



March 9, 2024

The Honourable Diane Lebouthillier
Minister of Fisheries, Oceans and the Canadian Coast Guard
Minister's Office
200 Kent Street
Station 15N100
Ottawa Ontario
K1A OE6

Dear Ms. Lebouthillier,

The Valdes Island Conservancy wishes to voice its strong opposition to the unsustainable use of anchorages for freighters in the southern Gulf Islands.

The Conservancy acknowledges the work of South Coast Ship Watch Alliance (SCSWA) and Gabriolans Against Freighters at Anchor (GAFA) as well as the political energies of NDP Members of Parliament Alistar MacGregor (Cowichan – Malahat -Langford) and Lisa Marie Barron (Nanaimo-Ladysmith).

Our Conservancy represents over 100 individuals with ecological interests living on Valdes Island (Leey'qsun). The Conservancy has been active for 17 years conducting biodiversity inventories on land and in the waters of Valdes Island. From our data, we are aware that the marine life on the west coast of Valdes Island is of a richness unmatched in the Gulf Islands.

We are aware that issues attributed to freighters at anchor and how to address them are complex, both legally and biologically.

From a legal perspective, the complexity of jurisdictions has in our opinion enabled inaction. For example, the Vancouver Port Authority has jurisdiction over anchorages in the main Port; Transport Canada is responsible for the 33 anchorages away from the Port; the Minister of Fisheries, Oceans and the Canadian Coast Guard is responsible for administering all navigable waters while the Oceans Act authorizes the Minister of Fisheries and Oceans to plan activities affecting estuaries and coastal and marine waters.

From a biological perspective, the industrial freighter anchorages are fundamentally at odds with the mandates of many government acts meant to provide a level of protection and to sustain the function of ecological systems, for example, the Canadian Environmental Protection Act, the Oceans Act, the Species at Risk Act, and the Declaration of the Rights of Indigenous Peoples Act.

While much has been documented and publicized on the nuisance factors of anchored freighters – light and noise pollution; bilge and wastewater discharge; introductions of pathogens and non-native species; above and below water sound generation, our Conservancy wishes to address an issue of critical biological significance and one we think warrants a full prohibition of freighters in the Gulf Islands.

The issue is the severe and long-term damage caused to the seafloor by the process of anchoring and by the movement of anchor chains while a ship is at anchor.

Data indicates the damage ships at anchor generate is extensive and is persistent. Watson 2022 calculated that each time a single high-tonnage ship is at anchor, on average 3,416 m² of seabed area is impacted. Assuming 80 cm anchor gear penetration, this equates to 2,733 m³ of seabed sediment displaced. Further the anchoring footprint is preserved over more than 4 years.

Two documents of note are:

- A geological survey of Canada report (Douglas & Podhorodeski, 2023) speaks to anchor and anchor chain-induced damages to the seabed appearing in bathymetry plots of the seabed adjacent to Valdes Island. https://publications.gc.ca/collections/collection_2023/rncan-nrcan/m183-2/M183-2-8942-eng.pdf
- More in depth studies have connected sea floor anchoring damage in New Zealand to significant long-term damage to benthic communities. Watson, S. et al. 2022. *The footprint of ship anchoring on the seafloor*. Scientific Reports. Nature <https://www.nature.com/articles/s41598-022-11627-5>

Watson (2022) suggests that the impact of anchoring is an unreported but significant contributor to the environmental footprint of the shipping industry and a hidden cost due to the associated and mostly unaccounted for seabed damage. The study likens anchoring damage to the impact of fisheries trawling, while noting that anchoring damage is restricted to narrower and shallower water depths, anchoring gear penetrates deeper into the seafloor than trawling gear, and anchoring occurs more frequently across the same localized regions.

The mechanism and impact of anchor chain-induced seabed damage can be seen from the Watson 2022 report - see figure below.

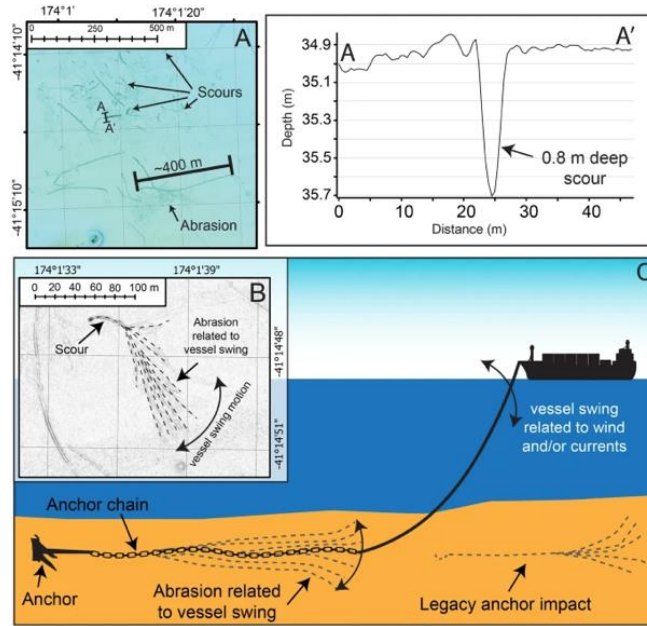


Figure 1: Taken from Watson 2022 showing scours and abrasion zones; penetration features and creation of a broomstick feature reflecting the preservation of the anchoring gear impacting the seabed.

A) Zoomed in bathymetry of the seafloor within the Picton anchorage (for location of figure see Fig. 1B). Scours and abrasion zones are labelled and the location of Profile A-A' is annotated. Profile A-A' shows the bathymetric profile where the penetration of one scour on the seabed is observed, of up to 5 m wide and 80 cm deep. **(B)** Shaded relief image of the seafloor showing a "broomstick-like" feature (interpretation in black dashed-line), reflecting the preservation of the anchoring gear impacting the seabed, and abrasion marks relating to the movement of the vessel (and chain scope) whilst on anchor. **(C)** Schematic representation of how anchoring gear (including the anchor and the chain scope) impact the seabed leaving scours, abrasion zones and "broomstick-like" features.

Locally, similar damage can be seen in Trincomali channel adjacent to Valdes Island as shown in Figure 2, taken from the Douglas & Podhorodeski report:

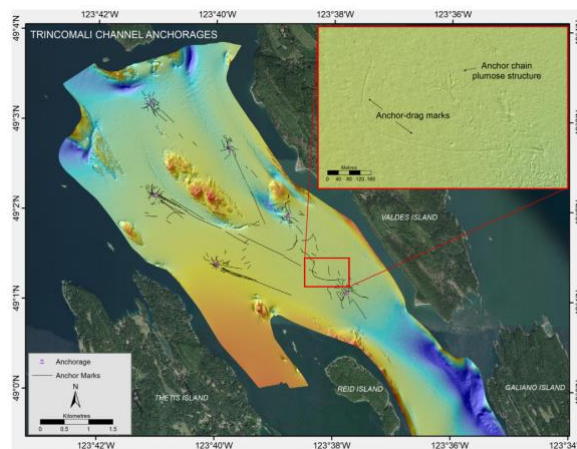


Figure 2: Anchorages and anchor marks in the Southern Gulf Islands, British Columbia. The inset shows a zoomed area where we see both anchor chain "plumose structures" where a feathered appearance is evident and anchor-drag marks in the bathymetry.

While we are aware that efforts are being made in the legal arena to reduce time a freighter can now be at anchor in the Gulf Islands, this does not address the damage of freighters to the seafloor of these highly productive regions of BC's south coast. In fact, more frequent anchoring will be even more damaging over the long-term and that damage will be to shallow coastal ecosystems. These ecosystems support high levels of primary productivity (limited by nutrient and light availability) and it is this productivity which goes toward supporting the larger marine system of the Salish Sea.

We know that Alistair MacGregor's private member's Bill C-305 (2022) was an act to amend the Canada Shipping Act to prohibit anchorages in the Gulf Islands. The Valdes Island Conservancy supported this private member's bill.

We are also aware Bill C-33 tabled in January 2023, is presently before the house and is being amended to include some of the restrictions MacGregor proposed and other avenues to address environmental concerns brought forward by SCSWA and GAFA.

However, the Valdes Island Conservancy is of the opinion that the suggested and current changes to Bill C-33 are critically insufficient to reduce the environmental degradation caused by freighters. We encourage the Government of Canada to ensure that Bill C-33 be amended to fully prohibit freighter anchorages in the Southern Gulf Islands.

Sincerely,



Marja de Jong Westman, MSc
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Retired Faculty Capilano University
President
Valdes Island Conservancy
Metis Nation of BC