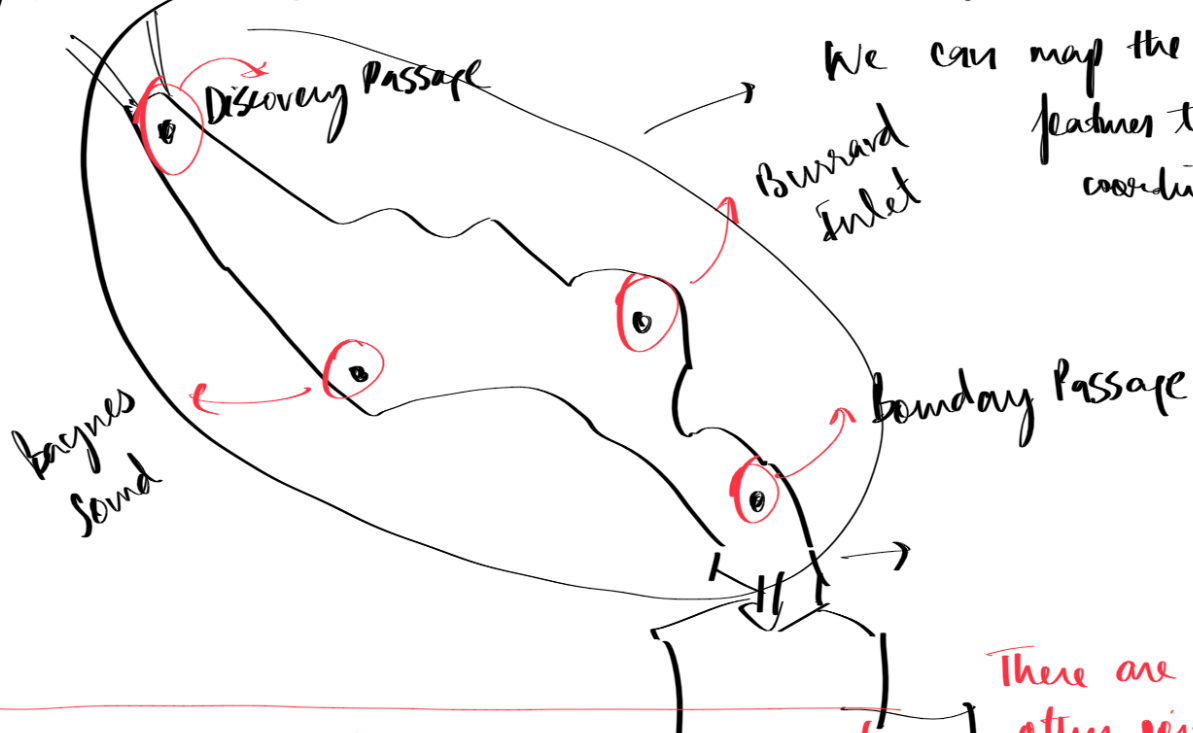


All Points HERE lead like



We can map the overlapping features to coordinate

Out of the factors we need :-

- (i) Oxygen ✓
- (ii) pH ✓
- (iii) Nitrogen
- (iv) Phosphorus
- (v) Salinity ✓
- (vi) Temperature ✓
- (vii) Carbonates & Bicarbonates
- (viii) Turbidity ✓
- (ix) Pressure ✓

Preferred below 5

There are other points which can be considered as well, but we can use just these to map main factors -

So we need to use the existing available features to map the unavailable factors, missing records or lapses, in data, & also create a relation b/w changing locations for mapping factors.

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Inputs :-

1. Data

(1) Campbell River >> Discovery Passage >> Salish Sea



Baynes Sound >> Salish Sea



Burnard Inlet >> Salish Sea



Boundary Pass >> Salish Sea (most amount of oxygen data)

Data Points available in Respective Locations :-

① Campbell River → aka Discovery Passage

• Water Quality Monitor (March 2016 - Jan 2017)

↳ Salinity

↳ Temp

↳ Turbidity

↳ CHLOROPHYLL

↳ Oxygen Conc.

↳ Conductivity

• Fluorometer (for CHLOROPHYLL) → (July 2016 - Now)

• Conductivity Temp, Depth : (July 2016 - Now)

↳ Salinity

↳ Pressure

↳ Turbidity

↳ Temp

[(CTD - AML)]

• Oxygen Andarea

↳ Oxygen Sensor [July 2016 - Now]

② Baynes Sound

⇒ 20 mbSS + >> 5 mbSS

• CO<sub>2</sub> Sensor :

↳ CO<sub>2</sub> Raw

↳ Humidity Sensor Temp

↳ CO<sub>2</sub> Concentration (Linearized)

[13 June 2019 - Now]

- CTD
  - ↳ Conductivity
  - ↳ Salinity
  - ↳ Turbidity (Not sure) (June 2019 - Now)
  - ↳ Pressure
  - ↳ Temperature
- Oxygen Sensor: (June 2019 - Now)

>> 40 mbss

- CO<sub>2</sub> Sensor
  - ↳ CO<sub>2</sub> Raw
  - ↳ Same as above (June 2019 - Now)
- CTD
  - ↳ Conductivity
  - ↳ Temperature (June 2019 - Now)
  - ↳ Practical Salinity
  - ↳ Pressure
  - ↳ Check for Turbidity
- Oxygen (June 2019 - Now)
- pH Sensor
  - ↳ pH Data (All)
    - ↳ Error Code
    - ↳ External fixed Reference Salinity (April 2020 - Now)
    - ↳ Internal Humidity
    - ↳ Internal pH
    - ↳ External temperature
    - ↳ pH temp.

3 Burrard Inlet

UNDER WATER ONLY

- Doppler Current Profile (Mar 2019 - Now)
  - ↳ Pressure
  - ↳ Temperature
- CO<sub>2</sub> Sensor: (March 2019 - Aug 2023)
  - ↳ CO<sub>2</sub> Raw
  - ↳ Humidity Sensor Temp
  - ↳ CO<sub>2</sub> Concentration (Linearized)
- (Auerwater) • Color Dissolved Organic Materials/ Matter (Mar 2019 - Sep 2023)
- CTD
  - ↳ Conductivity
  - ↳ Salinity - (March 2019 - Now)
  - ↳ Turbidity
  - ↳ Pressure -
  - ↳ Temperature -
- Fluorometer (March 2019 - Now)
  - ↳ Chlorophyll
- Oxygen Anderson (March 2019 - Now)
  - ↳ Oxygen Corrected
- pH Sensor
  - ↳ pH Data (All)
    - ↳ Error Code
    - ↳ External fixed Reference Salinity (March 2019 - Now)
    - ↳ Internal Humidity
    - ↳ Internal pH
    - ↳ External Temperature
    - ↳ pH Temp

## 4. Boundary Pass

- Doppler Current Profile (April 2013 - October 2018)

- ↳ Pressure
- ↳ Temperature

- CTD

- ↳ Conductivity
- ↳ Salinity
- ↳ Turbidity
- ↳ Pressure
- ↳ Temperature

( Oct 2012 - Aug 2021 )

- Current Meter

- ↳ Pressure
- ↳ current factors
- ↳ Temperature

( Oct 2012 - April 2021 )

- Oxygen Sensor ( - Oct 2012 - Aug 2021

- ↳ corrected conc.



