

FACT SHEET

BULK FREIGHTER ANCHORAGES IN THE SOUTHERN GULF ISLANDS: HEALTH AND ENVIRONMENTAL CONCERNS

Prepared by the *South Coast Ship Watch Alliance* | 2024 October 30

Large numbers of bulk cargo ships idling at anchor are significantly impacting the Southern Gulf Islands of British Columbia and adjacent Vancouver Island. These freighters often remain for weeks, awaiting berths to load primarily coal and grain in bulk at the Port of Vancouver. There are now **33 anchorage sites** in the Southern Gulf Islands, and **the number of annual anchor days** has increased from **123** in 2008 to **5,898** in 2022, indicating a massive problem of inefficient ship scheduling, as it is disproportionate to overall port activity.

SIGNIFICANT CONCERNS:

CONFLICT WITH PROTECTED AREAS

- Industrial anchorages are incompatible with the stated purpose of the **Islands Trust Act**, which aims to “preserve and protect the Trust Area and its unique amenities and environment.”¹
- The Trust Area is “one of the most productive marine ecosystems in the world and includes the highest density of species at risk in Canada.”²
- Industrial anchorages, with their constant ship generator noise and seabed scouring, are incompatible with multiple rockfish conservation areas within the anchorage zone³ and the need for acoustic sanctuaries for marine life.^{4 5}
- Anchorage is inconsistent with the **Fisheries and Oceans Canada** proposal for the Southern Gulf Islands as an **Environmentally and Biologically Significant Area (EBSA)**.⁶
- Industrial anchorages are also at odds with Trust Area official community plans for coastal protection.
- A **National Marine Conservation Area Reserve** has been proposed for the Trust Area by Parks Canada,⁷ and the Trust Council has called for elimination of the anchorages⁸ which in the past had been used only rarely and mostly by smaller ships for local island harbours.
- The **Canada Shipping Act** mandates the Minister of Transport to protect the environment and gives the authority to designate restricted areas,⁹ despite the impression that common law allows ships to anchor “anywhere.”

CONFLICT WITH CONSERVATION MANDATES

- The **Port of Vancouver** is responsible “for maintaining efficient movement of marine traffic and cargo”¹⁰ with a “goal of preserving and protecting our natural environment for generations to come”.¹¹ This includes “climate action programs designed to help conserve energy, reduce air contaminant and greenhouse gas emissions, and promote alternative energy sources”,¹² as well as “supporting species at risk”, “working to reduce underwater noise”, “preventing the spread of invasive species”, and “keeping our waterways clean”.¹³ “Protecting the environment is part of our mandate.”¹⁴
- The mandate letter of the Minister of Fisheries, Oceans, and the Canadian Coast Guard expects increased “protection for marine species and ecosystems” and creation of “stronger partnerships with Indigenous and other coastal communities.” It expects completion of the Port Operations Review, which targets “promoting environmentally sustainable infrastructure and operations.”¹⁵
- The adjacent U. S. San Juan Islands are protected from **coal ship traffic**, as most US thermal coal from western states is **shipped through Canada**, millions of tonnes per year, despite the mandate of the Minister of Environment and Climate Change to “ban thermal coal exports from and through Canada **as swiftly as possible**.”^{16 17 18}

LACK OF ENGAGEMENT WITH FIRST NATIONS

There has been insufficient consultation with Coast Salish First Nations, as noted in the August 6, 2021 letter to the Minister of Transport of which three signatories are chiefs.¹⁹

- According to **Cowichan Tribes Chief William Seymour**, “Anchorages in these inside waters and narrow passages between islands pose an unacceptable risk to the ecological integrity that sustains our food resources, which are critical to the long-term livelihoods and well-being of our members.”²⁰ Also, concern has been expressed regarding disturbance of ancestral burial sites.²¹
- **Article 29** of the **United Nations Declaration on the Rights of Indigenous Peoples**, affirmed by the **BC Declaration on the Rights of Indigenous Peoples Act**, states that “Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources.”²²

LACK OF CONSULTATION WITH COASTAL COMMUNITIES

- There has been little to no consultation with coastal communities. The “2018 Interim protocols for ships anchoring in the waters of Southern BC” was implemented by the federal government despite community objections. The result was an expansion of the anchorage use to areas where no consultation at all took place.
- Despite many letters requesting meetings with Vancouver Port Authorities, no meetings have been held.
- SCSWA representation was included in the 2022/23 Port Forward envisioning sessions, which provided for one representative community voice amongst well over 100 industry and port staff representatives.

ENVIRONMENTAL DEGRADATION

- **Climate Change and Air Pollution:** A single bulk freighter ship at anchor emits some 10 tonnes of greenhouse gases per day, significantly undermining local climate action initiatives.²³ Ships at anchor must often shuttle back and forth from Vancouver—over 100km each way—needlessly burning tons of fuel. These wasteful trips could be avoided with proper loading infrastructure, efficient processing, and a vessel arrival system in the Port of Vancouver.
- **Anchor Chain Abrasion of the Seabed:** In the shallower waters of the Southern Gulf Islands there is significant sunlight penetration that supports rich marine ecosystems, including benthic (sea floor) marine communities. Changing winds and currents typically swing ships around their anchors within a large radius. Consequently, heavy anchor chains scour the sea floor in a wide area and may destroy fragile sea bottom habitats while also creating sediment plumes and disrupting sea floor carbon storage. Recent research has shown widespread damage from anchors and anchor chains.^{24 25}
- **Anchor Drag, Power Loss, Groundings, and Collisions:** With seasonal extreme winds and currents, ships can drag anchor or lose power and 1) drift aimlessly, 2) collide with other ships, and 3) run aground with the risk of significant fuel oil spills. An incident in March 2020 resulted in a hull-penetrating collision of two ships in Plumper Sound. Since 2015, there have been 102 reports of anchor dragging along our BC coastline.²⁶ A 2024 incident resulted in a loaded ship apparently adrift among in the Gulf Islands.²⁷
- **Noise and Light Pollution:** Anchored ships operate huge diesel generators to provide the electrical power needed to maintain lighting, instrumentation, and refrigeration. The excessive noise produced is amplified by empty holds and further exacerbated by unloaded ships sitting higher in the water. Underwater noise can adversely affect behaviour, development, growth, and reproduction of a wide range of marine life, including plants. Deck safety lighting penetrates the water at night and can disrupt nightly migrations of marine organisms.^{28 29}
- **Water Pollution:** Discharge of ballast or bilge water can introduce pollutants, disease organisms, and invasive species into local waters.³⁰ Acidic discharge from exhaust gas scrubbers includes “contaminants - such as cadmium, copper, mercury, and nickel and of polycyclic aromatic hydrocarbons (PAHs) - that exceed thresholds set for the protection of aquatic life.”³¹
- **Risks to Southern Resident Killer Whales:** The unnecessary shuttling of large vessels back and forth between the Southern Gulf Islands and the Port of Vancouver amplifies the risk of collision with the declining southern resident killer whale pod. Engine noise may cause them stress, disorientation and drive them from feeding areas.^{32 33}

HUMAN HEALTH IMPACTS

Large idling ships transmit continuous generator noise, night lighting, and air pollution into human residential areas.

- **Environmental noise** has associations with cardiovascular disease, sleep disturbance, immune dysfunction, and deterioration of mental health.^{34 35}
- **Light pollution** has been associated with increased risk of cancer, hypertension, heart disease, stroke, Alzheimer’s Disease, sleep disorders, depression, anxiety, and diabetes.^{36 37}
- **Air quality deterioration** increases the risk of lung disease, cardiovascular disease, and cancer.³⁸
- **Water pollution:** Discharge into the sea from exhaust gas scrubbers includes polycyclic aromatic hydrocarbons and heavy metals that “have a high likelihood of bioaccumulation in the marine food web, including in fish consumed by humans.”³⁹

COSTS TO THE CANADIAN ECONOMY

When a ship must remain at port for longer than the contracted period, financial penalties must be paid by the industry.

- The 2022–2023 demurrage cost for grain alone was 31.5 million dollars.⁴⁰



SOLUTIONS & TOOLS

REQUIRED SOLUTIONS:

Closure of the Southern Gulf Islands Anchorages

The 33 Southern Gulf Islands anchorages should be eliminated, as called for by First Nations, BC coastal communities, MLAs, MPs, Islands Trust Council and environmental groups.

Anchorage-free National Marine Protected Area

A **National Marine Protected Area** should be created for the Southern Gulf Islands Trust Area **that prohibits anchorages** for large commercial ships awaiting berths in the Port of Vancouver.

AVAILABLE ACTION TOOLS INCLUDE:

Vessel Arrival System:

A vessel arrival marine traffic management system could provide safe sharing of essential information and approvals, allow vessels to choose optimal speeds for just-in-time arrival at port, and reduce fuel consumption, emissions,⁴¹ and turnaround times at port.

- Such systems have been implemented at other ports worldwide to minimize or eliminate anchorage requirements.⁴²

All-weather Grain Loading Technology

Unlike ports elsewhere, Vancouver lacks the capacity to load grain in the rain, which could be rectified by investment in appropriate technology. Because of this problem “It’s not unusual for ships to come here and wait 25 to 30 days to get onto the berth.”⁴³

Restrict the Export of Thermal Coal

- The Canadian federal government should discontinue the export of thermal coal, the burning of which is a major contributor to climate change.¹⁶ The unnecessary transport of millions of tonnes of US thermal coal annually through Vancouver contributes significantly to local ship congestion problems.

Increased Port Capacity

There are opportunities to hold more ships within the Vancouver port area through use of modern single buoy mooring technology, which, in combination with a vessel arrival system, would eliminate the need for overflow anchorages in the Southern Gulf Islands.

Port Rules and Regulations:

There are opportunities to **mandate specific limits for bulk freighter turnaround times at port**. This would not affect trade volume but would increase efficiency.

- Exporters need to have certainty as to what turnaround times are allowed, and be given the opportunity to develop the most realistic logistics planning for synchronizing best delivery times in export contracts to meet mandated objectives.
- Without mandated turnaround times:
 - more vessels arrive at port than can be loaded,
 - valuable port anchorages are taken away by ships waiting longer than necessary,
 - opportunities are reduced for other users at port, and
 - avoidable emissions and other environmental risks occur.
- Financial incentives/disincentives linked to turnaround performance at port could further enhance the competitiveness of export companies that apply advanced and responsible planning.

Supply Chain Optimization:

The Port Authority and industry, with oversight from Transport Canada, could ensure that a transparent, state of the art, networked supply chain planning, management, forecasting, and scheduling system is in place and coupled with a virtual vessel arrival system.

- The scheduling of delivery time windows at port needs to realistically reflect the current capacity at port terminals.
- Early warning systems of delays in the supply chain and buildup of vessel lineups can be fully integrated into the scheduling of commodity exports.
- Overbooking the capacity of the supply chain cannot expand export volumes but creates inefficiency and environmental problems.

CONTACT

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MEMBER ORGANIZATIONS

Anchorage Concern Thetis

Cowichan Bay Ship Watch Society

DeCourcy Anchorage Watch

Freighter Free Chemainus

Gabriolans Against Freighter Anchorages Society

Ladysmith Anchorage Watch

Plumper Sound Protection Association

Ruxton Anchorage Watch

Salt Spring Island: Protect The Islands Sea (PTIS)

Valdes Island Conservancy

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