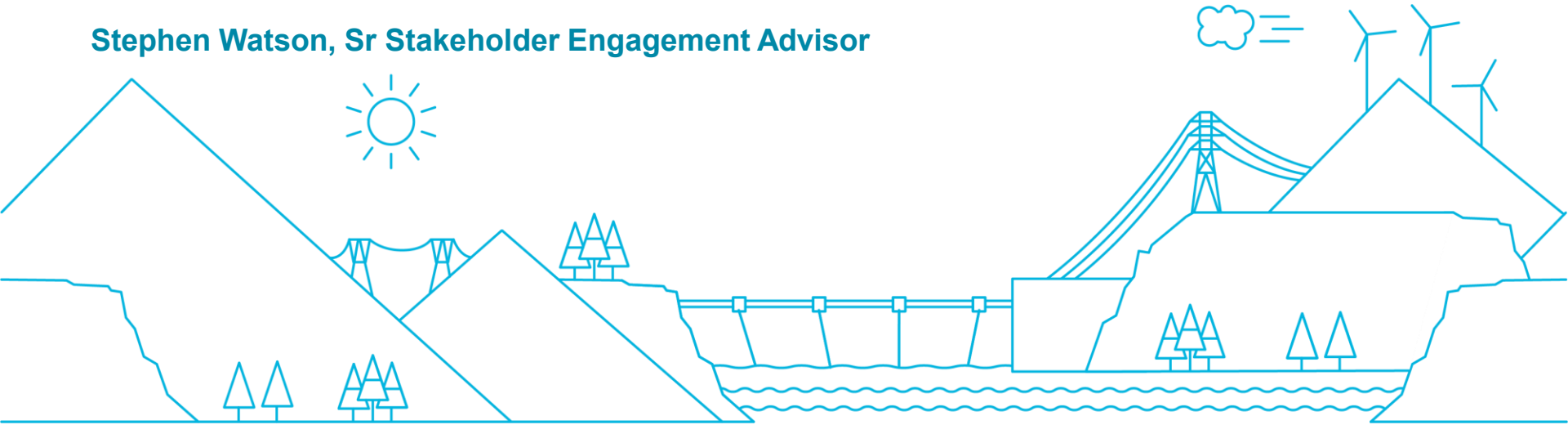
Jervis Inlet and Agamemnon Channel Power Line Replacement Project

City of Powell River – Mayor and Council

Stephen Watson, Sr Stakeholder Engagement Advisor



Date: February 18, 2025

BC Hydro
Power smart

Agenda

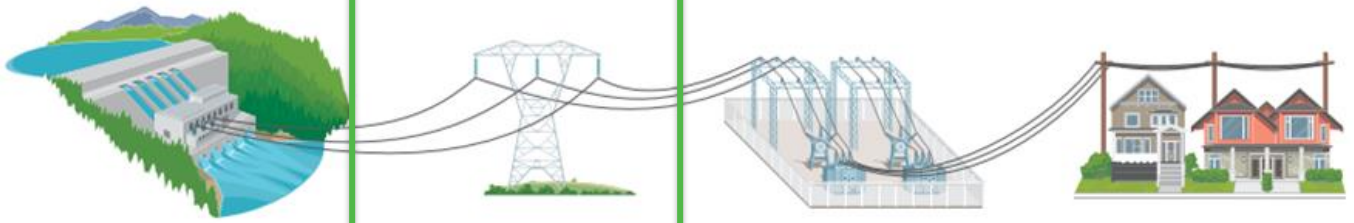
- Providing electricity service to the region
- Project introduction
- Photos of the Jervis Inlet and Agamemnon Channel power line crossings
- Project activities and schedule
- Project community considerations and impacts
- Community engagement and next steps

Jervis Inlet North – 230 kV line.

Providing electrical service to the region

Delivering Electricity To Our Customers

Our electricity system



Generation

Electricity is generated by BC Hydro and independent power producers.

Transmission

Electricity is moved from where it's produced to where it's used.

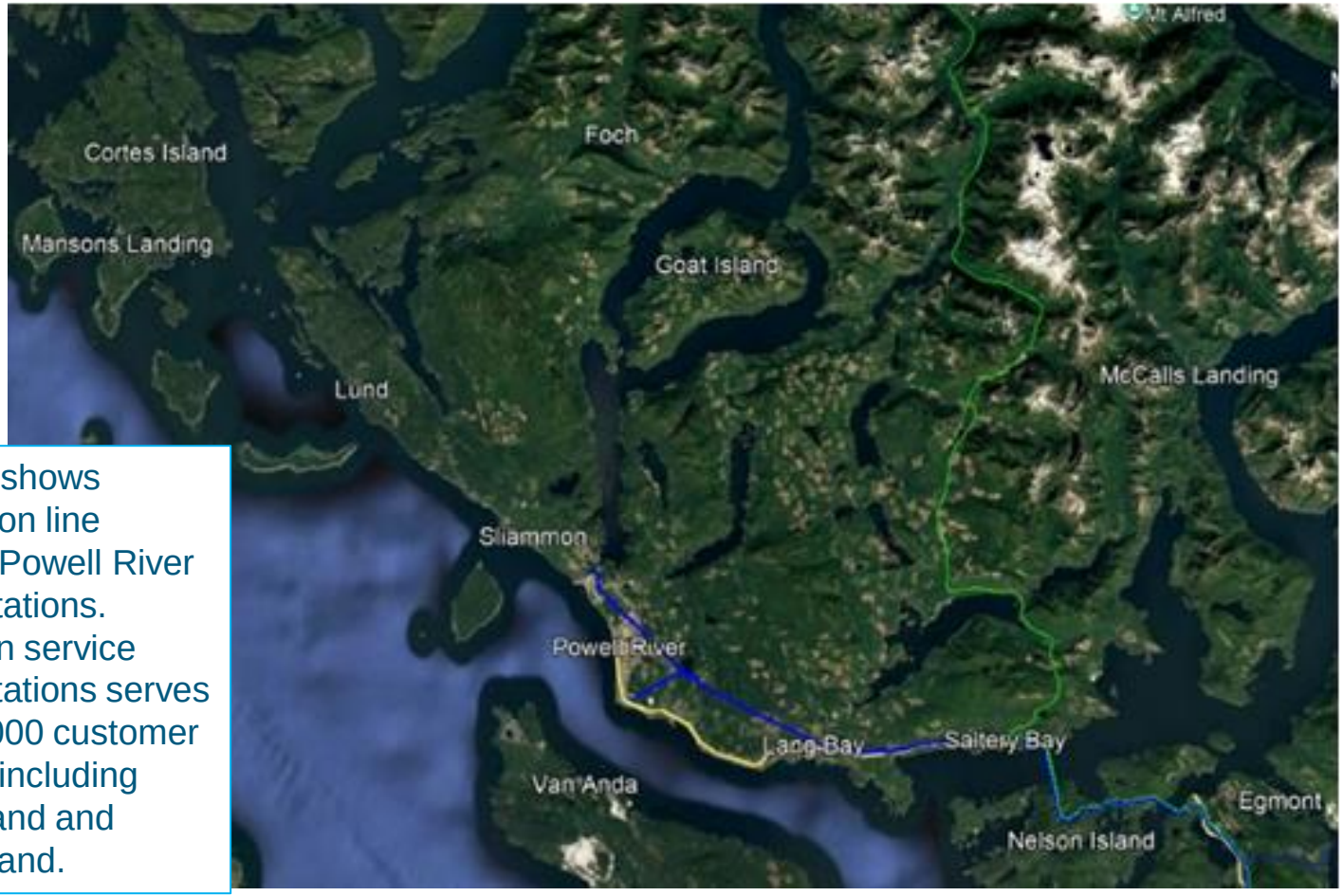
Substations

Voltage is reduced at substations to provide power suitable for use in your home or business.

Distribution

Low voltage electricity is provided to neighbourhoods and businesses.

Transmission System Service Area



Blue lines shows transmission line service to Powell River area substations. Distribution service from substations serves about 10,000 customer accounts, including Cortes Island and Texada Island.

BC Hydro
Power smart

Project introduction

Project introduction

- There are two transmission lines that travel to the Saltery Bay Substation, with one rated at 138 kV and the other at 230 kV, and then two 138 kV lines travel from the Saltery Bay Substation to Powell River.
  - The 138 kV line was put into service in 1956, and the 230 kV line in 1970.
  - There are two marine crossings – a 3.5 km crossing over Jervis Inlet and a 2.1 km crossing over Agamemnon Channel.
  - At Jervis Inlet, the power lines are located about 2.5 km east of Saltery Bay and cross to the north side of Nelson Island.
  - At Agamemnon Channel, the power lines cross from the south side of Nelson Island to an area that is about 1.5 km southwest of Earls Cove.

Jervis Inlet North – 138 kV line.

Project introduction

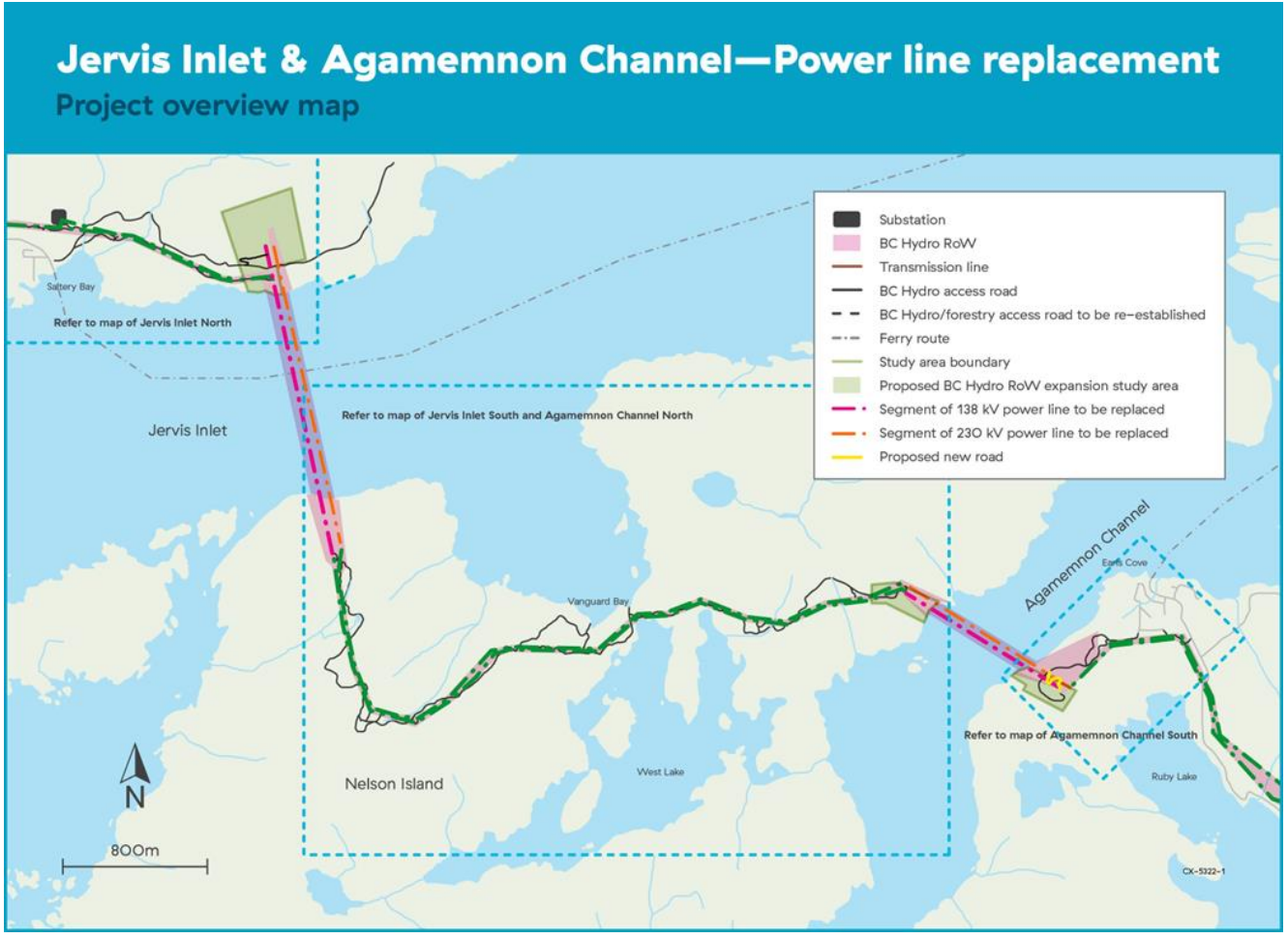
- We completed a review and found that the power lines and aviation marker balls that cross Jervis Inlet and Agamemnon Channel are at end-of-life. Their conditions are due to ocean spray corrosion and age.
  - We later found that the power lines and aviation marker balls on the 138 kV line are at high risk of failure. The replacement of that line was re-classified as an emergency project in spring 2024.

- We are working on the design of the project, including an archaeological impact assessment, biophysical assessment, environmental management plan, and geotechnical investigations.

- **This project will ensure public safety and electricity reliability.**

- We plan to replace the 230 kV power lines and the aviation marker balls at the two marine crossings at a later date.

Project introduction



BC Hydro
Power smart

Photos of the Jervis Inlet and Agamemnon Channel power line crossings

Photos – Jervis Inlet (North)

Photos – Jervis Inlet (North)

Photos – Jervis Inlet (South)

Aviation marker ball replacement.

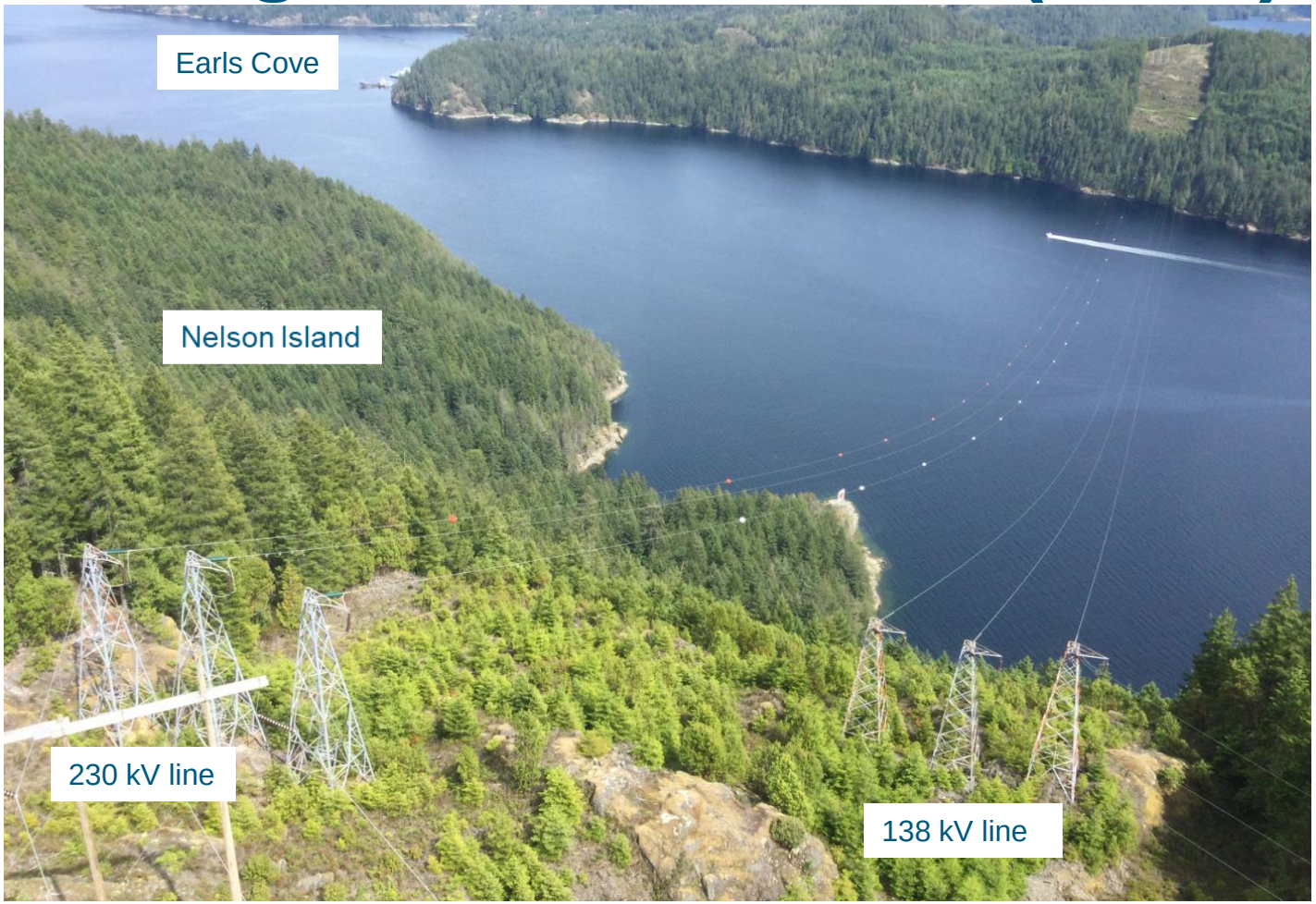
Saltery Bay

138 kV line

230 kV line

Nelson Island

Photos – Agamemnon Channel (North)



BC Hydro
Power smart

Project activities and schedule

Jervis Inlet – Activities and Schedule

- Tree removals in 2024 and 2025.
- Access road construction in 2024 and early 2025.
- Power line tower work in 2025 and 2026.
- Project construction to remove and restring the 138 kV power lines at Jervis Inlet:
  - New tower structures on either side of Jervis Inlet to be in place by fall 2026.
  - The 138 kV lines to be removed sometime between mid-September and October 31, 2025.
  - The new 138 kV lines are planned to be strung in place in fall 2026.
  - The 230 kV line continues to provide electricity to the region.

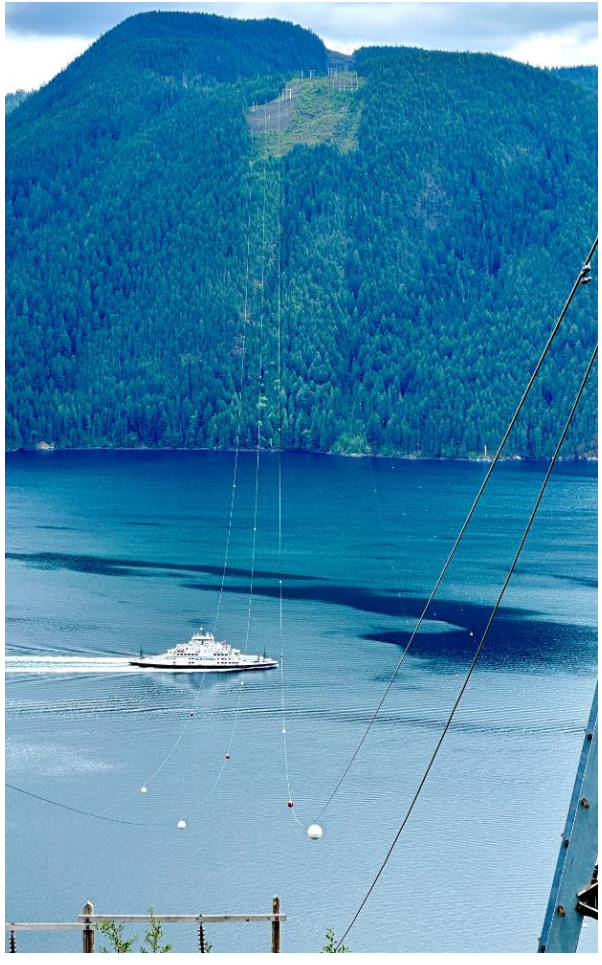
Agamemnon Channel – Activities and Schedule

- 138 kV line construction at Agamemnon Channel:
  - The 138 kV power lines are currently planned for replacement in spring 2026, though we are currently assessing advancing the removal work to October 2025.
  - The 230 kV line will continue to provide electricity to the region.

Project community considerations and impacts

Community: BC Ferries and Marine Traffic

- Project construction at power lines at Jervis Inlet and Agamemnon Channel in 2025 and 2026:
  - During our marine crossing power line work there will be no marine traffic permitted through Jervis Inlet or Agamemnon Channel.
  - There will always be one marine access route open around Nelson Island into upper Jervis Inlet. Wider awareness to the boating community will begin.



BC Hydro
Power smart

Community: BC Ferries and Marine Traffic

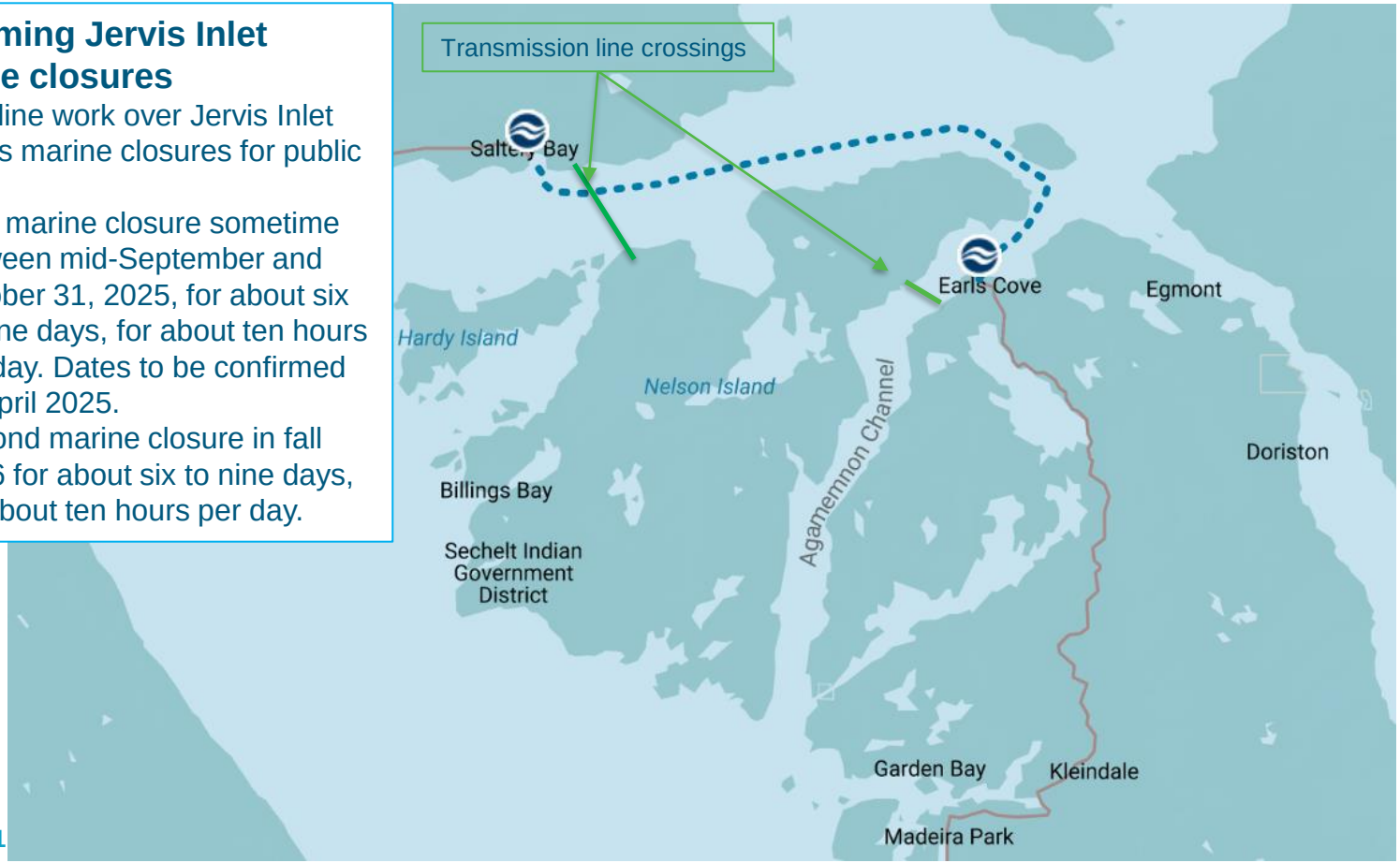
- Project construction at power lines at Jervis Inlet in 2025 and 2026:
  - We've been in discussions with BC Ferries since spring 2024 to provide them an overview of the impacts to their service.
  - To ensure communities remain connected and essential service is maintained, BC Ferries is currently developing alternate service, which includes:
    - alternate schedule.
    - and alternate route options, including options to sail around Nelson Island during the Jervis Inlet closure.
  - Once final dates are established, BC Ferries will post schedules on www.bcferries.com and update communities through a service notice.

Community: BC Ferries and Marine Traffic

Upcoming Jervis Inlet marine closures

Power line work over Jervis Inlet requires marine closures for public safety:

- First marine closure sometime between mid-September and October 31, 2025, for about six to nine days, for about ten hours per day. Dates to be confirmed by April 2025.
- Second marine closure in fall 2026 for about six to nine days, for about ten hours per day.



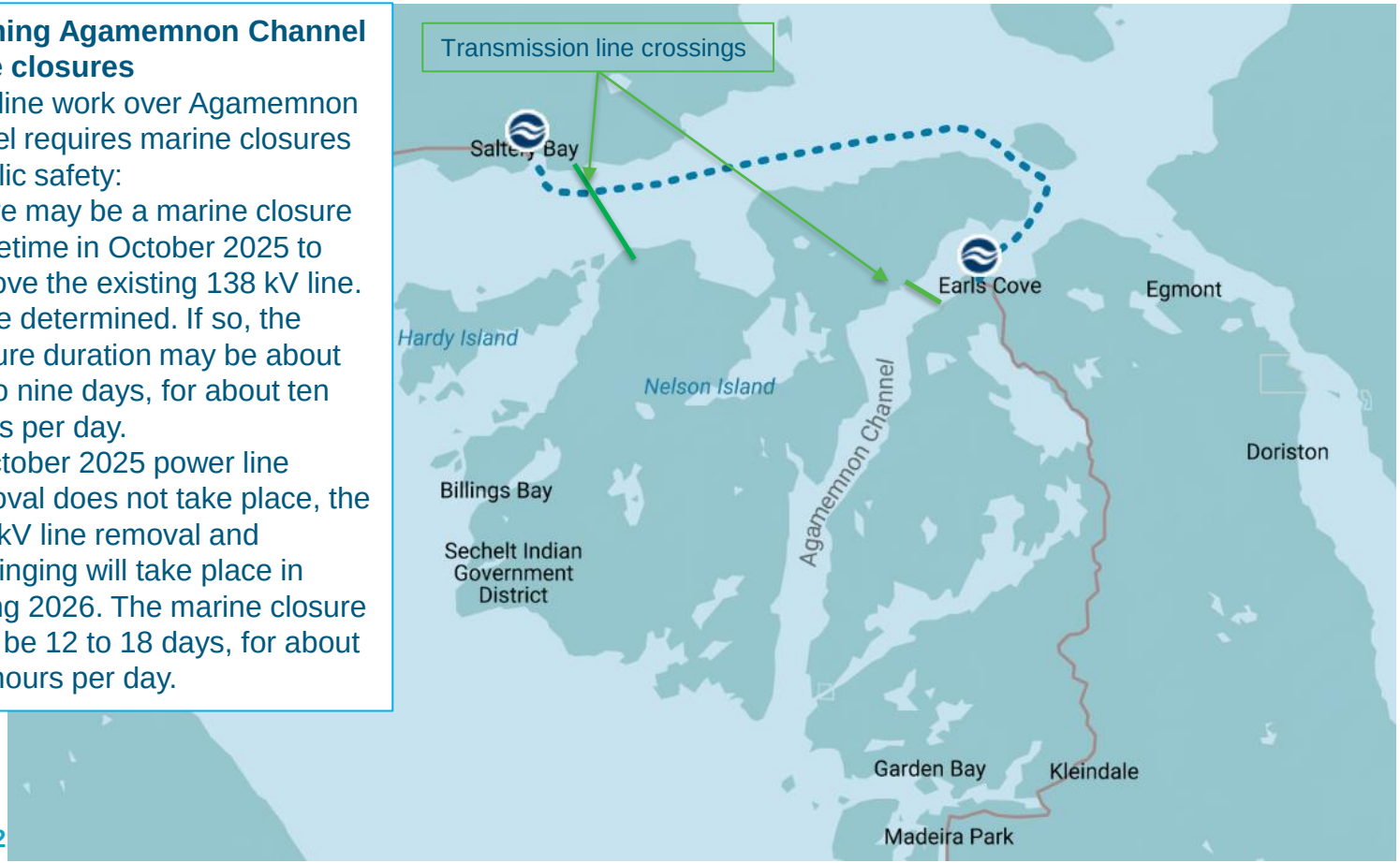
BC Hydro
Power smart

Community: Marine Traffic

Upcoming Agamemnon Channel marine closures

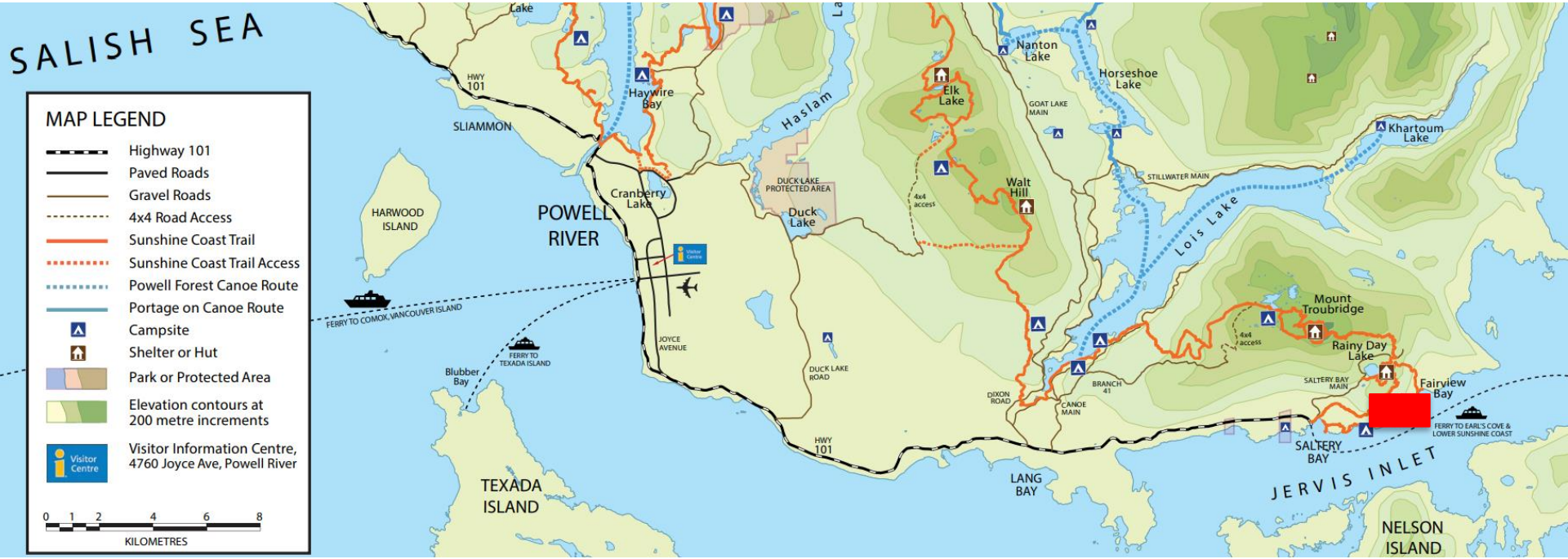
Power line work over Agamemnon Channel requires marine closures for public safety:

- There may be a marine closure sometime in October 2025 to remove the existing 138 kV line. To be determined. If so, the closure duration may be about six to nine days, for about ten hours per day.
- If October 2025 power line removal does not take place, the 138 kV line removal and restringing will take place in spring 2026. The marine closure may be 12 to 18 days, for about ten hours per day.



BC Hydro
Power smart

Community: Sunshine Coast Trail



Working with the SCT Board of Directors. The area of the project-related trail closures are highlighted by the red box.

- There were trail closures in late 2024 and early 2025 to the lower and upper trail through the project area for tree removals and access road construction.
- Future temporary closures will be communicated.

Community: Planned Outage – Saltery Bay to Cortes Island to Texada Island

For system reliability and worker safety, we require a twelve-hour outage to the transmission line that serves Powell River and the surrounding areas in September 2025.

The planned outage must be done during the day for viewing the lines and work activities. There were two requirements for a planned outage, one for this project and one for system maintenance, so we combined them into one community outage. The date is Sunday, September 14, from 7:00 am to 7:00 pm.

History:
Over the past ten years, we have had one transmission line outage (a planned outage) to the Powell River area.

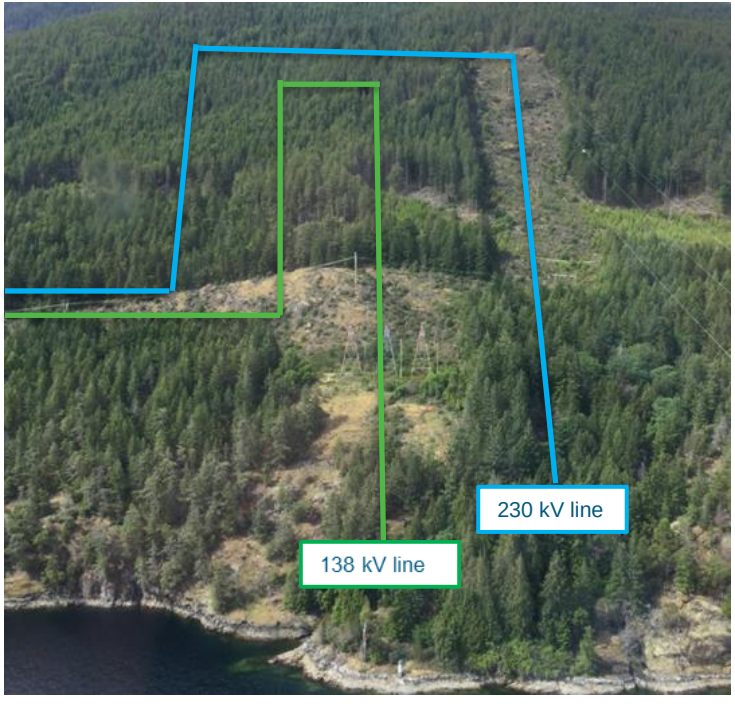
Project benefit:
Once the 138 kV line marine crossings are replaced by fall 2026 there will be two transmission lines available.

Community: Planned Outage – Saltery Bay to Cortes Island to Texada Island

Why a planned outage to the Powell River area is needed: At Jervis Inlet North, we need to reconfigure the 230 kV line to create an upper bypass so both circuits do not cross each other.

Current configuration

Planned new configuration



Community engagement and next steps

Community Engagement

- Consulting with First Nations and engaging with local government and stakeholders like the Sunshine Coast Trail members, Nelson Island residents, and BC Ferries.
- Wider community awareness of the project has begun.
- Project website: **bchydro.com/jervisagamemnon**.
- We will continue to keep you informed as the project progresses and schedules confirmed.

BC Hydro

Power smart