


Stormwater Monitoring Program

CRD Environmental Protection Division

Making a difference...together

Our Program

Making a difference...together

Works with local governments, First Nations,
various jurisdictions & communities
to maintain healthy watersheds &
protect the nearshore receiving environment.

Our Program

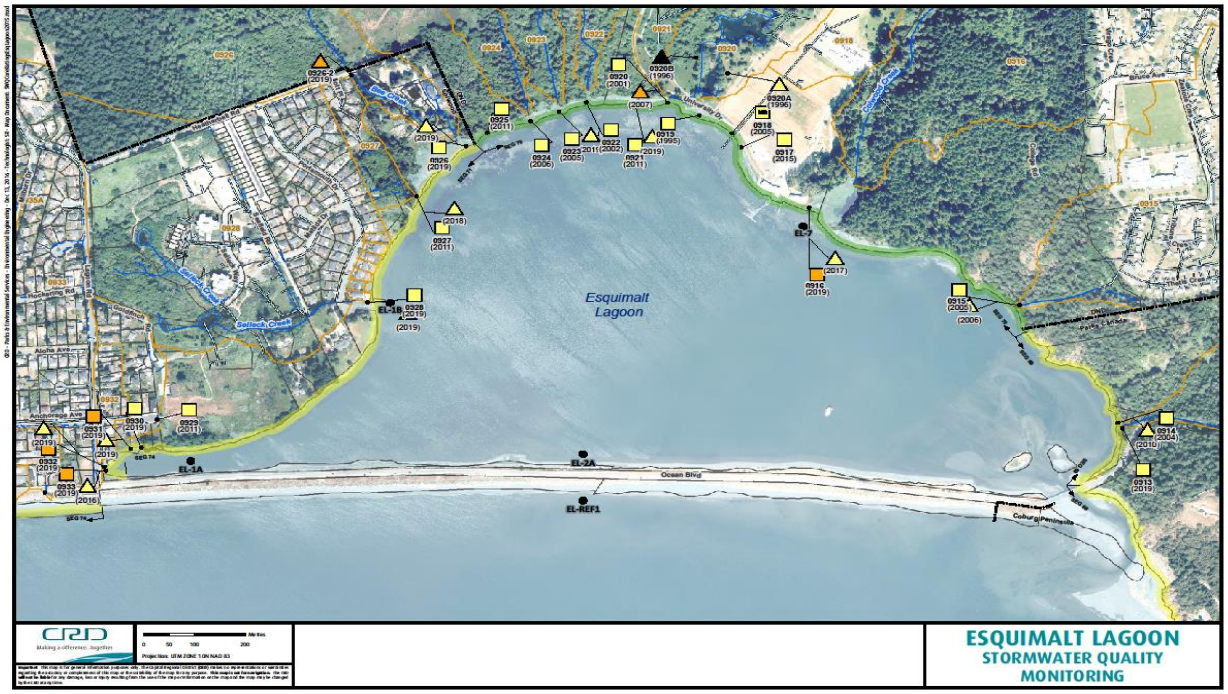
Making a difference...together

- Monitoring
- Reporting
- Prioritization
- Source investigation
- Education
- Source control
- Collaboration

Monitoring Esquimalt Lagoon

Making a difference...together

- 21 stormwater discharges (pipes, creeks & diches) for bacteria
- Bee, Colwood & Selleck creeks for nutrients, metals, physical, benthic inverts
- Marine water (5 stations) for bacteria, nutrients, metals



Stormwater Discharges

Making a difference...together

21 discharges:

- 17 have low bacteria counts
- 1 has elevated counts (>200 CFU/100 mL) ; 928
- none has high counts (>5,000 CFU/100mL)

Discharges of Concern

916 (Colwood Creek):

- Slightly elevated in summer on average
- Low 2020

931 and 932

(Discharge near toe, spring fed):

- Each had a high count in 2019
- Counts lower in 2020;
- Staff continue monitoring

Creek Monitoring Program – Data collection

Making a difference...together

- Is the water and sediment clean?
- Is the flow natural?
- Are invertebrate communities healthy?

2019 Bee and Selleck Creek Monitoring

Making a difference...together

Potential parameters of concern:

- Turbidity / Suspended Solids
- Phosphorus
- Nitrate

Construction ongoing at time of sampling and sediment-laden water entering creek during heavy rain

Marine Monitoring

Parameters of concern in 2018:

- DO
- Temp
- Nitrate
- Bacteria (entero, FC)
- Metals (Cd,Cu,Zn)

Marine Monitoring

Making a difference...together

2018 parameters of concern:

- DO (toe)
- Temp (28° mouth of Colwood Ck)
- Bacteria (entero in toe; FC > shellfish)
- Cadmium (less; -1A -2A, Ref)

Previous parameters of concern

- Nitrate: highest at -7,-1A in 2011
- Copper: no exceedances; lower dl
- Zinc: no exceedances; lower dl

Future Monitoring

Making a difference...together

Area	Year
Stormwater Discharges	Ongoing
Marine	2023
Colwood Creek	2022
Bee and Selleck	2024

Questions

Making a difference...together