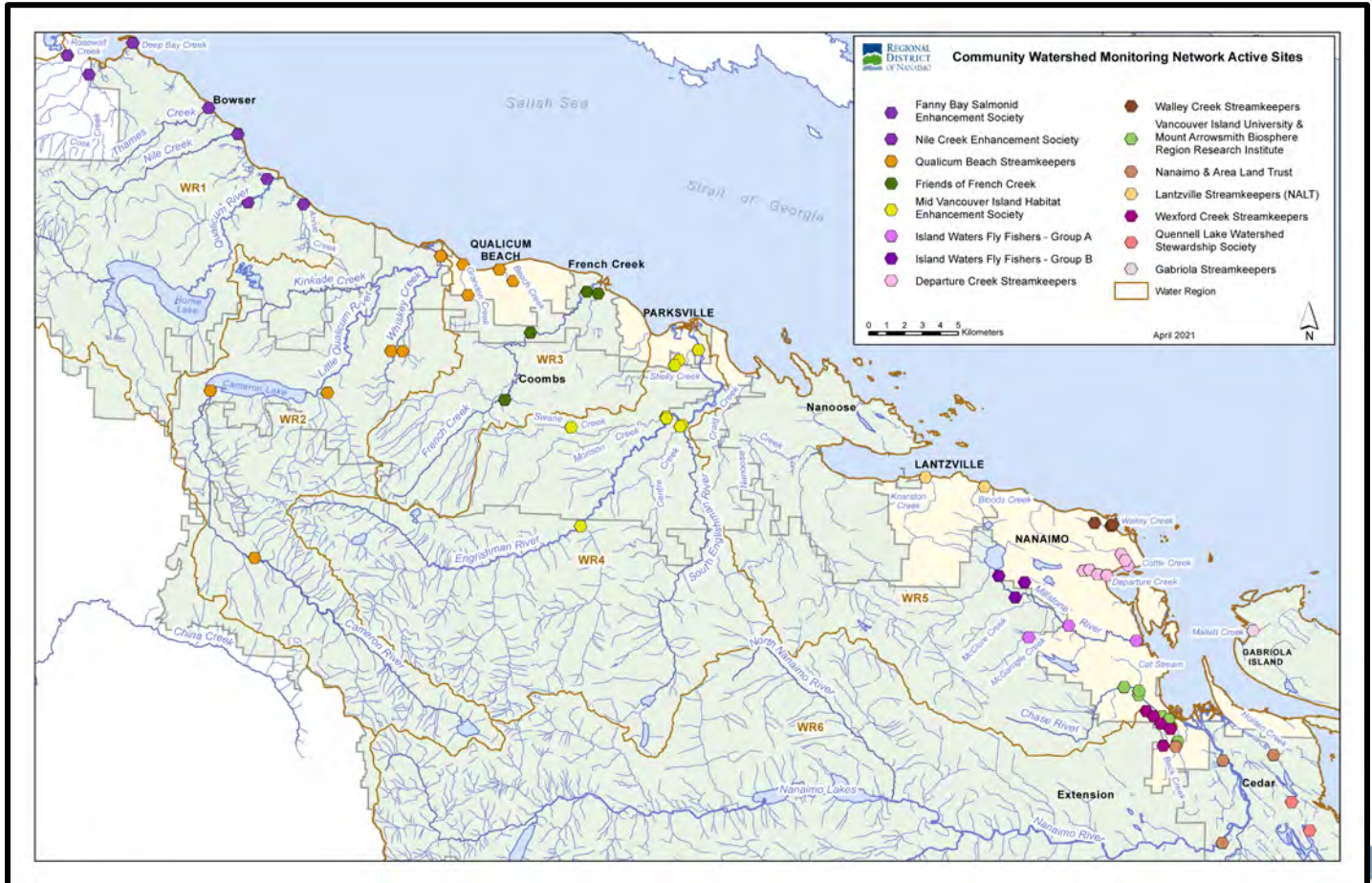


# Community Watershed Monitoring Network 2021 Results by Water Region

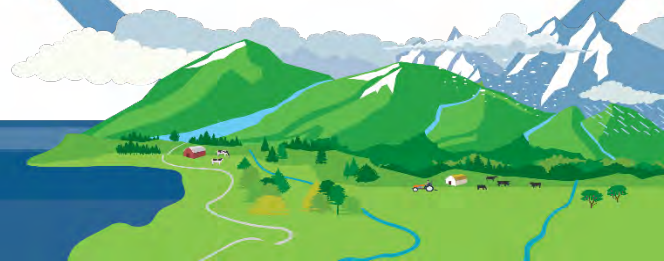


Included in Water Region (WR) 6 package:

1. CWMN WR6 sample sites
2. How to interpret a box plot
3. Box Plot Comparison – 2021 data to previous years: *displayed by parameter (Temperature, Dissolved Oxygen, Turbidity, Conductivity) & sample period (summer, fall)*
4. WxCS CWMN map of sample sites
5. NALT CWMN map of sample sites
6. VIU MABRRI CWMN map of sample sites
7. QLWSS CWMN map of sample sites



Water Region 6  
sampled by:  
**Wexford Creek Streamkeepers (WxCS)**  
&  
**Nanaimo Area Land Trust (NALT)**  
&  
**Mount Arrowsmith Biosphere Region  
Research Institute at VIU (VIU MABRRI)**  
&  
**Quennell Lake Watershed Stewardship  
Society (QLWSS)**

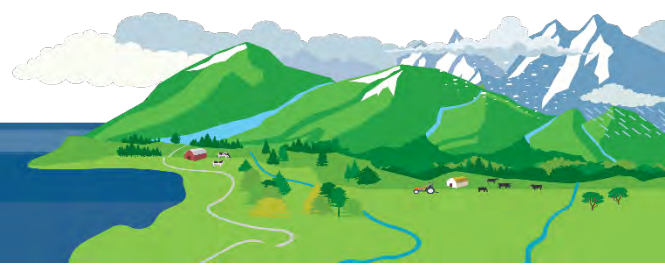


## WR6 CWMN Sample Sites:

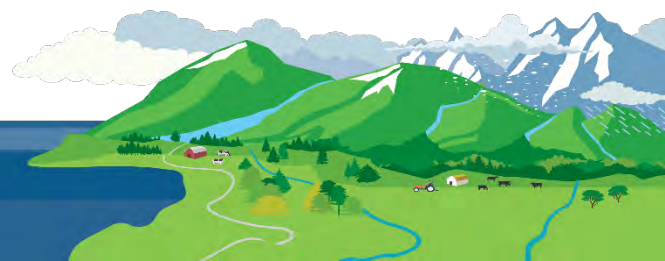
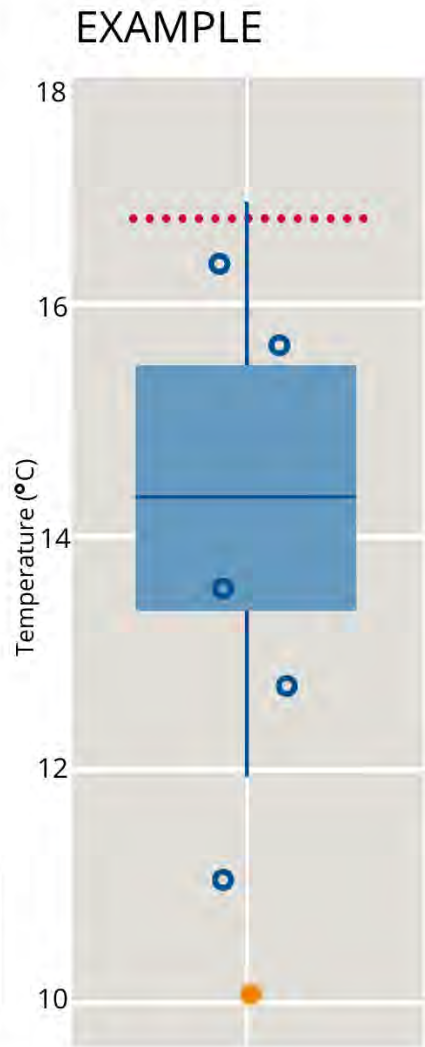
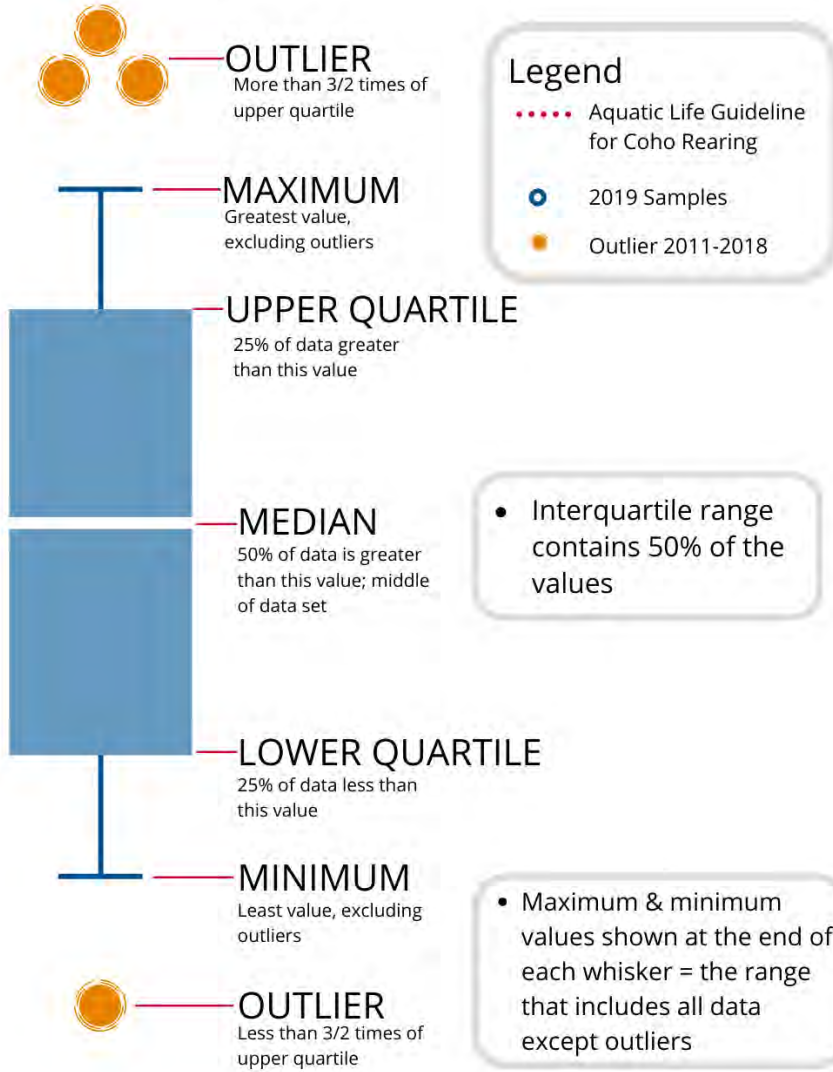
The table below shows the sites monitored by each of the streamkeeper organizations, as well as the number of years and which years a site was sampled. The number of years is important to keep in mind when interpreting the box plots as the plot for each site may contain a slightly different temporal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

Group	EMS ID	Geographic Description	Years Sampled	Years Monitored
WxCS	E318155	South Wexford Ck at Community Park (Glenford Pl)	3	2019 - present
WxCS	E318152	Wexford Ck just d/s Douglas Ave	3	2019 - present
WxCS	E318172	Wexford Ck just u/s seniors complex	3	2019 - present
WxCS	E318153	Wexford Ck just d/s Tenth St	3	2019 - present
WxCS	E318154	Wexford Ck ~20m d/s confluence of N and main arm	3	2019 - present
NALT	E287699	Nanaimo River u/s Haslam Ck ~500m d/s hwy bridge	11	2011 - present
NALT	E215789	Nanaimo River at Cedar Rd bridge	8	2014 - present
NALT	E321395	Richards Creek 5m u/s Frames Rd	2	2020 - present
VIU MABRRI	E290487	Beck Creek @ Cedar Rd	10	2012 - present
QLWSS	E321392	Holden Creek 10m d/s Tiesu Rd	2	2020 - present
NALT	E310147	Holden Creek off East side of Lazo Lane	4.5	2017 – present*
QLWSS	E321393	Unknown Tributary (Haley Creek) 15m d/s Yellow Point Rd	2	2020 - present

*\*Sampled in 2017 fall period only.*

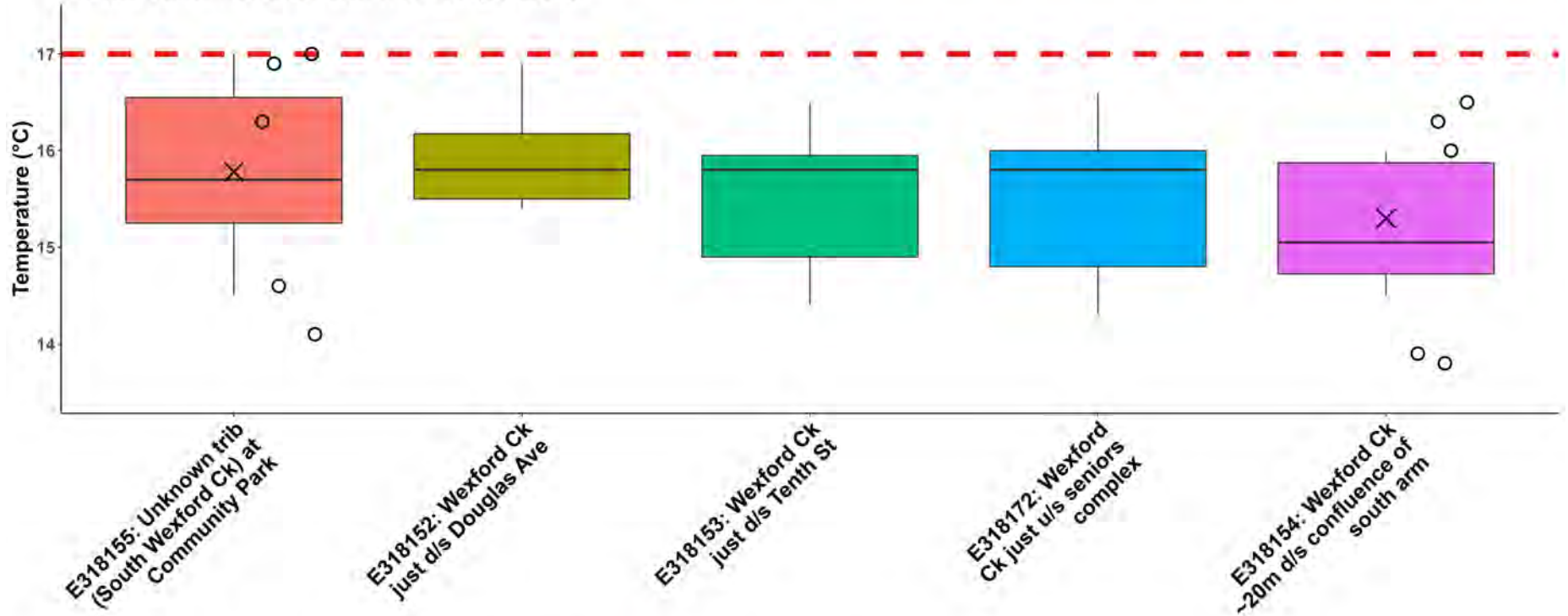


# How to Interpret a Box Plot:

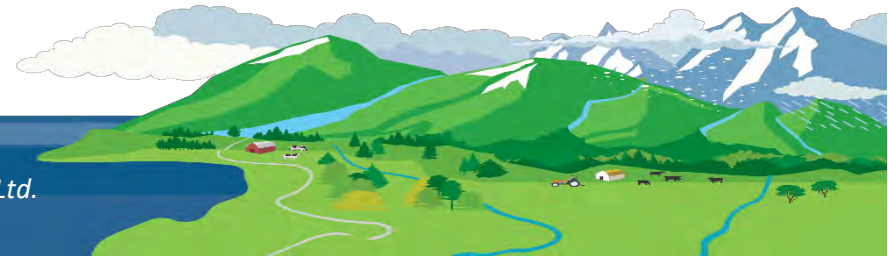




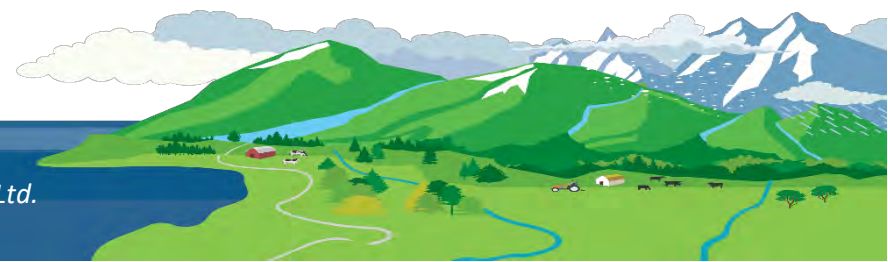
### WR6a: Nanaimo River Summer Temperature



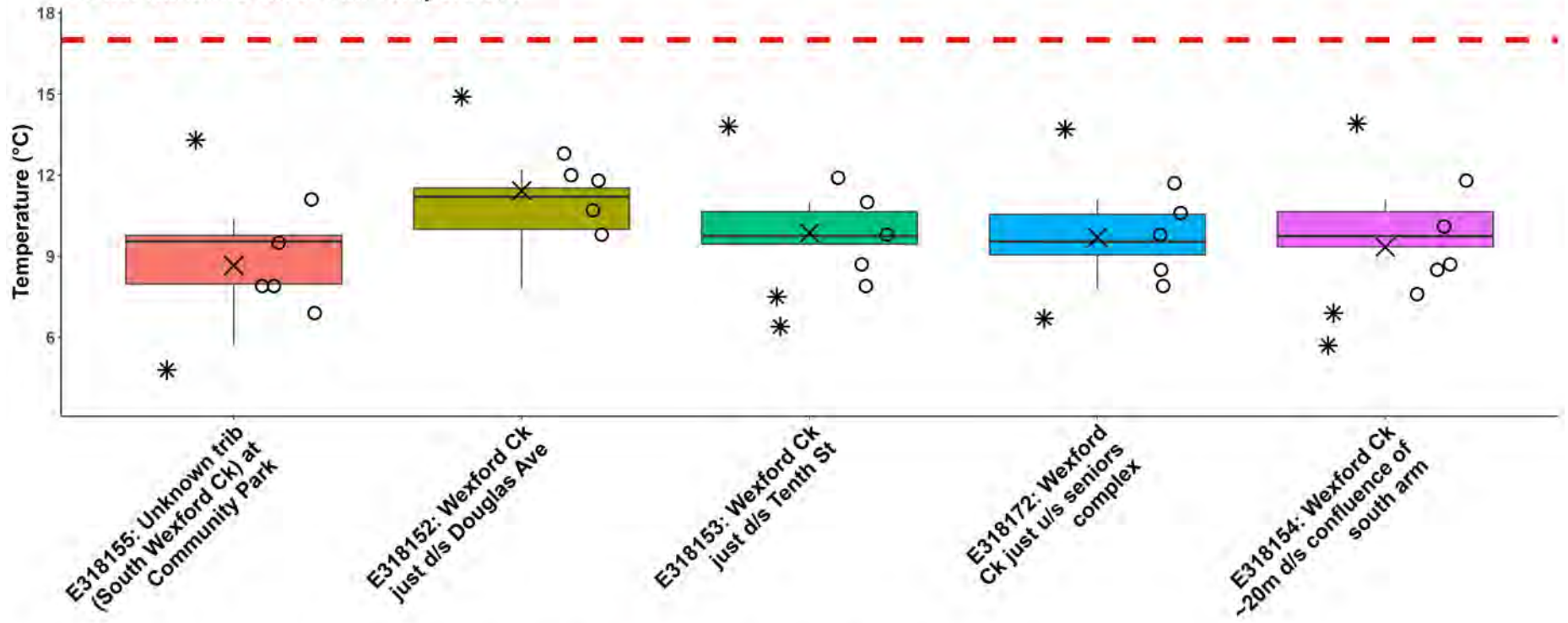
\* Outlier 2019-2020    - Aquatic Life Guideline for Coho Rearing (17°C)  
 ○ 2021 Samples  
 × 2021 30-Day Mean



WR6b: Nanaimo River Summer Temperature



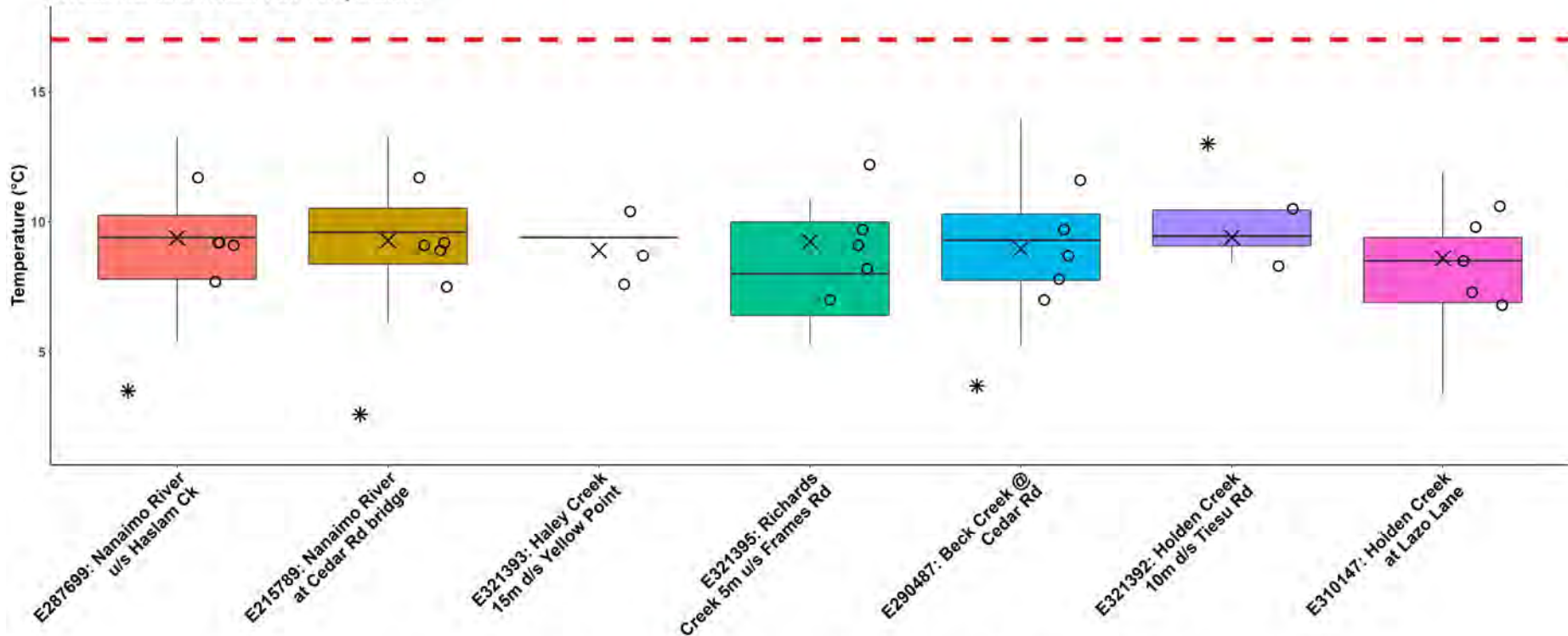
### WR6a: Nanaimo River Fall Temperature



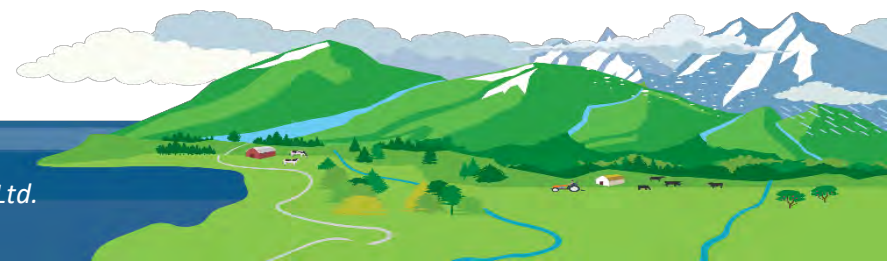
\* Outlier 2019-2020    - Aquatic Life Guideline for Coho Rearing (17°C)  
 ○ 2021 Samples  
 × 2021 30-Day Mean



WR6b: Nanaimo River Fall Temperature

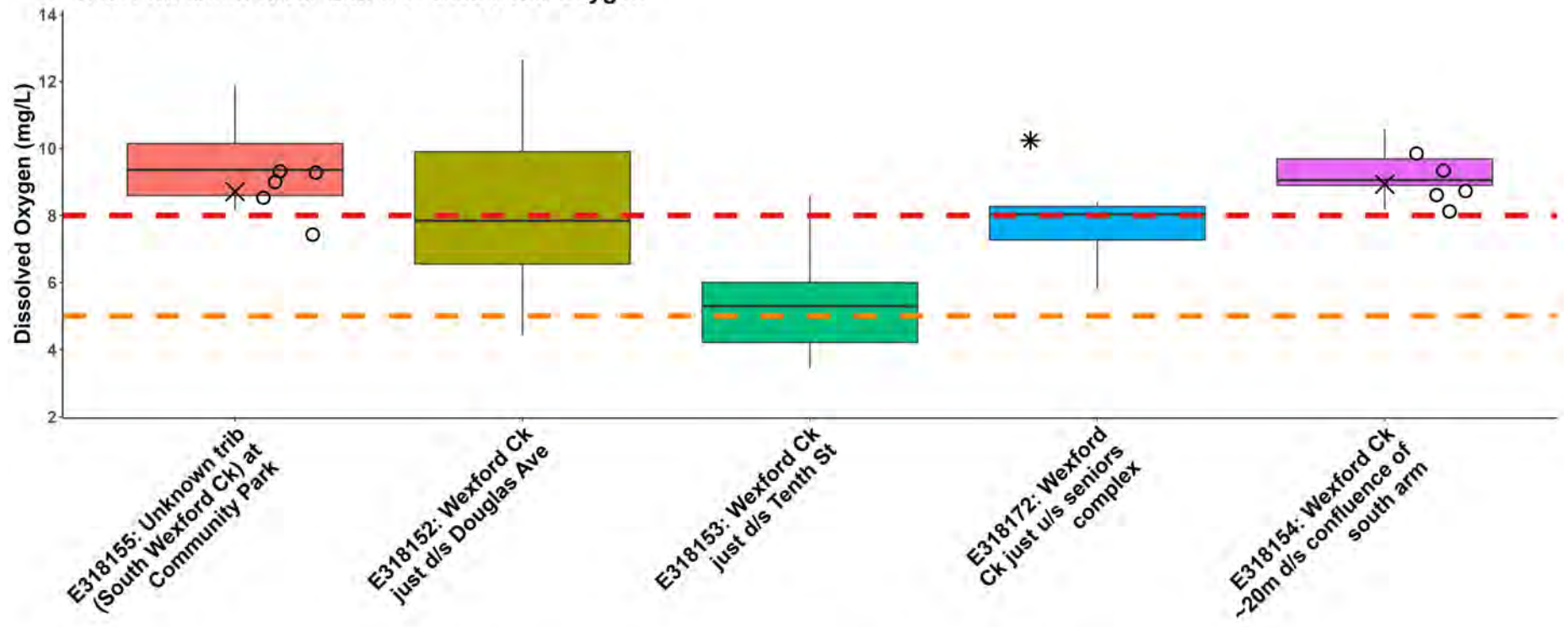


\* Outlier 2011-2020    - Aquatic Life Guideline for Coho Rearing (17°C)  
 ○ 2021 Samples  
 × 2021 30-Day Mean





### WR6a: Nanaimo River Summer Dissolved Oxygen

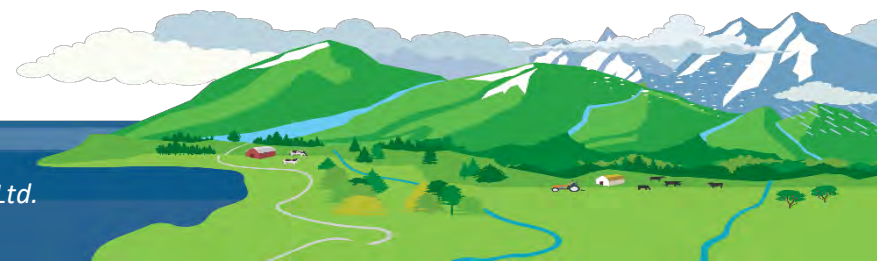
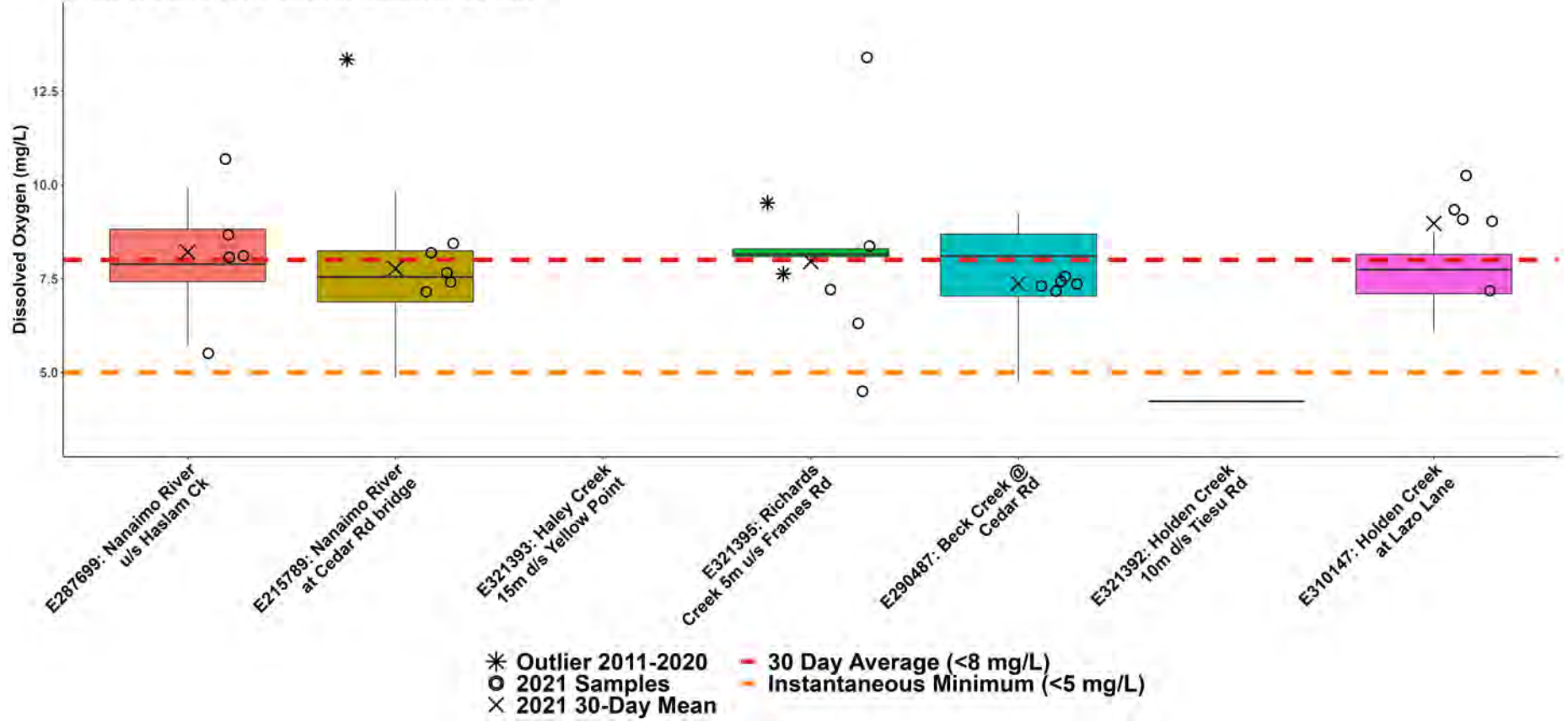


\* Outlier 2019-2020      - 30 Day Average (<8 mg/L)  
 ○ 2021 Samples            - Instantaneous Minimum (<5 mg/L)  
 × 2021 30-Day Mean

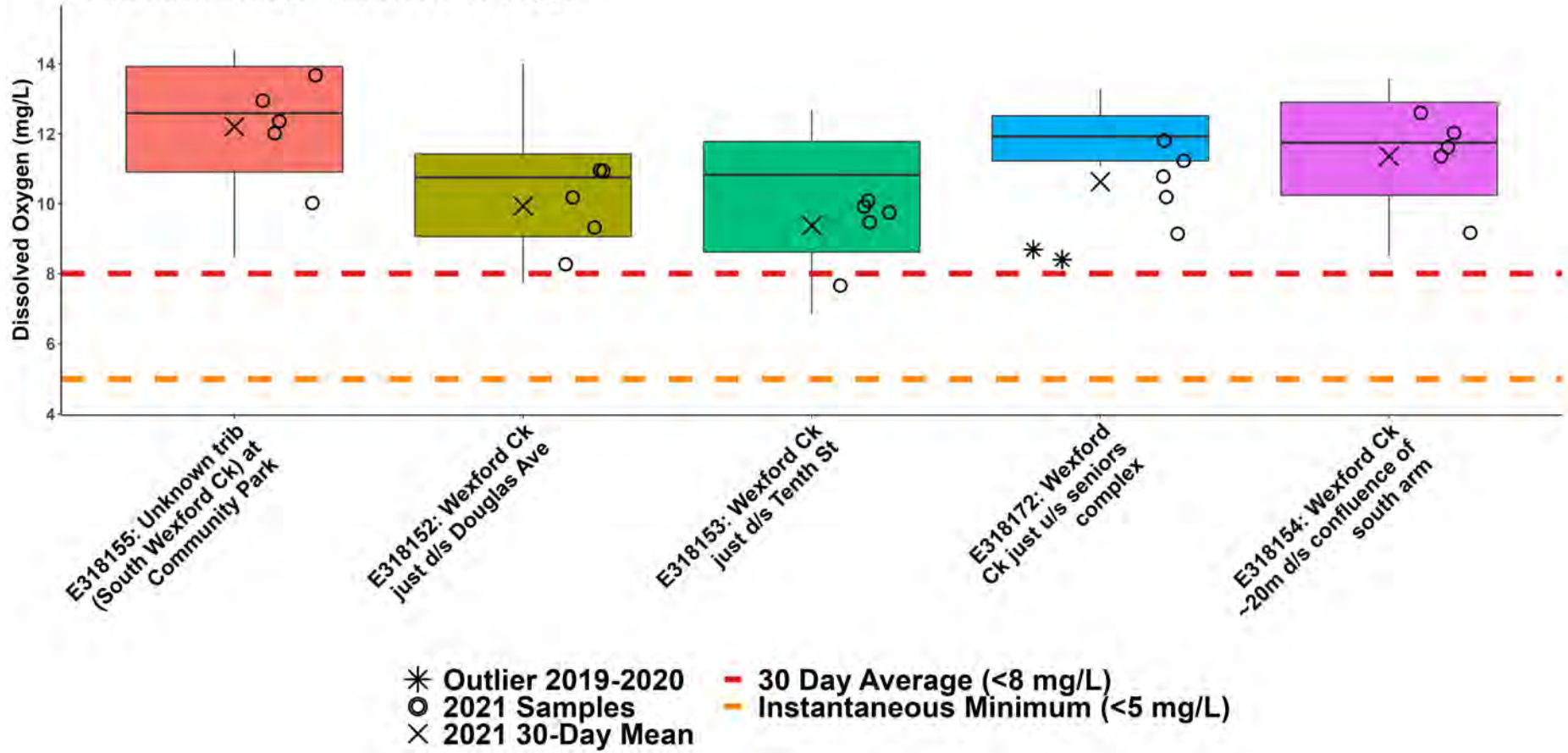




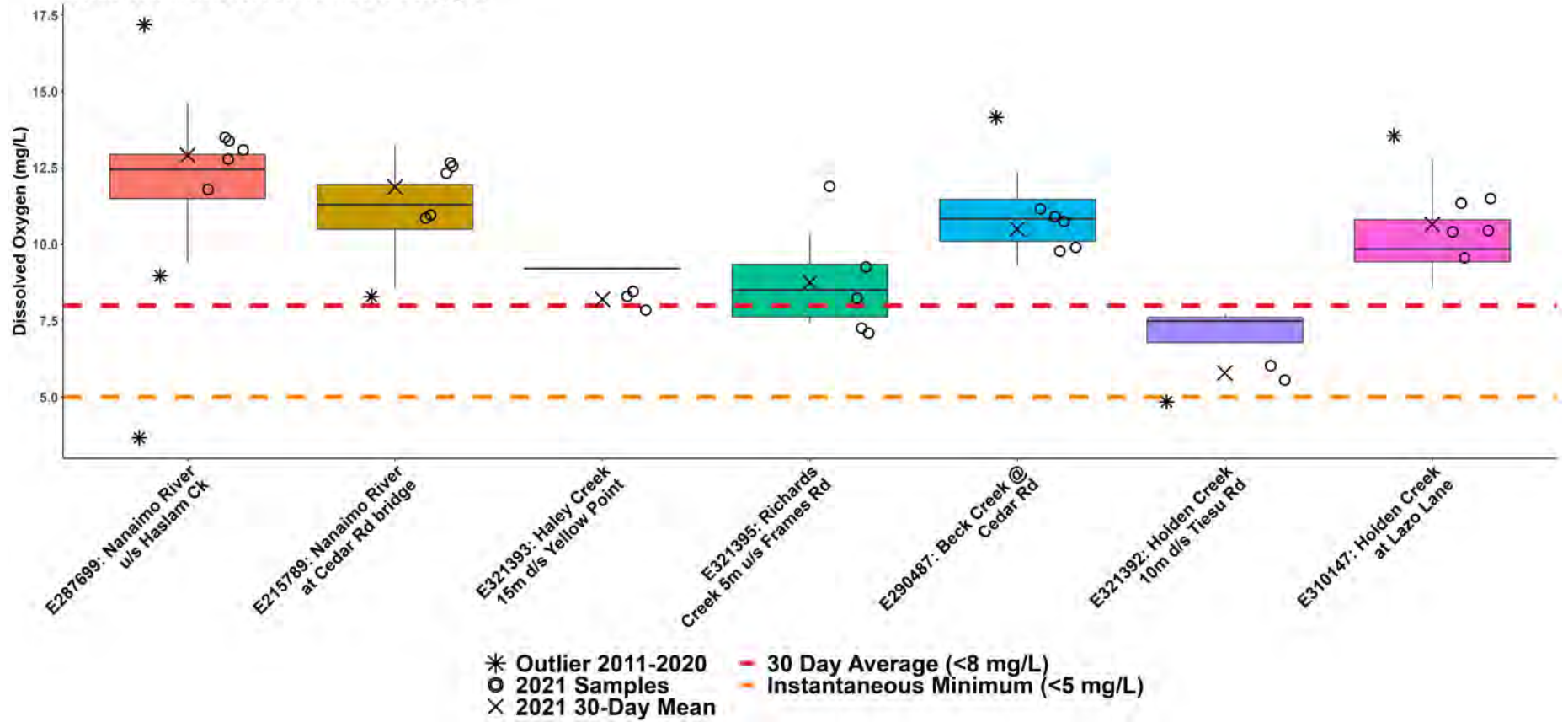
WR6b: Nanaimo River Summer Dissolved Oxygen



### WR6a: Nanaimo River Fall Dissolved Oxygen

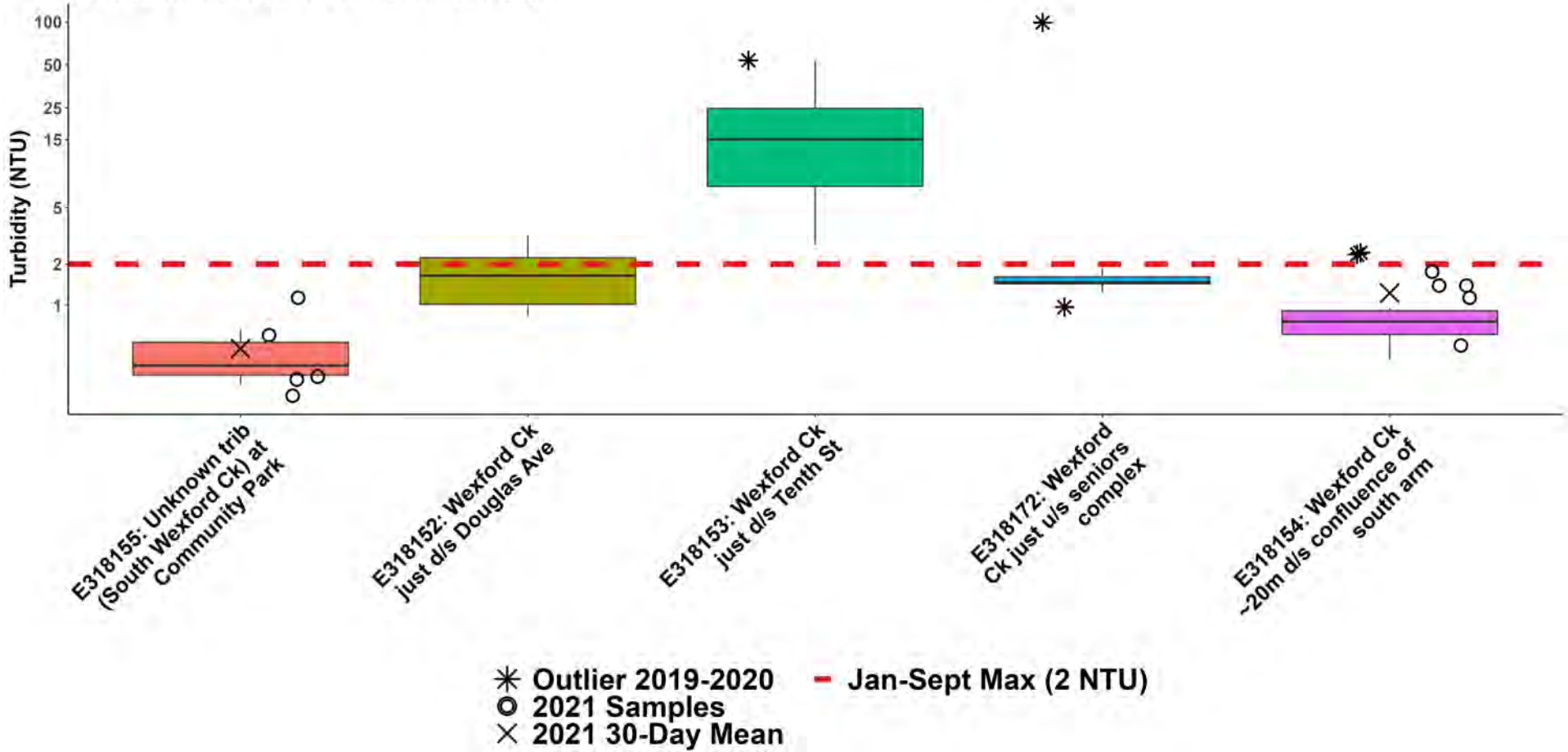


### WR6b: Nanaimo River Fall Dissolved Oxygen

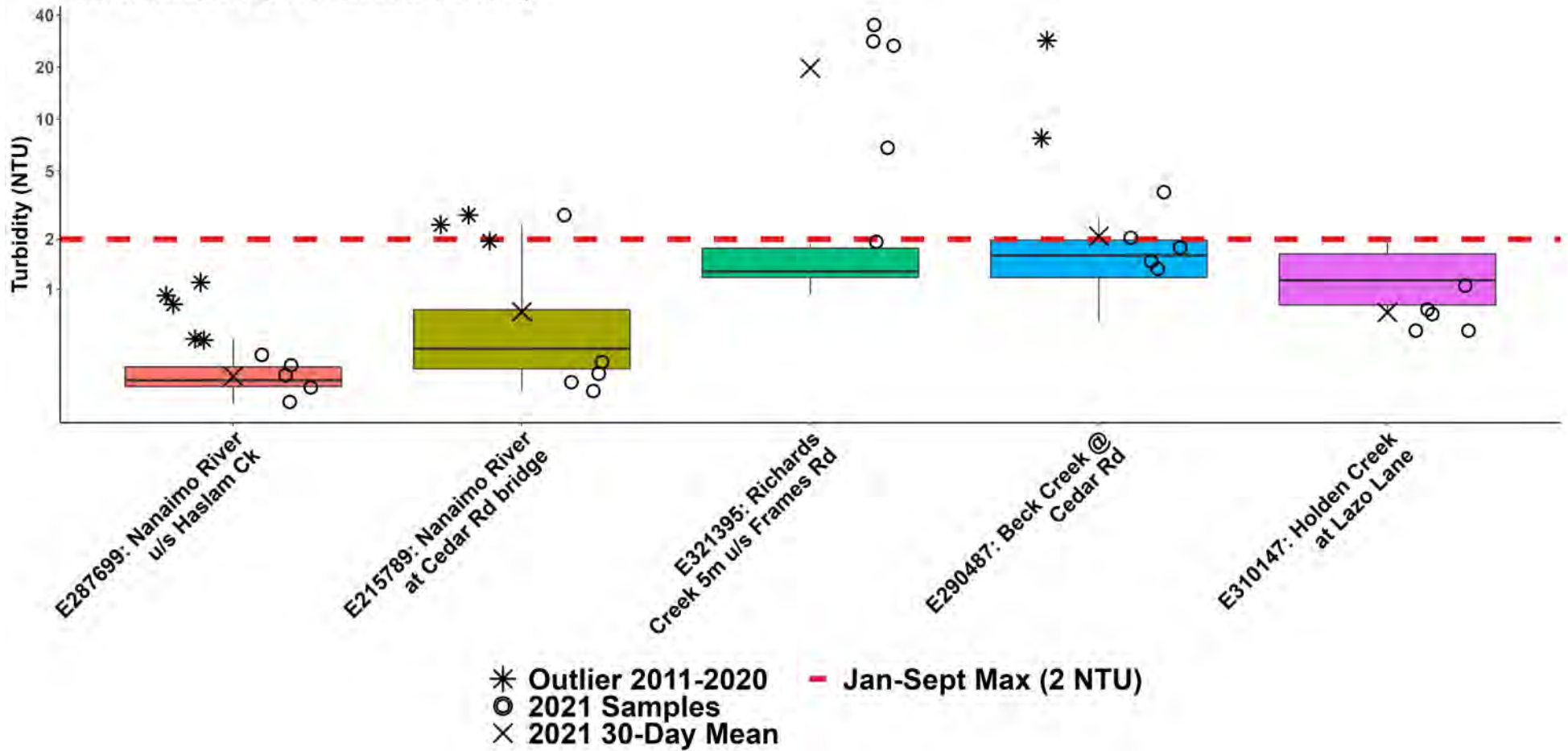




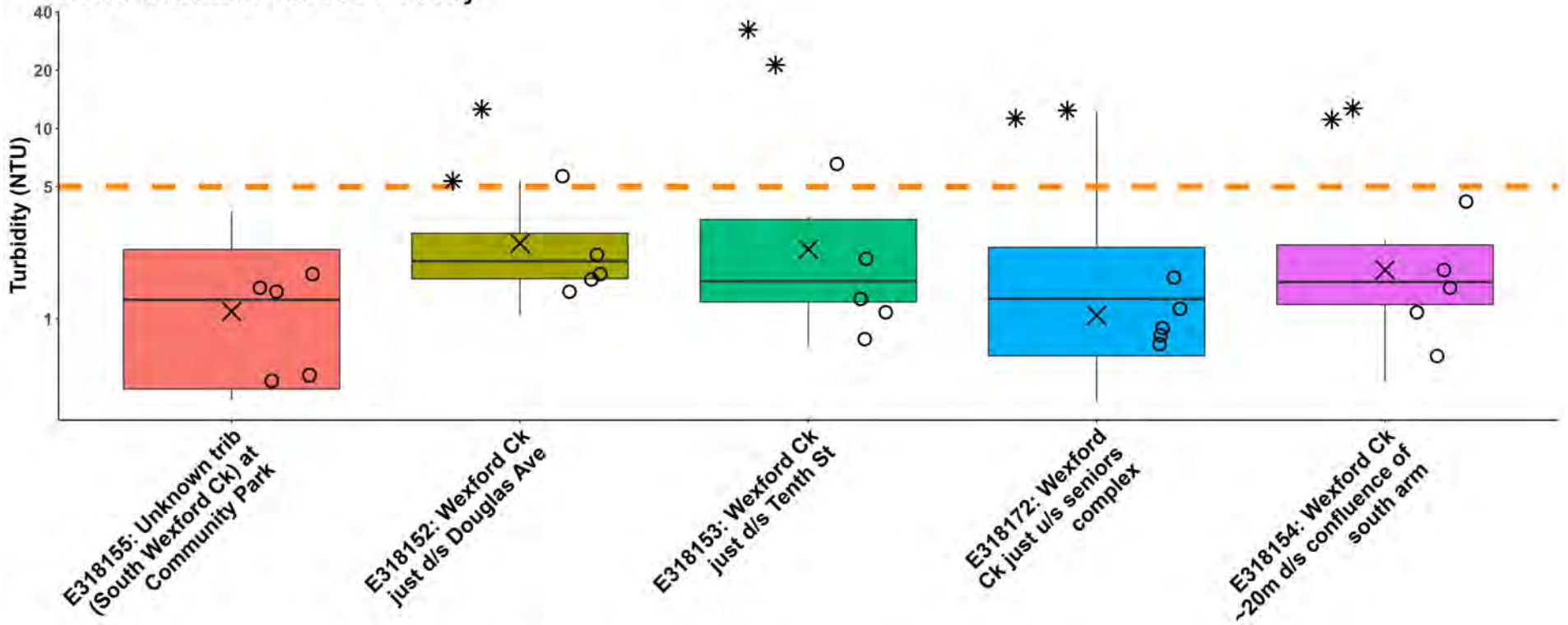
### WR6a: Nanaimo River Summer Turbidity



### WR6b: Nanaimo River Summer Turbidity



### WR6a: Nanaimo River Fall Turbidity

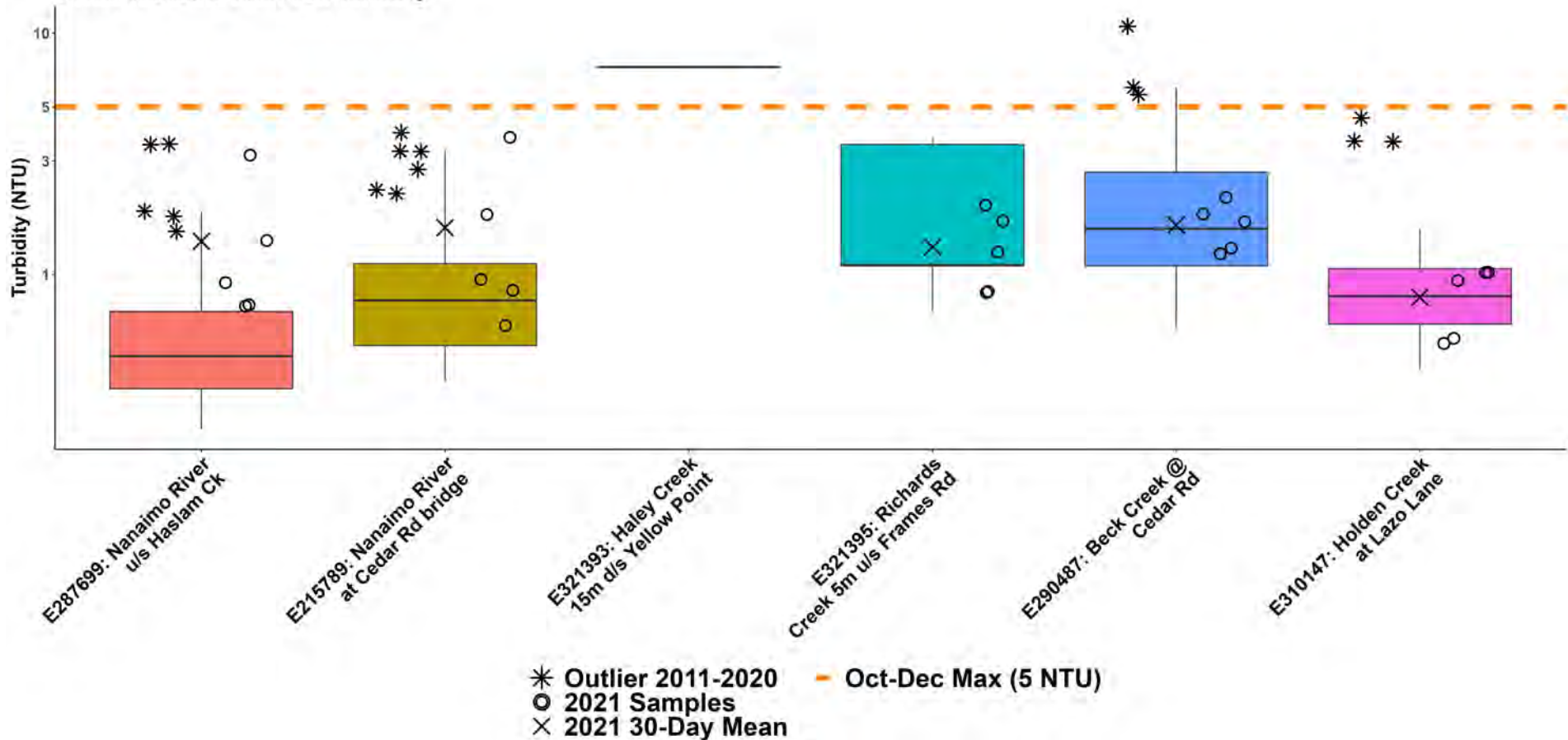


\* Outlier 2019-2020    — Oct-Dec Max (5 NTU)  
 ○ 2021 Samples  
 × 2021 30-Day Mean

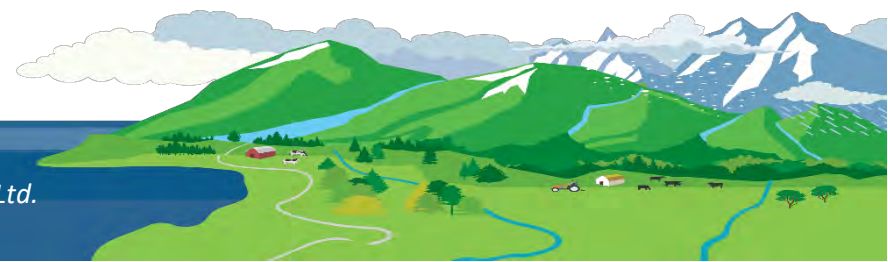
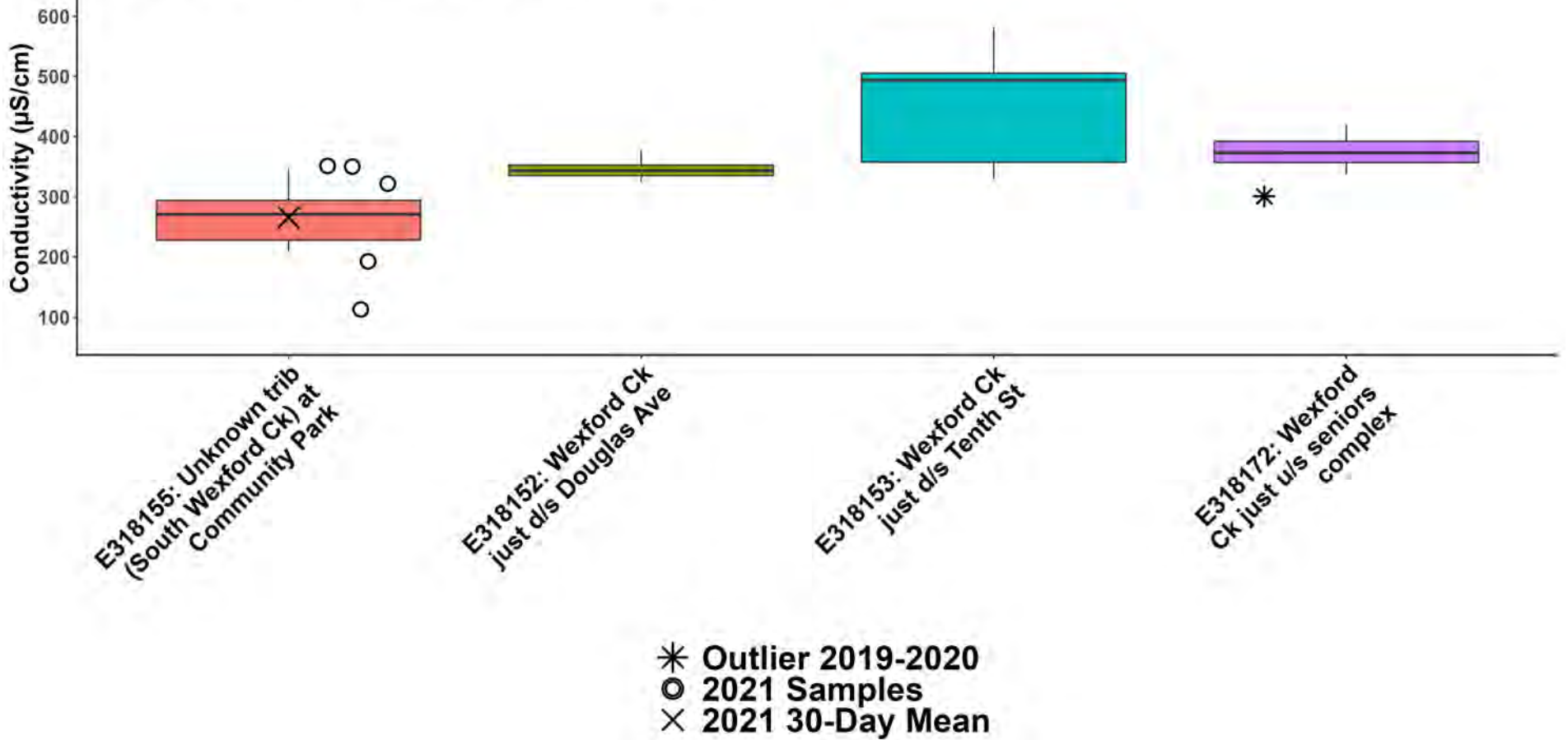


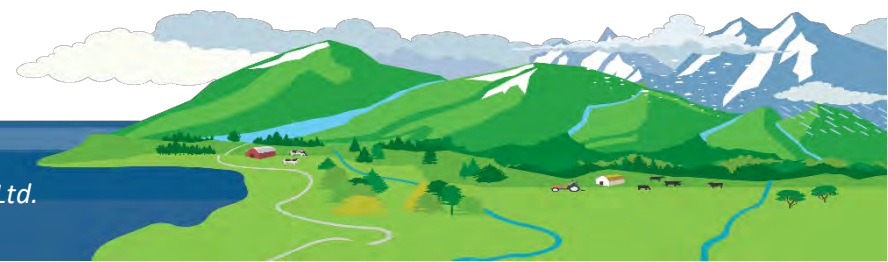
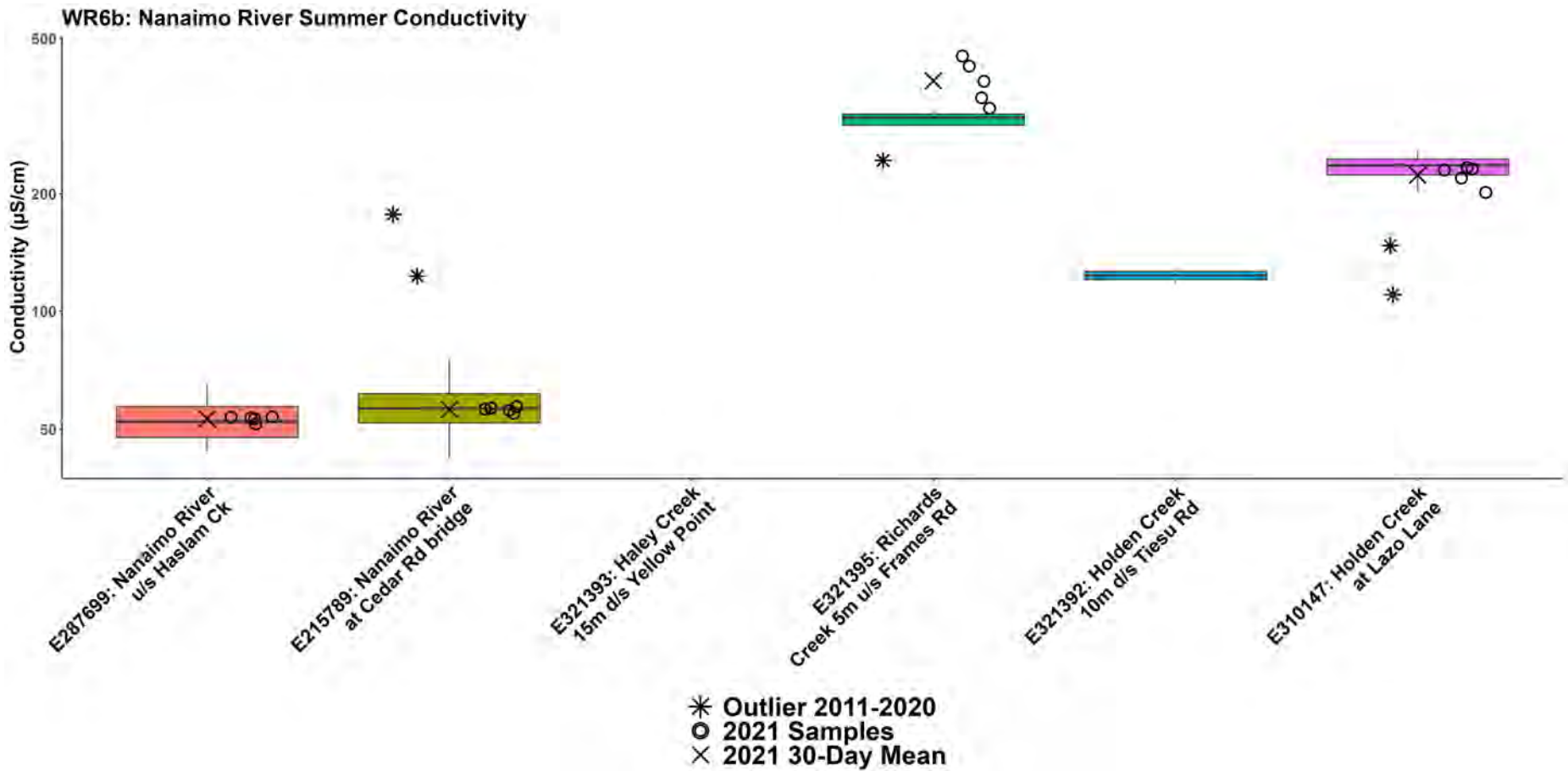


### WR6b: Nanaimo River Fall Turbidity



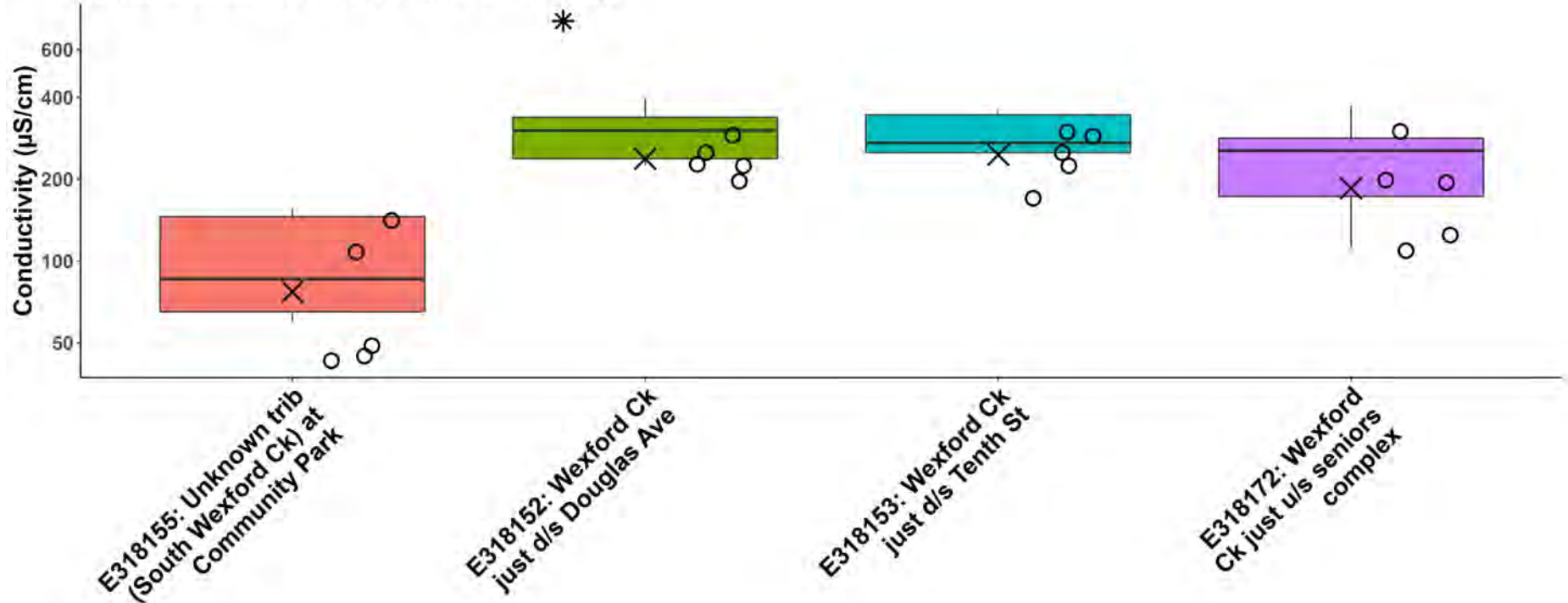
### WR6a: Nanaimo River Summer Conductivity



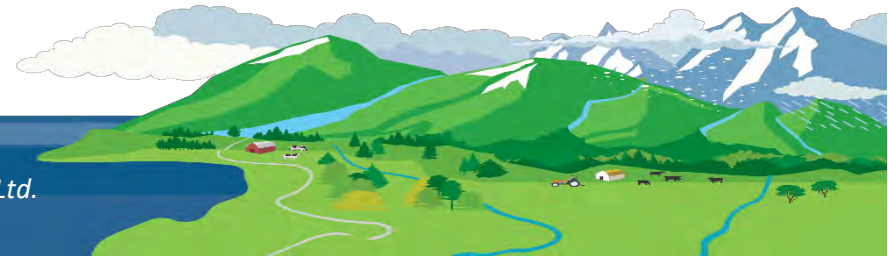




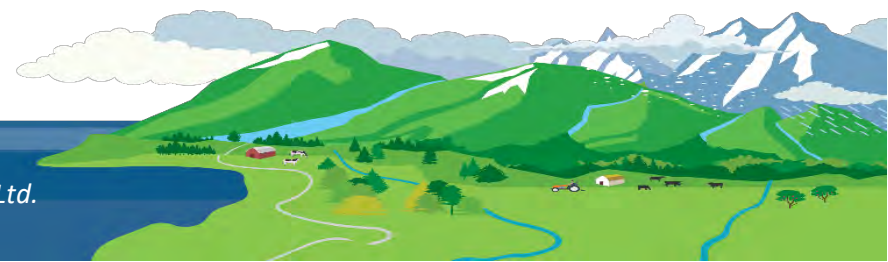
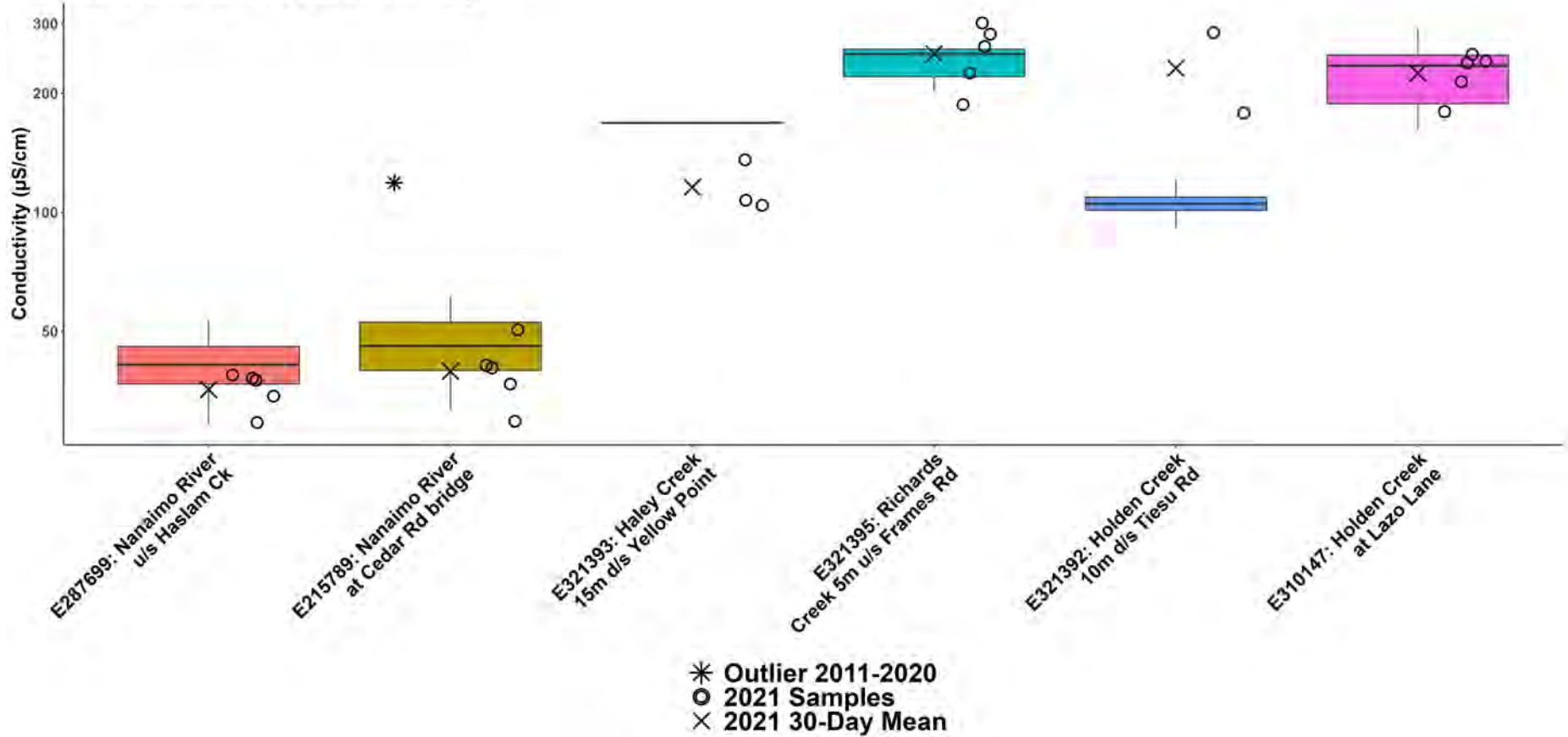
### WR6a: Nanaimo River Fall Conductivity



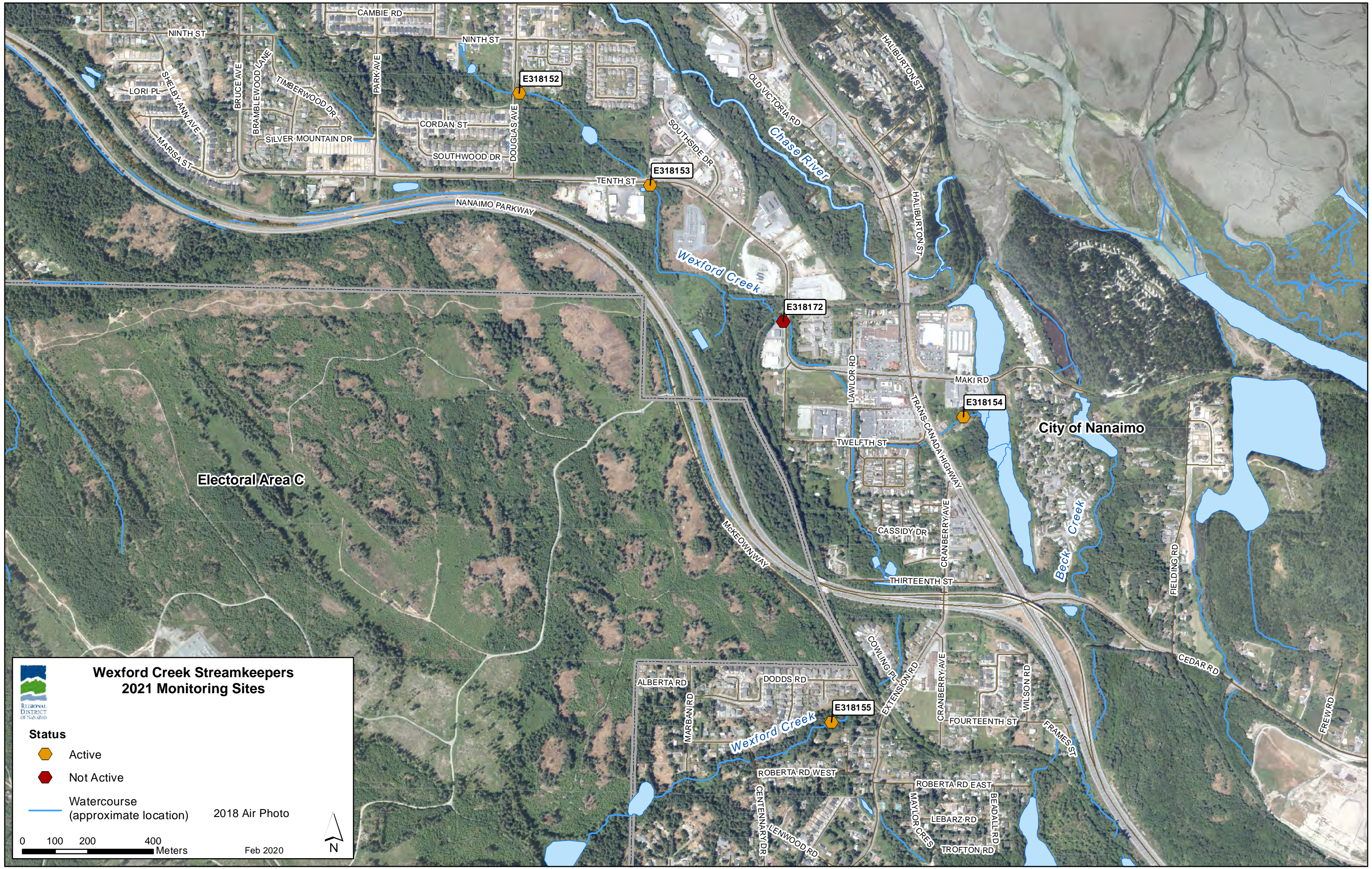
\* Outlier 2019-2020  
 ○ 2021 Samples  
 × 2021 30-Day Mean



### WR6b: Nanaimo River Fall Conductivity







**Wexford Creek Streamkeepers  
2021 Monitoring Sites**

REGIONAL DISTRICT OF NANAIMO

**Status**

- Active
- Not Active

**Watercourse**  
(approximate location)     2018 Air Photo

0    100    200    400  
Meters








Feb 2020





**Nanaimo & Area Land Trust  
2021 Monitoring Sites**

RD

<b>Status</b>	 Active	 Community Park
	 Not Active	 Regional Park
		 Provincial Park
<b>Watercourse</b> (approximate location)		 2018 Air Photo

0 250 500 1,000 Meters

October 2020



N





**Vancouver Island University**  
**Coastal Hydrology and Climate Change**  
**Research Lab**  
**2021 Monitoring Sites**


**Status**

-  Active
-  Not Active

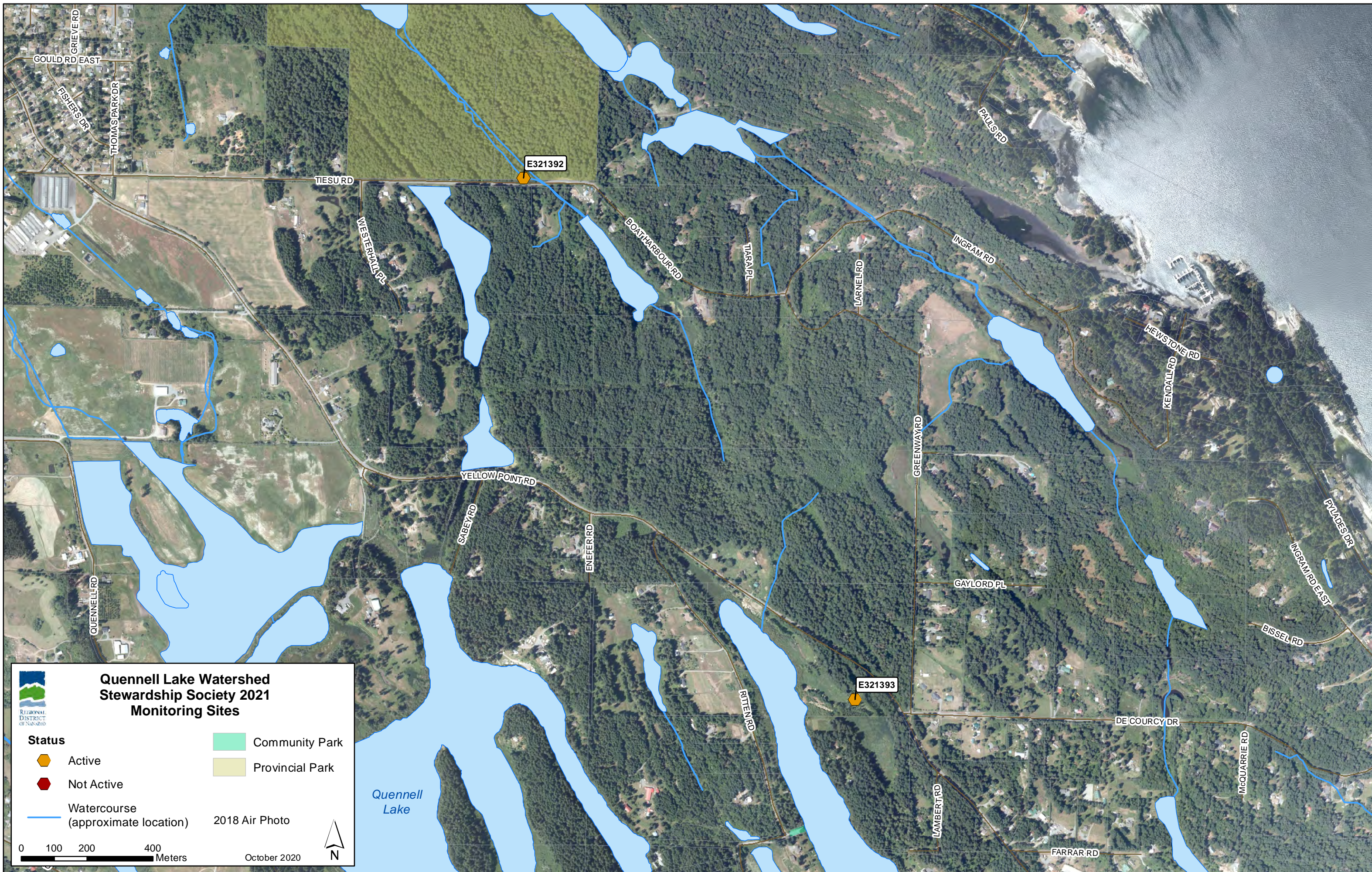
**Watercourse**  
 (approximate location)    2018 Air Photo

0    100    200    400  
 Meters

July 2019







**Quennell Lake Watershed Stewardship Society 2021 Monitoring Sites**

REGIONAL DISTRICT OF NANAIMO

<b>Status</b>	Community Park
Active	Provincial Park
Not Active	
Watercourse (approximate location)	2018 Air Photo

0 100 200 400 Meters

October 2020

N

E321392

E321393

Quennell Lake

Map labels include: GRIEVE RD, GOULD RD EAST, FISHERS DR, THOMAS PARK DR, TIESU RD, WESTERHILL PL, BOATHARBOUR RD, TIARA PL, LARNEL RD, INGRAM RD, PAULS RD, QUENNEL RD, YELLOW POINT RD, SABEY RD, ENEFER RD, GREENWAY RD, GAYLORD PL, HEWSTONE RD, KENDALL RD, RITEN RD, LAMBERT RD, FARRAR RD, DE COURCY DR, McQUARRIE RD, BISSSEL RD, INGRAM RD EAST, PVLADES DR.