Community Watershed Monitoring Network 2023 Results by Water Region

Community Watershed Monitoring Network Active Sites

- Fanny Bay Salmonid Enhancement Society
- Nile Creek Enhancement Society
- Qualicum Beach Streamkeepers
- Friends of French Creek Conservation Society
- Mid Vancouver Island Habitat Enhancement Society
- MVIHES Nanoose Group
- Island Waters Fly Fishers - Group A
- Island Waters Fly Fishers - Group B
- Departure Creek Streamkeepers
- Walley Creek Streamkeepers
- Cat Stream Stewardship Group
- Wexford Creek Streamkeepers
- Nanaimo & Area Land Trust
- Gabriola Streamkeepers
- Water Region

0 1 2 3 4 5 Kilometers   Sept. 2023

Included in Water Region (WR) 7 package:

1. CWMN WR7 sample sites
2. How to interpret a box plot
3. Box Plot Comparison – 2023 data to previous years: *displayed by parameter (Turbidity, Dissolved Oxygen, Temperature, Conductivity) & sample period (summer, fall)*
4. Gabriola Streamkeepers (GSK) map

Water Region 7 sampled by:

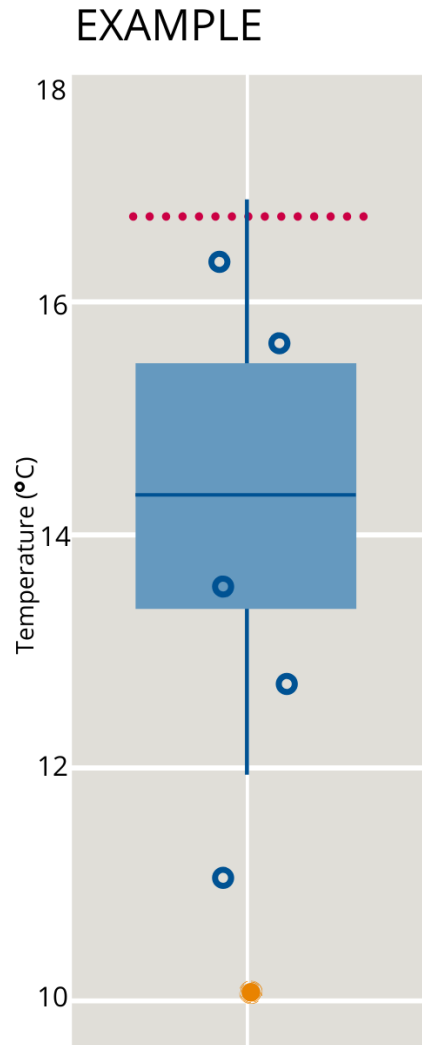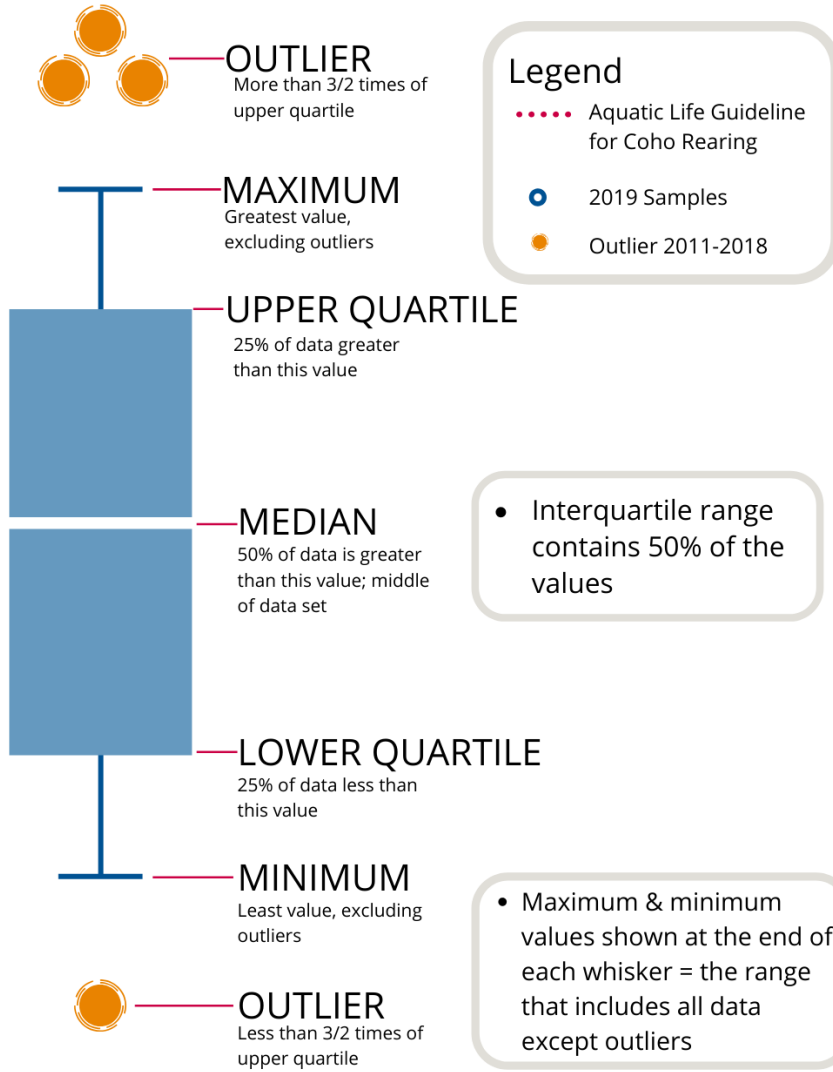**Gabriola Streamkeepers (GSK)**

WR7 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.
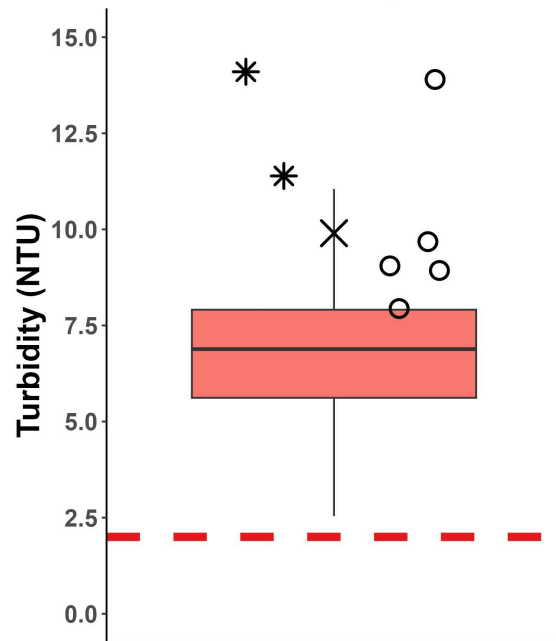
Group	EMS ID	Geographic Description	Years Sampled	Years Monitored
GSk	E304070	Mallett Creek 40m upstream from Taylor Bay Rd	9	2015 - present

How to Interpret a Box Plot:

OUTLIER
More than 3/2 times of upper quartile

MAXIMUM
Greatest value, excluding outliers

UPPER QUARTILE
25% of data greater than this value

MEDIAN
50% of data is greater than this value; middle of data set

LOWER QUARTILE
25% of data less than this value

MINIMUM
Least value, excluding outliers

OUTLIER
Less than 3/2 times of upper quartile

Legend
- • • • • Aquatic Life Guideline for Coho Rearing
- ⊙ 2019 Samples
- ● Outlier 2011-2018

- Interquartile range contains 50% of the values

- Maximum & minimum values shown at the end of each whisker = the range that includes all data except outliers

EXAMPLE

Temperature (°C)

18
16
14
12
10

**WR7: Gabriola Island
Summer Turbidity**

Turbidity (NTU)

E304070: Mallett Creek

✳ Outlier 2015-2022
⊚ 2023 Samples
✕ 2023 30-Day Mean
━ Jan-Sept Max (2 NTU)

**WR7: Gabriola Island
Fall Turbidity**

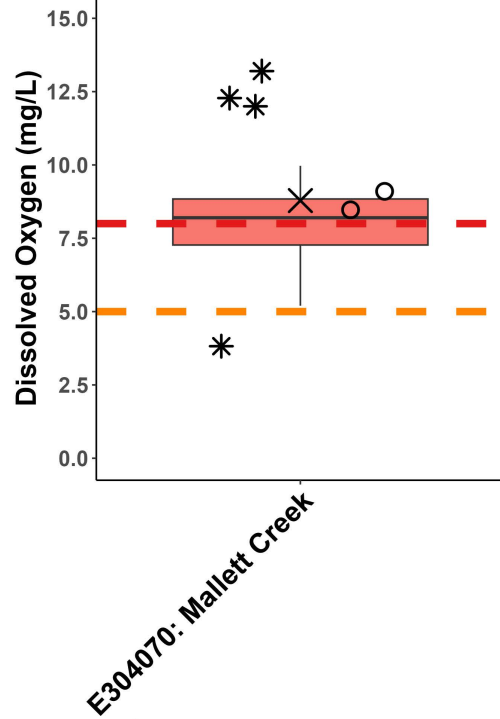Turbidity (NTU)
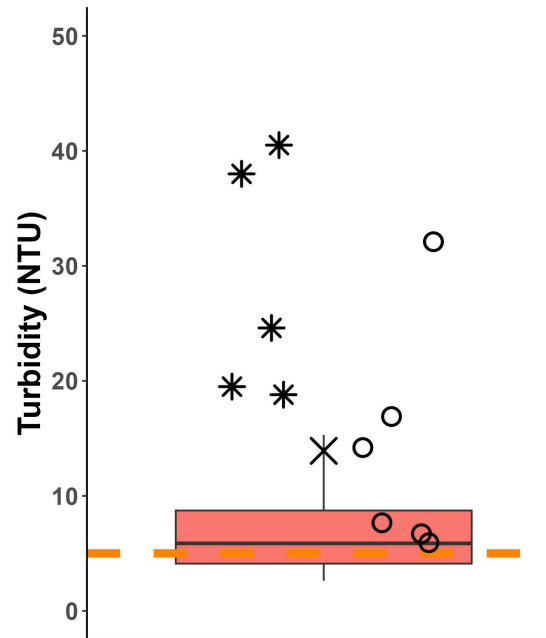
E304070: Mallett Creek

✳ Outlier 2015-2022
⊚ 2023 Samples
✕ 2023 30-Day Mean
━ Oct-Dec Max (5 NTU)

Created for the RDN's Community Watershed Monitoring Network using 2023 data collected by local Streamkeepers. Charts produced by Ecoscape Environmental Consultants Ltd. Question? Call 250-390-6560 or email watermonitoring@rdn.bc.ca
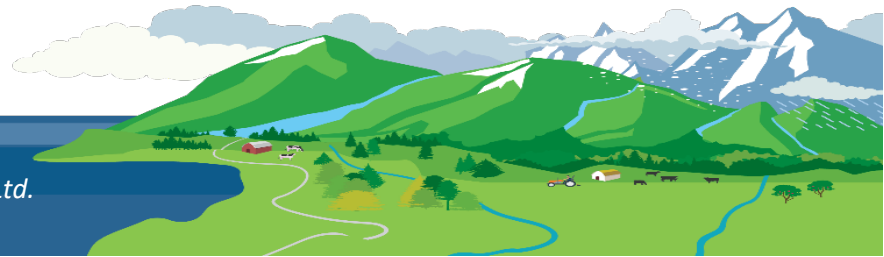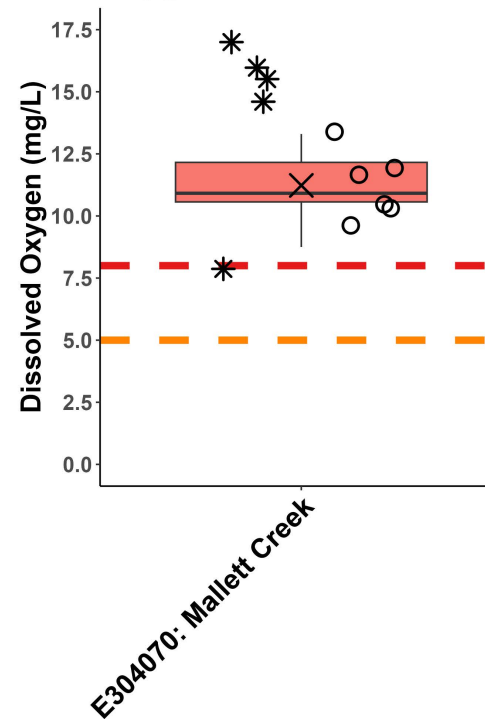
WR7: Gabriola Island
Summer Dissolved
Oxygen

WR7: Gabriola Island
Fall Dissolved
Oxygen

E304070: Mallett Creek

✳ Outlier 2015-2022
◎ 2023 Samples
✕ 2023 30-Day Mean
━ 30 Day Average (<8 mg/L)
━ Instantaneous Minimum (<5 mg/L)

WR7: Gabriola Island
Summary Temperature
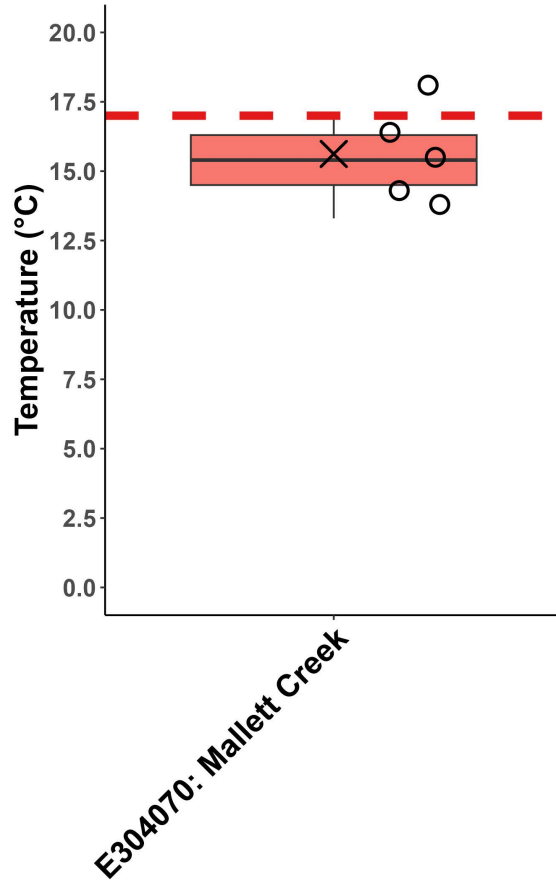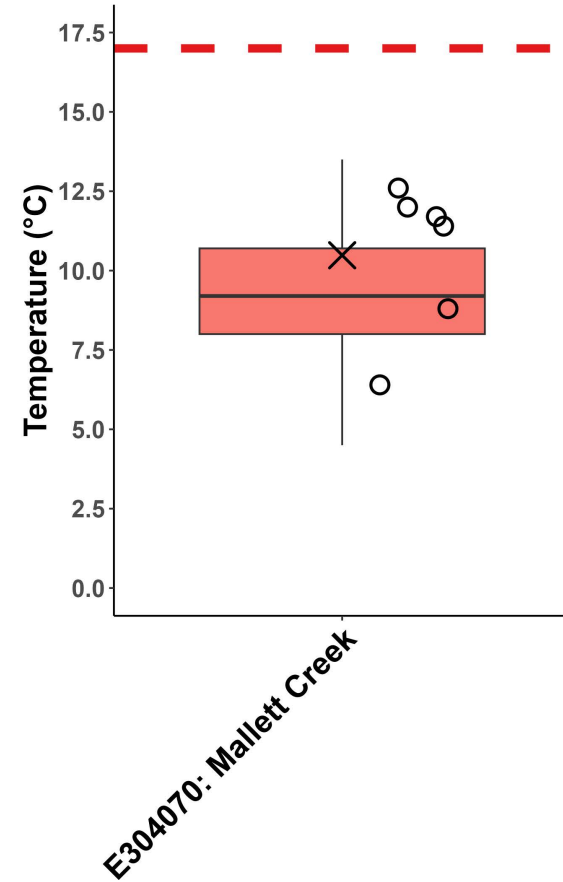
WR7: Gabriola Island
Summer Temperature

Temperature (°C)

20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0

E304070: Mallett Creek

✳ Outlier 2015-2022
⊚ 2023 Samples
✕ 2023 30-Day Mean
▬ ▬ Aquatic Life Guideline
for Coho Rearing (17°C)

WR7: Gabriola Island
Fall Temperature

Temperature (°C)

17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0

E304070: Mallett Creek

✳ Outlier 2015-2022
⊚ 2023 Samples
✕ 2023 30-Day Mean
▬ ▬ Aquatic Life Guideline
for Coho Rearing (17°C)

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WR7: Gabriola Island
Summer Conductivity
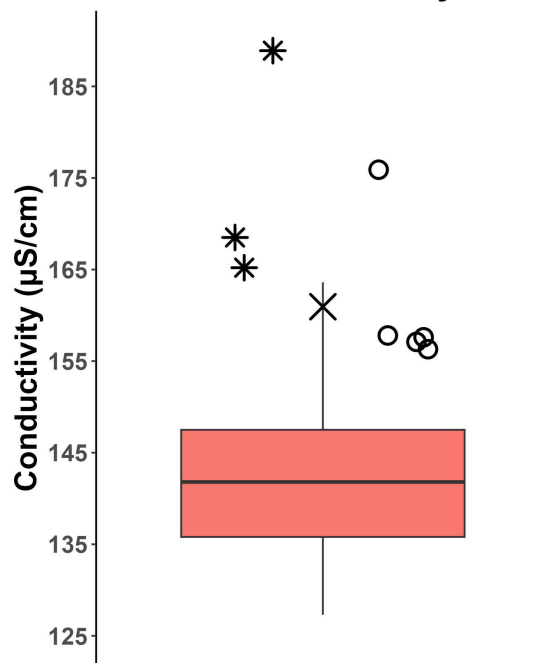
WR7: Gabriola Island
Fall Conductivity

Conductivity (µS/cm)
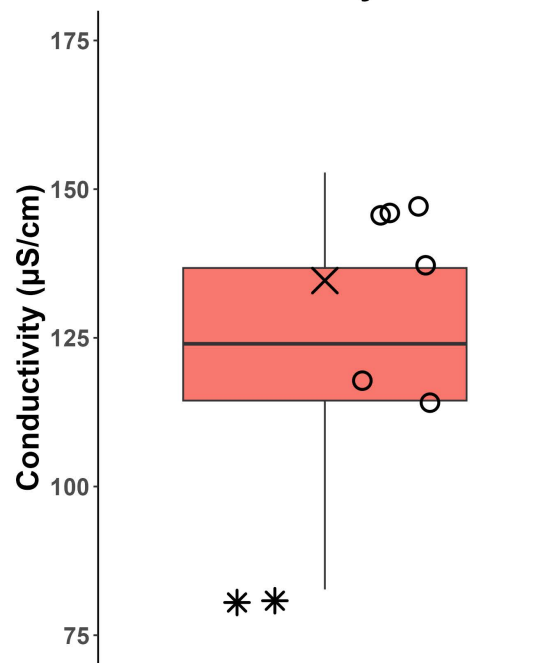
E304070: Mallett Creek

✳ Outlier 2015-2022
◎ 2023 Samples
✕ 2023 30-Day Mean

Gabriola Streamkeepers
2023 Monitoring Sites

Status
⬡ Active
⬡ Not Active

── Watercourse
   (approximate location)

Community Park
Regional Park
Provincial Park

2022 Air Photo

0 125 250   500
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