

BRITISH COLUMBIA FERRIES PERFORMANCE TERM 6 SUBMISSION FOR ROUTES 21 AND 22

We, the Hornby Island Ferry Action Discussion Group, make this submission to provide information to assist the British Columbia Ferries Commissioner (the “Commissioner”) in establishing the price caps and anticipated spending for Performance Term Six. The operating plan, capital expenditures, and fares BC Ferries charges for core ferry services are regulated by the Commissioner in accordance with the Coastal Ferry Act (the “Act”). Every four years, the Commissioner establishes spending for each route group specified in the Coastal Ferry Services Contract (the “CFSC”) between BC Ferries and the Province of British Columbia (the “Province”) for the ensuing four-year performance term. The price cap is the maximum permitted ceiling of average ferry fares for each route group in that performance term. Spending is a combination of the route fare boxes and government subsidies.

Additionally, we respectfully submit information of a local nature, which may assist B.C. Ferries in their strategic planning for ferry service to Hornby and Denman Islands.

This letter highlights our evaluation of the current Performance Term 6 submission by BC Ferries as it pertains to Routes 21 and 22 (Buckley Bay to Denman Island, Denman Island to Hornby Island). It has 4 sections:

1. Our summary of Performance Term 5
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- B. Annual costs of a self-propelled ferry versus the Baynes Sound Connector
- C. Dr. Colin Boyd report: Condensed, Problems with the Baynes Sound Connector
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Performance Term 6 will run from April 2024 to March 2028.

1. Our summary of Performance Term 5

Performance Term 5 runs from April 2022 – March 2024. So we are almost in the last 12 months. From the Hornby / Denman communities' perspectives, it is fair to say that, so far, we have seen the worst problems since the system began:

- The Baynes Sound Connector was and remains unreliable.
- The carrying capacity of the Kahloke was downgraded in November 2021.¹
- The peak seasons of the years 2021 and 2022 experienced the longest line-ups and wait times (notwithstanding decreased demand due to Covid) ever.
- Even in the off-peak season, Route 22 saw extended waits and shuttling, because of the lower weight allowance of the Kahloke.

The reduced carrying capacity of the Kahloke could not have come at a worse time. We are aware of people postponing travel, even for medical appointments, because of the service's unreliability and unavailability.

This analysis also applies to the Baynes Sound Connector (BSC), where there have been documented increases in the number of service interruptions². For example, nights in November and December 2022 the service was not available overnight, which affects medical emergencies. Despite being off schedule, or unavailable, the service levels are deemed by BCF to exceed the contract-required minimums.

Since inception in 2016, the Baynes Sound Connector has offered the Islands less service. The previous vessel on the route was the Quinitisa. Although the 50 AEQ carried was equal, other measurements of service were not. The BSC has carrying capacity for Gross Vehicle Weight of 190 tonnes, a reduction from the carrying 220 G.V.W. carrying maximum for the previous vessel. When the cable ferry replaced the free moving vessel, the 300-passenger capacity was reduced to 200-passenger capacity. Both metrics relate directly to weight capacity. It is a grave concern that increasing the weight of the BSC, which will happen with any type of deck expansion, will have a negative implication on the composition profile of traffic carried.

Additionally, the BSC has poor tolerance in storms/winds, unlike a traditional vessel that turns the bow into waves, the BSC is on a fixed route. If the wind is blowing broadside, there is no manoeuvrability to handle it. Apparently, there is now a BCF operational directive stating that sailings are to be cancelled when wind gusts reach 39-knots at Sisters Island. Sisters Island is the windiest location in the geographic area, located in the exposed waters of the Strait of Georgia, off Lasqueti Island.

¹ In November 2021, as a result of a routine lightship survey, required by Transport Canada, the weight carrying capacity of the Kahloke was reduced from 88 tons to 80 tons. Did this factor into BC Ferries report and heat maps?

² Letter dated Feb 3, 2021, from Sheldon Stoilen to Jason Barabash, Re: Baynes Sound Connector – Service Reliability

Normal procedure is for the ship's captain to reference the on-board wind gauge, or the closest wind station. There is a wind buoy in Baynes Sound, just south of the BSC route. And another at the Comox Airport. Both much less exposed than Sisters Island and more reflective of Baynes Sound wind conditions. The new wind standard is significantly reduced from that promised and will result in more cancelled sailings.

When the cable ferry was introduced, then BC Ferries vice president of engineering Mark Wilson promised: *"The vessel is designed to operate in sustained wind conditions for four hours or more of 55 knots sustained, gusting to over 85 knots, and that's a higher standard than much of the rest of the fleet."*³

The 4 haulers on Denman collective GVW have approx. 130 tonnes, which is before other commercial and regular vehicles enter the picture. We have reports that the BSC is often overloaded due to weight in the mornings from Buckley Bay. The inability to carry all the commercial traffic is a severe limitation on service provided. There are also BSC overloads most mornings year-round from Denman West⁴, (especially the 9 am sailing) and overloaded from Buckley Bay often in the afternoons year-round (especially the 4 pm sailing).

The constant presence of a BCF maintenance vehicle taking up deck space is indicative of systemic problems; even less of the public's vehicles are able to load.

Real time, true story:

Hornby resident: *Wednesday, March 1, 2023 (mid-week, winter, not during any holidays):*

9 am ferry off Hornby, Wed. March 1st:

Arriving at Denman West the BSC lot is full. Half the Hornby traffic is left behind.

10:17 am the BSC arrived back to Denman.

The current Denman West line-up is already into the fifth lane.

10:25, waiting traffic is now in Lane 6, meaning there is no room, for the 10 am Hornby traffic trying to make the connection, on the next BSC sailing.

10:40 departure from Denman Island (scheduled time), leaving all Hornby through traffic waiting.

Just before 11 am = 2 + hours Hornby to Buckley Bay.

Double the time of the published "connecting ferry" schedule.

For Route 21, residents have been tracking service performance, producing a chart ⁵

³ <https://www.cbc.ca/news/canada/british-columbia/denman-island-cable-ferry-1.3328209>

⁵ Regardless of what the BCF "Heat Maps" indicate

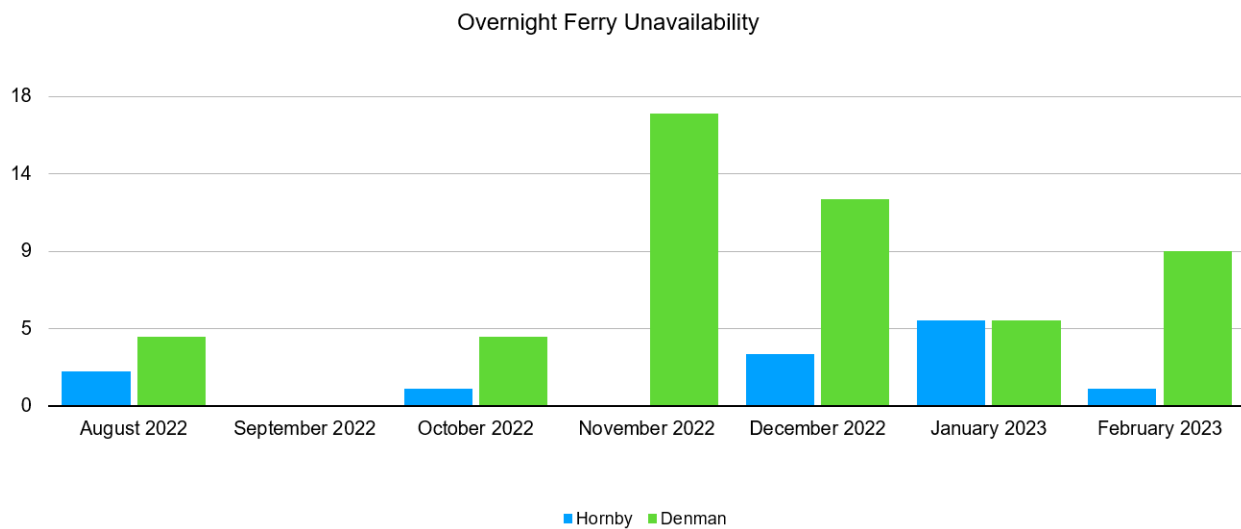
to summarize service interruptions. Historically, the ferry dependent communities of Hornby and Denman Islands have had access to their ferries for “after scheduled hours of service” emergency access. Medical and Emergency Services personnel have been able to call out the ferries in “the off hours”. This historic service is being severely challenged with the constant night-time work required for the cable ferry. This chart shows lack of availability. If BC Ferries does not continue to provide reliable “after hours” service the government will need to provide a whole new service of helicopters, Coast Guard or building on island medical facilities to provide the service. “Rob Peter to pay Paul.”

This table outlines the after-hours **non-availability** of night time ferry access for both Routes 21 and 22.

Table 1

	Hornby	Denman
August 2022	2	4
September 2022	0	0
October 2022	1	4
November 2022	0	17
December 2022	3	12
January 2023	5	5
February 2023	1	9

To put it another way, the graphic comparison between access to the interoperable, self-propelled, ferry on Hornby vs. the BSC on the Buckley Bay to Denman run, is drastically different.



Also, some delivery services are not available anymore (e.g. Centra Windows) because they cannot justify trucks, including drivers, sitting in line-ups for unpredictable numbers of hours.⁶ Even worse, some suppliers (concrete trucks) have refused to come to the Island during the summer season, resulting in broken supply chains and dampening economic and liveability opportunities.

The lack of responsiveness by BCF and the impact on planned construction projects is dramatic. One of the local contractors has estimated that construction costs on Hornby Island are 1/3 more than those costs on Vancouver Island! The commercial traffic disruptions due to limitations on ferry access have had devastating impacts on many projects.

Safety is a grave concern with ferry traffic, on both sides of the Hornby ferry (Gravelly Bay and Shingle Spit) using one of the lanes of the narrow, two lane main road as a marshalling area (effectively turning the lane into a parking lot, with two-way moving traffic pushed into one lane). Compare the video at https://www.youtube.com/watch?v=5VOG_0xQHdM, taken by a Denman resident, driving to his house which is on the main road down past the Gravelly Bay ferry terminal (the terminal for travel from Denman to Hornby). The video was taken in June 2022, not even the hottest months, which are July and August.

Vehicle wait times during busy months on Route 22 can reach 4 to 6 sailings. Even in the off-season there can be significant waits when there are maintenance problems, too many heavy vehicles, or simply more demand than space on the vessel.

In particular, the weight of commercial vehicles can total so close to the weight limit of the Kahloke, that very few vehicles are transported across. All others, or the vast majority of travellers, have to wait for the return trip. While extra trips may be added at the end of the day, when the schedule is not respected, the quality of service is diminished.

In the 5-plus ferry-wait line-ups on many days of July and August 2022, the waiting traffic occupies one lane of the narrow, two-lane main road. Measured on Hornby Island last summer at Shingle Spit Road, the line-up extended for over a kilometre, creating a significant safety hazard for both the people waiting in line and the vehicles trying to travel in both directions on the single-lane, remaining roadway (reference to video). Making matters worse, people in the line-ups regularly walked to the front of the line-ups in search of water and bathrooms. On one particular hot, sunny day last August, by mid-day the ferry terminal washrooms had been so heavily used that the septic system backed up, and the washrooms were closed. Where were

⁶ On February 22, 2022 Home Depot, a major supplier of building materials to Hornby Island, announced an increase in delivery charges from \$125. to \$450. This is a direct result of suppliers waiting in lengthy ferry line-ups after the reduction in carrying capacity impacted the commercial carriers. Simply put, having our supply chain waiting in lengthy line-ups is beyond inconvenient, it is economically crippling, increasing the cost of living.

people supposed to go to the bathroom? What is the responsibility of B.C. Ferries to its customers?

For 2022, and route 22, there were 4,762 actual round trips, approx. 4060 scheduled round trips and 3695 minimum required round trips (minimum to qualify for the subsidy). This comes to 702, or 17.3%, extra sailings compared to the schedule, and 1067, or 28.9%, more trips than the required minimum. This illustrates that the schedule, and required service levels, are completely inadequate, and that not only in the summer. How can the minimum be so much lower than what is needed to move the actual traffic? How can completely inadequate service not incur a penalty, but satisfy the Coastal Ferry Service Contract?

Residents question environmental claims with continuing to operate the Baynes Sound Connector. Touted as being more environmentally friendly, it has become a broken promise. Vehicles waiting in lengthy line-ups in the hot summer sun idling with their air conditioning on, and in the cold winter months idling with their heaters on. Constant starting and stopping as the line inches forward. The tremendous cost of manufacturing and supplying consumables to the cable ferry – iron ore and coal to make the steel cables, sourced from all over the world and shipped in ocean going “steamers”, crews and equipment travelling to service the cable changes (13 off-site originated workers were counted at Buckley Bay during one of the cable changes). Without cooperation from BCF for the exact number, local sources estimate up to 19 cable changes have occurred in the 7 years the cable ferry has been in service.

Even said, the environmental cost of keeping the Baynes Sound Connector really rests with its projected life span, and the current plans of B.C. Ferries to electrify its fleet. As vessels in the entire fleet are converted to lower GHG emissions, any savings being touted for the BSC become less relevant. As any environmental argument diminishes in perspective, the impacts on service, reliability, capacity, and capability become more pronounced.

Reliability will continue to be a major issue. The combination of weather and tides provides a hostile environment for a 3-cable drive system, individual cables get stressed past tolerance and become “saggy”, leaving 2 cables to take the tension designed for 3, jeopardizing performance and safety.

Another broken promise was for operational cost reductions. Crewing without any licensed officers has proven problematic both from functional and regulatory evaluations. Transport Canada is expected to impose Marine Personnel Regulations (MPR) in the Fall of 2023 that require the BSC to have a Captain and a Mate on crew. From a functional viewpoint this should enhance reliability somewhat as there will be qualified decision makers to read wind gauges and evaluate tidal conditions. Cost reductions for fewer crewing and less fuel consumption have rapidly dissolved with new regulations forthcoming and excessive maintenance requirements.

Appendix B more fully outlines the cost discussion. Summary of the cable ferry: **NO SAVINGS AT ALL, and compared to a sea-going vessel SEVERELY REDUCED SPEED, RELIABILITY, WEATHER CAPABILITY AND CAPACITY.**

2. Local developments Impacting, but not acknowledged, for Performance Term 6

The following Provincial Government investments, Federal Government programs, and other local developments will have an impact on ferry traffic and should be considered when making demand projections:

1. In November 2018, the Provincial Government committed to \$2.6 million to subsidize a 26 unit affordable housing rental project on Hornby Island, construction is anticipated to begin in 2023.
2. In August 2021, the Provincial Government invested \$5.64 million to support bringing high speed fibre optic internet to Denman and Hornby Islands. The opportunities afforded for remote workers to live/work on the Islands is anticipated to increase year-round demand for these ferry routes. We are not able to quantify the impact.
3. In late 2021, the Provincial Government, through B.C. Parks, spent \$11.4 million acquiring land to expand Tribune Bay Park and Campsite on Hornby Island. Summer demand for ferry service routinely creates severe overloads. How will the new Tribune Bay Park expansion increase demand?
4. More recently, Government grants, both federal and provincial have also been awarded to the Hornby Arts Council for the construction of a new Centre, and to the Hornby Island Farmland Trust Society for a food processing hub. Construction on both of these projects is anticipated to commence in 2023.
5. Also on Hornby, redevelopment of the commercial property adjacent to the Shingle Spit ferry terminal has been underway, including construction of 15 residential units.
6. Denman North has a 24-lot subdivision completed, and about to have the properties sold. This will result in homes being built, construction industry deliveries, families and increased population on Denman.
7. Denman Green is an affordable home initiative which has secured land to build a development.

The availability and reliability of ferry service will impact development costs for these projects. The construction phase will add pressure on deck space with an intensified demand for commercial traffic. And when all the new developments are on-stream, the increased public traffic will add to ferry bottlenecks.

But this is also a fact of daily life

Real time, true story:

“The local haulers care about the communities we live in and serve. Our purpose to get involved with the FAC was not only about the strain and limits to our businesses, but also includes the fact that we want the communities of Denman and Hornby to thrive. We could take a more passive approach and say, “oh well, if it takes 7 hours to deliver to Hornby or 5 hours to deliver to Denman then the people will just have to pay for it”, and not bother undergoing the work and stress to try and get a better ferry service. This does not sit well with any of us that the Resident’s, in the end, are the ones paying for BC Ferries lack of understanding, poor decisions and reluctance to put proper vessels and systems in place. In the end it is always the middle to low income citizen that will be harmed the most by these situations.”

3. Criticism of BC Ferries’ submission

One has to acknowledge that BC Ferries had a difficult task when compiling their submission. There are many moving parts, from Covid, to inflation, to the number of routes, to supply chain and staffing challenges.

However, in detail, we feel that BC Ferries’ assessment and plans have fallen short, for Routes 21 and 22, in several different ways:

a. General methodology

How did the plan for Performance Term 5 fail? How did it happen that management failed to be prepared for the Kahloke downgrade to carrying capacity? Even without this failure, the Kahloke was already too small. B.C. Ferries own metrics showed it was the worst performing route in the entire Minor Route fleet. How was this not anticipated in Performance Term 5 planning? Why were lessons to be learned during PT 5 not incorporated into the planning for PT 6?

b. Problems with forecasting demand

40% of the land mass on Hornby is protected for all citizens of B.C. (parks and conservation areas). and service is for more than just the local census population.

Will PT 6 really avoid the present problems mentioned in Section 1? In the few pages that BC Ferries submission dedicates to routes 21 and 22, they are not mentioned. Even without taking into account any future increases in traffic.

A particular methodological problem is related to their Long-Term Traffic Demand Outlook. On p101 it states:

For some routes, econometric models were able to explain past behaviour, but when used to forecast, it became clear they were not appropriate. In those cases, the traffic forecast was developed using the route’s long-run traffic trend (compound annual growth rate). For example, routes 19 and 22 have faced considerable capacity challenges that

cannot be properly captured in the models. Adding further complexity, route 19's available capacity was increased in fiscal 2022 with a change from one to two vessel service. As a result, it was deemed unreasonable to use an econometric model developed on historical data and the econometric models on routes 19 and 22 were replaced with a long-run growth rate forecast. Similarly, a long-run trend was used on other routes and commercial when a suitable econometric model could not be found.

This is an important point, on p101, they say that they chose an "econometric" forecast approach for route 21, while they chose a "long-run" trend for route 22. How can this be compatible? Almost all Route 22 traffic goes through Route 21 as well. The long-run trend is said to be less reliable, this loss in reliability should affect the reliability of the econometric forecast, for both, route 21 and route 22.

BC Ferries plans for the two routes does not address or seem to anticipate the expected demand and usage changes identified in section 3. Are they captured by the assumed long-term compound annual growth rates? It seems unlikely. For all the analysis included in BC Ferries submission, the result seems to be a system wide forecast of 0.5%/0.8%/1.7% in compound annual growth rates. According to Statistics Canada, between 2016 and 2021, Hornby and Denman's populations grew by 20% and 19% respectively. Given that there are no indications that this is slowing down, how much sense does it make to suggest that routes 21 and 22 ferry traffic will see an increase of only 0.5% during Performance Term 6?

They say they use the long-run trend method for forecasting the Route 22 traffic. Are they forecasting peak / off-peak separately? Surely there are very different passenger profiles, which would be modelled differently. Are the trends they are seeing convincing? With line-ups half as long, there may be the same usage they are reporting. Are they capturing the line-up lengths?

The values in their heatmaps make it appear that the off-peak service is acceptable, while there have been real capacity issues even from October to May. The heat maps also do not reflect morning overloads caused by heavy commercial vehicles, because they are not reaching the carry capacity of 21 AEQ's. In these situations, there is deck space available according to the AEQ. The heat maps appear to show adequate deck space in the shoulder seasons but that is not the reality. Will this mismatch also transpire for the future heatmaps (Medium Term)?

We have recently learned that reports are sometimes misleading: when BC Ferries adds a sailing later in the day, this can compensate, for the purpose of gathering statistics, for one that was missed earlier.

The disruption to the travelling public is not indicated in the reporting. Also, capacity utilization does not take into account commercial vehicle weight overloads, which leads to skewed metrics. For example, the capacity utilization statistics that are presented are measured against total round trips including extra trips, and not the number of *scheduled* round trips. When we look at the figures for 2022, according to the schedule, we see $4,060 \times 21 \text{ AEQ} = 85,260$. Multiplied by 2, for the roundtrips, we obtain 170,520 scheduled AEQ. The actual AEQ figure is

138,451, a utilisation of 81%. When one looks at the potential AEQ based on actual trips, including the extra trips, one obtains $4,933 \times 21 \text{ AEQ} = 103,593$, multiplied by 2, arriving at 207,186 actual, available AEQ. Then the utilisation drops to 67%. That is much lower.

The heatmaps also appear to be internally inconsistent. For the Near-Term heat map of route 22, the off-peak and shoulder season should be the same since the proposal is only for changes for July and August. It is very difficult to work with such graphic displays when one must watch every step.

c. Problems relating to planned supply

Is the Quinitsa deployment really going to solve even the present problems? In the peak season, even Route 21 experiences long wait times and line-ups.

The design of the Baynes Sounds Connector (BSC) was already initially too small. It replaced a vessel with the exact same rating for number of vehicles carried. Meaning there was no accommodation for any vehicular growth capacity. Nor did BC Ferries leave the option of switching out vessels. In installing the cable ferry, they went outside of their corporate policy of vessel “interchangeability”. They created an engineering anomaly, that their staff had no expertise or experience in operating. Furthermore, in public consultations, the communities of Hornby and Denman Islands were not supportive of the installation.

Now, a few years later, BCF is scrambling to try to figure out how to increase the size of the Baynes Sound Connector. The engineering is problematic. Even if it could be successfully expanded, will the planned expansion in capacity be sufficient in 2028? Will it be sufficient in the peak season? Will it be sufficient in the off-peak season?

There are 3 numbers, actual round trips (4,762), scheduled round trips (approx. 4,060) and minimum required round trips (3,695). It is crazy that the minimum is 1067 (28.9%) less than what is needed to move the actual traffic. BC Ferries can get away with 3,695 trips without incurring a penalty and are considered to have satisfied the CFSC. One could argue that, if 702 (17.3%) more trips than scheduled and actually 1067 (28.9%) more trips than minimum are required to serve Hornby, the schedule is completely inadequate and that not only in the summer.

d. Further problems related to the Bayes Sound Connector

The Bayes Sound Connector was planned for service levels at the time of design. In other words, it was planned not for the future, but the past. On top of this, it has proven to be unreliable. In addition, one of its touted advantages over conventional service, of not requiring a highly qualified captain to operate, may be lost because of requirement changes on the federal level. Sources at Transport Canada anticipate that the Marine Personnel Regulations (MPR)

changes to the crewing requirements for cable ferries of this size will become law in the Fall of 2023. The changes include having licensed officers on Board large cable ferries. Costs of operating the cable ferry will be dramatically increased. And further alterations to the barge will be needed for crew lounge space.

There has been an analysis by a local retired University Professor, Dr. Colin Boyd, recommending replacement of the BSC altogether. Dr Boyd describes the problem beginning when BC Ferries commissioned a consulting firm to analyse the future demand for a cable ferry and recommend its future size. The consultant's report, available on the BC Ferry website, appeared to have a sophisticated analysis of demographics, but Dr Boyd found that the actual numbers in the report were seriously flawed, rendering the analysis next to useless. For example, the report assumed that every adult on Denman Island uses the ferry twice a week to go to Vancouver Island, which seemed extreme to the writer. The report did not acknowledge that a proportion of traffic from Buckley Bay drove across Denman to catch the ferry to Hornby Island. As a result, Dr Boyd recommends that BC Ferries demand all their money back from the consultants.

In addition, Dr Boyd assesses that the ideas of modifying the BCS to carry more cars, and also to have a new source of power generation, are essentially Band-Aid solutions that sustain the continued use of a cable ferry when the original problem was caused by the elimination of interoperable ferries in the first place.

The Chair of the Hornby/Denman Ferry Advisory Committee in 2022, Frank Frketich, has described the results of his August 2022 meeting with BC Ferries, which proposed several changes to be implemented before the summer of 2023. These include operationalizing the Quinitsa on Route 22 and moving the Kahloke to Route 21 to run in tandem with the BSC. Then in the mid-term, expanding the BSC to carry at least 70 cars, changing the BSC to electric power, and placing a new Island Class ferry on Route 22 in 2026. Frketich believes that these changes are a positive development, assuming they are implemented, but has concerns about the effectiveness of running the BSC in parallel with an ordinary ferry. Frketich also questions the feasibility of modifying the BSC to carry more cars and the use of an experimental power system inside it. He suggests that BCF should abandon the cable ferry project and move on to other solutions to improve their reputation.

Dr Boyd also is pessimistic about BC Ferries considering continuing the life of an ill-considered mismatched inept project. He introduced the concept of "sunk cost fallacy" to the discussion and suggests to just "kill it" and "get on with your lives."

An abbreviated copy of Dr. Boyd's report is presented as Appendix C in this submission. Dr. Boyd submitted his full report, pro bono, to the BCF management in the Fall of 2022.

e. Problems relating to operations

BC Ferries did not include tables for “Extra and Cancelled Roundtrips” in the PT 6 submission, as it was included in the PT 5 submission, see appendices A.3 – A.9. BC Ferries’ statistics show over 700 extra sailings in 2023 on Route 22 at

https://www.bcferrries.com/web_image/hd8/hec/8898175860766.pdf.

Many people believe there should be equal deck space on the Baynes Sound Connector, as a shared ferry, for each of Hornby and Denman Islands, to reflect equal population counts on each of the islands. The impact of lack of shared deck capacity on the Baynes Sound Connector to the community of Hornby Island is not significantly mentioned as a reality. What are the plans for the future? Especially with a 20% increase in population on Denman Island (2016 to 2021 Census figures), is the fate of Hornby Islander traffic to be moving further and further back in the line-ups?

BC Ferries reports do not measure service reliability, hours of wasted lives (in line-ups), trips that could not be realised. Does the Ferry Commissioner place an hourly cost on “wait time” per person, missed “medical appointments,” and similar? Overnight town costs should be clearly defined if line-ups make Hornby travellers miss their connection.

Does BC Ferries even have the required resources to provide adequate ferry service? Have they asked for funds for improvements?

A critical point: does the inadequate response to the downgrade of the carrying capacity of the Kahloke constitute a breach of the Coastal Ferry Services Contract? Section 2.01 states

Representations and warranties of BC Ferries

2.01

(h) it has sufficient trained staff, facilities, materials and appropriate equipment in place and available to enable it to fully perform its obligations under this Agreement.

Section 4.01 states

Representations and warranties of BC Ferries

2.01

(h) it has sufficient trained staff, facilities, materials and appropriate equipment in place and available to enable it to fully perform its obligations under this Agreement.

(a) [Omitted]

(b) will not reduce service on a Designated Ferry Route below the Core Service Level required in relation to that Designated Ferry Route unless (6 points which did not apply)

Also, Appendix 1 of Schedule “A,” Route Overview contains this item:

2d. the capacity provided on the Designated Ferry Route will be sufficient to carry the previous year's traffic.

It appears that BC Ferries is in breach of these terms and conditions of service for Route 22. It is doubtful that the current submission will lead to adequate service.

It would be a fair assessment that BC Ferries is challenging the core service levels year after year, on both Routes 21 and 22. This is not criticism of the local crews, but of the head office management and Provincial Government oversight and support. How is the commissioner addressing this? Is the commissioner working on further amendments to the Coastal Ferry Service Contract? In general, if there are concerns about the performance of a company, the commissioner responsible for overseeing the service provider may take several steps to address these concerns. These steps may include:

1. Enforcement of existing regulations: The commissioner may review existing regulations and ensure that BC Ferries is complying with all requirements. If there are violations, appropriate penalties or corrective actions may be imposed.
2. Contractual amendments: The commissioner may work on amending the Coastal Ferry Service Contract to address the concerns about the core service levels provided by BC Ferries.
3. Performance monitoring: The commissioner may monitor the performance of BC Ferries closely, collect data, and analyze it to identify trends and patterns. Based on this analysis, appropriate interventions may be designed to improve service quality.
4. Public engagement: The commissioner may engage with stakeholders, including customers and local communities, to understand their concerns and feedback about the performance of BC Ferries. This feedback can inform the actions taken by the commissioner.

Overall, the commissioner has several tools and mechanisms to address concerns about BC Ferries' performance.

In calculating the price cap, the [Commissioners web page](#) says they "solve one key question":

What amount of revenue is required to cover the expenses of the ferry operator?

The aim is to set a price cap that will minimize increases for users while allowing BC Ferries to earn enough revenue to cover its operating costs and service its debt.

In general, we ask ourselves, where is the accountability for the present problems? We have doubts that the current plans for future operations are sufficient. How will BC Ferries be held to commitments? Are there commitments? How is management held to account?

Is this one key question well-chosen? Would its answers address the points we have raised?

What constitutes acceptable service? How is the reliability of the service to be measured? Are there comparisons of equity between the minor routes. Why do some routes get improved service and Routes 21 and 22, with some of the worst performance metrics in the entire Minor Route fleet continue to be ignored? What is a fair and constructive response to unreliable service?

Real time, true story:

"It was wet, cold, dark, all too predictable."

Service notice - Sailing Cancellations - Baynes Sound Connector

Posted: Friday, March 03, 2023, issued at 5:27 pm for the 5:40 pm cancellation

The following Baynes Sound Connector sailings cancelled for Friday, March 3 due to a mechanical difficulty with the ship's bullwheel.

Cancelled Sailings:

5:40 pm departing Denman Island West

6:00 pm departing Buckley Bay (Vancouver Island)

6:40 pm departing Denman Island West

7:00 pm departing Buckley Bay (Vancouver Island)

8:00 pm departing Denman Island West

Scheduled 8:30 pm departing Buckley Bay (Vancouver Island) left just after 8 pm

g. BC Ferries Commissioner Stoilen Ignored

On Feb. 3, 2021 BC Ferries Commissioner, Sheldon Stoilen, concluded his report on the Service Reliability of the BSC. In that report to BCF Vice President, Jason Barabash, he stated:

"If service interruptions are perceived to be excessive over the long-term, public confidence in the ferry service may be undermined. To that end, the Commissioner requests BC Ferries to report quarterly, for the remainder of Performance Term 5, on the service reliability of the Baynes Sound Connector, the measures taken to minimize service interruptions and communications with ferry users on Route 21."

Points of note, Commissioner Stoilen is specifically referring to "service interruptions", meaning delays, postponements, and cancellations are all problematic. The inference by requiring continuing reporting is that Commissioner Stoilen acknowledged existing reliability issues, and the serious potential of that unreliability continuing and/or escalating. In his recommendation he was giving BCF additional time to become familiar with cable ferry technology and maintenance. If service interruptions continue, as they have, the time-frame extension of the Commissioners involvement also became a window of time for BSC to find other solutions.

Despite persistent requests, the current Commissioners office is unable to provide the quarterly reports for calendar 2023, nor do they anticipate receiving any reports for the final two years of PT 5. In the absence of reporting, the intentions of the Stoilen review are not being met.

If there has been a change to Commissioner Stoilen’s recommendation for accountability, the cancellation of the expectation has not been communicated to the ferry users of Route 21. Commissioner Stoilen’s report is included as Appendix D in this submission.

4. Conclusion

For Route 22: There is agreement that this run needs a more serviceable ferry. Both to recover from the November, 2021 reduced carrying capacity of the current 49 year old ferry, the Kahloke, but also to meet pent up demand. BC Ferries PT 6 submission showing a current schedule for a new vessel in Fiscal 2034 is woefully inadequate and the timeline should be significantly accelerated. In the Near-Term, the 44 AEQ Quinitisa needs to be deployed immediately.

For Route 21: There can be no discussion without acknowledging the ‘sunk cost fallacy’. The application of a cable ferry, in coastal and tidal waters has proven to be unsuccessful. When considering how to move forward there are 5 key points that need to be met in any evaluation of ferry service delivery, not just in B.C., but globally. There are international comparisons and standards.

The five units of measure cannot be favoured one over the others. There are solutions that meet all five.

1. Cost – environmental, operational, capital
2. Reliability & interoperability
3. Speed & flexibility
4. Weather capability
5. Capacity – current and forecast

From the PT 6 submission, BC Ferries’ plans for the two routes are described in this table. We are adding our proposed priorities in the fourth column:

Route	Challenge (BC Ferries)	Plan (BC Ferries)	Denman/Hornby Community Proposition
Route 22, Denman Island –	Less than five percent peak season capacity available and frequent overloads in peak season, high commuter	Near Term: Redeploy a larger vessel to the route, Quinitisa (44 AEQ) for summer service	Near Term: Deploy the Quinitisa for year-round service. Add flagging service in peak period.

Hornby Island	directional demand year-round at key times, overloads cause congestion in surrounding community	Medium Term: Redeploy a larger vessel to the route, Quinitsa (44 AEQ) year-round	Medium Term: As the Quinitsa ages out, deploy a vessel with equivalent, or better, capacity, such as one of the new 47 AEQ Island Class ferries.
Route 21, Buckley Bay – Denman Island	Less than 30 percent capacity available in the peak season, high commuter directional demand year-round at key times of day, overloads cause congestion in surrounding community	Near term: Supplement peak season with the Kahloke (21 AEQ) to support higher capacity vessel on route 22 Medium Term: Increase the size of the Baynes Sound Connector from 45 AEQ to approximately 65 AEQ to support higher capacity vessel on route 22	Near term, PT 5: Summer of 2023 supplement peak season with the Kahloke. Near term, PT 6: Do not sink more money into the Baynes Sound Connector. It is a failed experiment. Commission a new ferry to be built to replace the BSC with a interoperable ferry with 90 AEQ.

We respectfully request that the Commissioner directs BCF to redo their PT 6 submission, as it relates to Routes 21 and 22, to immediately, and effectively, address local concerns and deploy vessels capable of delivering a level of service expected from one of the largest marine ferry operators in the world.

Appendices:

- A. [BC Ferries’ plans for Performance Term 6 – summarized](#)
- B. [Annual costs of a self-propelled ferry versus the Baynes Sound Connector](#)
- C. [Dr. Colin Boyd report: Condensed, Problems with the Baynes Sound Connector](#)
- D. [BC Ferries Commissioner Stoilen, BSC reliability stats ordered through to March, 2024](#)
- E. [Hornby Ferry Action Discussion Group Participant list](#)

Appendix A

BC Ferries' plans for Performance Term 6 - Summarized

In order to facilitate discussion and understanding, we present this summary of BC Ferries' submission as it pertains to route 21 and route 22.

According to the [submission by BC Ferries](#) for Performance Term 6, the traffic increase forecasts for the long-term are in (p111)⁷:

Table 28 – Forecast long-term CAGRS

	Private Vehicles	Total Passengers	Commercial
Majors	0.4%	0.4%	1.1%
Minors	0.5%	0.8%	1.7%
North	0.0%	0.4%	1.8%

Page 116 shows the perceived challenges on routes 21 and 22, and how they will be addressed (p117):

Route	Challenge	Plan
Route 22 Denman Island - Hornby Island	Less than five percent peak season capacity available and frequent overloads in peak season, high commuter directional demand year-round at key times, overloads cause congestion in surrounding community	Near Term: Redeploy a larger vessel to the route, <i>Quinitsa</i> (44 AEQ) for summer service Medium Term: Redeploy a larger vessel to the route, <i>Quinitsa</i> (44 AEQ) year-round
Route 21 Buckley Bay - Denman Island	Less than 30 percent capacity available in the peak season, high commuter directional demand year-round at key times of day, overloads cause congestion in surrounding community	Near term: Supplement peak season with the <i>Kahloke</i> (21 AEQ) to support higher capacity vessel on route 22 Medium Term: Increase the size of the <i>Baynes Sound Connector</i> from 45 AEQ to approximately 65 AEQ to support higher capacity vessel on route 22

⁷ That's right, there are no figures for route 21 and 22 separately, they are bunched together with the 16 other "minors." There are also no forecast short-term CAGRS for route 21 and 22.

Also, p127 shows plans up to 2036:

Route	PT6				PT7				PT8			
	F25	F26	F27	F28	F29	F30	F31	F32	F33	F34	F35	F36
4	Add RT's peak		Seasonal deployment of Quinsam as supplementary vessel									
5	Salish Introduced Fall 2022											
6	Quinsam redeployment		Island Class Phase 3									
7	Peak available capacity over 30% to F36											
8	Peak available capacity over 30% to F29, support modal shift initiatives											
9	Salish Class (deployed 2017)											
12	Well utilized route with alternate option via highway											
17	Salish Class (deployed 2017)											
18	Island Class Phase 1 (deployed Spring 2020)											
19	Island Class Phase 2 (deployed Spring 2022)											
20	Peak available capacity over 30%										Island Class Phase 4	
21	Kahloke as seasonal supplemental		Increase capacity of the BSC									
22	Seasonal Deploy Quinitsa		IC Phase 3 supports Quinitsa redeployment Year round							Island Class Phase 4		
23	Island Class Phase 2											
24	Seasonal 2 ship service		Island Class Phase 3									
25	Island Class Phase 1 (deployed Summer 2020)											
26	Revert to 2 shifts daily service in 2020											New Ship

SERVICE
DEPLOYMENT
PROCURE/CAPITAL

Page 119 and Page 120 then shows these heat maps (Route 22 appears before route 21 in their document), indicating an absence of problems from 2026 on:

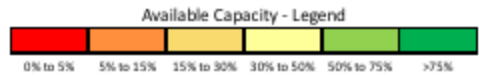
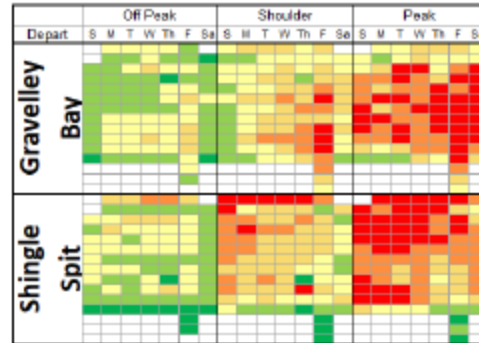
Route 22 – Hornby Island to Denman Island

The following tables outline the average available capacity by season, by day of week, across the day for the base year and future years as the near and medium term initiatives are implemented:

Available Capacity Base Year with Kahloke (21 AEQ)

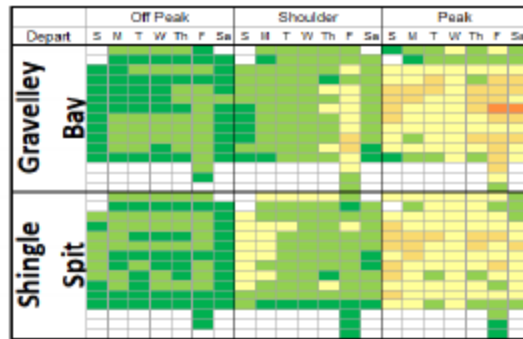
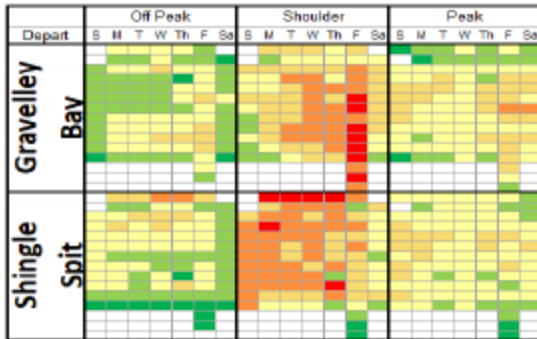
Service Considerations:

- Seasonal high capacity utilization and overloads
- Use shuttling to address peak period demand
- Directional nature of daily demand
- Size of *Baynes Sound Connector* is a consideration for a larger vessel on route 22



Near Term - Increase the capacity on route by deploying *Quinitisa* (44 AEQ) in peak season.

Medium Term –Deploy *Quinitisa* (44 AEQ), year round. *Estimated Spring 2026*



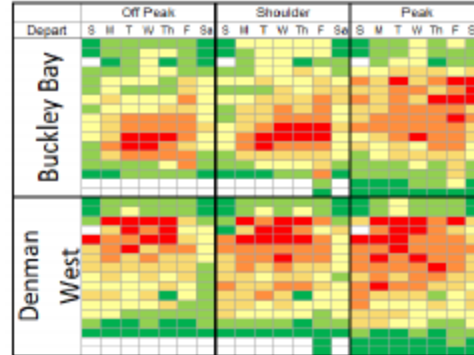
Route 21 – Denman Island to Vancouver Island (Buckley Bay)

The following tables outline the average available capacity by season, by day of week, across the day for the base year and future years as the near and medium term initiatives are implemented:

Available Capacity Base Year with Baynes Sound Connector (45 AEQ)

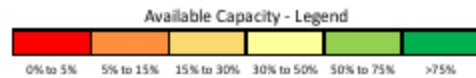
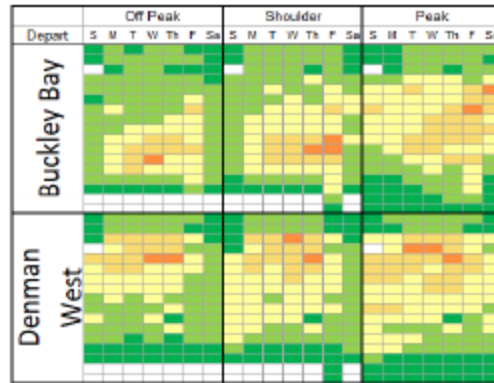
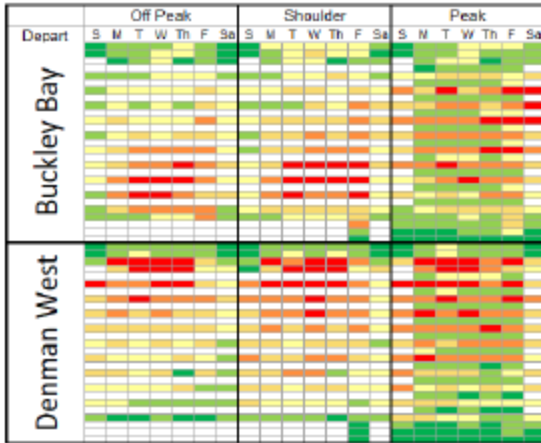
Service Considerations:

- Seasonal high capacity utilization and overloads
- Use of shuttling to address peak demand
- Directional nature of daily demand



Near Term - Increase the capacity on route by deploying Kahloke (21 AEQ) in peak season.

Medium Term -Expansion of the Baynes Sound Connector. Estimated Spring 2026



Appendix B

Annual costs of a self-propelled ferry versus the Baynes Sound Connector

APPENDIX B
Operating cost evaluation Baynes Sound Connector (BSC)
Quinita > BSC now > BSC with increased deck size
compiled by Bernhard Weiss

Quinita versus BSC

In February 2016 the BSC took over service on Route 21 from the sea going ferry, the Quinita. Before that date in 2015 Quinita provided the base service while the BSC conducted training and test runs and slowly started to transport vehicles and passengers. For financial considerations, Fiscal 2016 shows the cost accumulated by both ferries, Fiscal 2015 was the last year Quinita was providing all service.

- av. operating cost for Quinita in Fiscal 2015/14/13 was \$ 4,947,000

compare that to

- av. operating cost for BSC in Fiscal 2022/21/20 was \$ 5,932,000

an increase of \$ 985,000 or 19.9 %. Comparing just Fiscal 2015 with Fiscal 2022, the increase was 24.6%.

During that time, av. total operating costs for all Minor Routes increased by 22.8 %, so operating the BSC for those 3 years was on av. \$ 143,500 cheaper, not an amount to get excited about and a far cry from the promised 2 million saving.

BSC continues as is in Fiscal 2025 and 2026 of PT 6

Since 2014 Transport Canada is working on changes to the Marine Personnel Regulations. Included is a change to the crewing requirements for cable ferries of less than 500 tons (the BSC has a max. displacement of 750 tons), see attached.

- Sect. 207.1(3) requires that the minimum complement of
 - a) a master
 - b) a chief-mate if the ferry carries more than 50 passengers
 - c) a person in charge of the machinery if the ferry has more than 750 KW (does not apply, the BSC only has 734 KW)

The BSC is a 2-shift ferry requiring 3 complete crews of 4 each for a total of 12 deckhands, with 3 of them carrying the designation of "lead operator". When the new MPR is in place, the BSC will require 6 deckhands, 3 masters and 3 mates, That will increase the wage costs by approx. \$ 300,000 (cost of 6 officers at 700k, minus cost of 6 deckhands at 400k).

- The original plastic coated cables were supposed to be in use for 3 years. The presently

used galvanised steel cables should have a life expectancy of 2 years, requiring 1 1/2 cables /year instead of one cable. As per attached letter from BCF's FOIPP office, one cable including everything costa approx. 250k, so the annual cable cost will increase by 125k.

The increase in crewing plus cable cost will be approx. \$ 450,000/ year. So instead of savings of 2 million/year, the continued use of the BSC will cost \$ 300,000 more per year than the Quinita would cost, had she remained on Route 21.

NO SAVINGS AT ALL, AND SEVERELY REDUCED SPEED, RELIABILITY, WEATHER CAPABILITY AND CAPACITY.

BSC with increased deck capacity in Fiscal 2027 and 2028

Increasing the decksize will be achieved by widening the hull by 2 lanes. This substantial capital investment will increase capacity, but do nothing to increase reliability and will not reduce cost. The cable size might have to be increased without positively effecting the weather matrix and the much called for interchangeability will not be achieved.

Conclusion

The cable ferry is a failed experiment. The sooner BC Ferries pulls the plug, the better for ferry users and taxpayers.

attach: Transport Canada presentation at CMAC
FOIPP office on cable cost

Hornby Island, March 3rd 2023

Appendix C

Dr. Colin Boyd report: Condensed, Problems with the Baynes Sound Connector

What to do with the Baynes Sound Connector?

I am Colin Boyd, a retired academic who has owned property on Hornby Island since 1989. I have a Ph.D. in Transportation Economics, and am Canada's leading expert on aircraft crash analysis. I have also written and spoken publicly about rail and sea disasters. One relevant paper of mine was entitled "*Safety: Procedures or People? An Examination of BC Ferry's Three Accidents Between August 10th - 14th, 1992*"

This current note is a condensed version of a paper about the cable ferry that I sent to BC Ferry's new set of senior managers in the Fall of 2022.

The original announcement that BC Ferries was considering linking Buckley Bay with Denman Island via a cable ferry was met with complete local disbelief. Had BCF gone completely barking mad in proposing this costly replacement of our normal ferry service, a service that seemed to be functioning well? What was the problem that the insane expenditure on the cable ferry was supposed to solve?

The various island folk knew intuitively that this was a deranged experiment being thrust upon us. To our continued collective amazement, and in the face of our near universal opposition BC Ferries went ahead with this insane scheme.

It was evident to me that BC Ferries had not undertaken a simple break-even analysis for the cable ferry. The scale of the minor savings in variable costs (reduced fuel consumption plus one or two fewer crew) was utterly dwarfed by the huge expenditure in fixed cost infrastructure (\$17 million?) for the ferry and its new docks.

The 30-year lifetime of the size of the new ferry involved a prediction of the future economies of the islands that no real economist would dare undertake. BCF could already switch in larger or smaller interoperable ferries to manage our economic ups and downs, but the cable ferry locked us in to a fixed capacity for 30 years. It was a predictable bottleneck.

No risk analysis was carried out either. If the cable ferry breaks down there is no other cable ferry to swap in to replace it. It represents a single point of engineering failure. The lack of redundancy in the cable

ferry system requires the continued maintenance and availability of the docks for the parallel normal ferry service that it was supposed to replace.

Moreover, it was a mismatch with BC Ferry's core technological skills. It had a new drive technology that did not rely on BCF's core engineering expertise. Teething problems were predictable, and the recent history of multiple breakdowns of the cable ferry is suggestive of technological incompatibility.

I still cannot grasp the enormity of this example of sheer managerial madness. Overall, the story of the management of the cable ferry project that I portray is an exceptionally miserable one. One must ask - why on earth did it go ahead when it was so blindingly obvious that it was wrong?

There is, in fact, a distinctive history of exactly this kind of project in the management literature under the heading "*Investments in Managerial Ego*".

There is an extensive history in the business world of crackpot irrational investments by senior management (almost inevitably male) who are convinced that the course they are following is ordained and superior in a particular way. Criticisms of such policies are automatically dismissed.

BCF senior management became obsessed with the idea of installing the world's longest cable ferry across Baynes Sound, deaf to the many protests that they were ego-driven in pouring public money into this pet project.

BCF commissioned a Vancouver-based consulting firm to recommend the future size of the ferry based on forecasting future demand. I read the consultant's report. In my academic career I had supervised many Masters' and Doctoral student theses, and have read and marked many other student projects.

If the consultant's report had been submitted to me as a student project then I would have graded it with an "F" and thrown it back at the

students with a demand that they start again and do it all over another time. It was inept beyond belief.

Parts of the report to do with the demographics of the Denman Island were very sophisticated. But there was one troubling aspect of the report that worried me. The actual numbers in the report seemed seriously wrong. The report stated that every Denman resident aged 20 to 54 would take an average of 279 ferry trips per year, while the average Hornby resident took around 36 ferry trips per year.

I suspected an error in their calculations. I checked to find that the consultants seemed to have imagined that every car and passenger who boarded the ferry at Buckley Bay got off the ferry and remained on Denman Island. Their calculations of Denman Islanders' usage of the ferry were invalid as a result.

This was such an awful flaw as to render their analysis as next to useless. Their final recommendation that the cable ferry's vehicle capacity should be the same as the ferry that it was replacing seemed remarkably convenient.

What to do now with the Baynes Sound Connector?

Frank Frketich, the Chair of the Hornby/Denman Ferry Advisory Committee has recently described changes that BCF would begin implementing before the summer of 2023.

Excess demand would be dealt with by operating a larger ferry on the Hornby run, and by operating a normal ferry on the BB run that would operate in parallel with the BCS. In addition, in the future the BCS would be enlarged by two lanes to accommodate more cars, and would get a new electric power system.

I have my doubts about BCF's ability to implement the 2 ferries in parallel on the BB run. It would require the recruitment of a second ship's crew, and the use of the aging log-pile older dock at Denman West, which recently needed repairs under the connecting bridge. Any failure to implement this proposal would produce negative publicity for the new BCF management team at a time when they may wish to appear to be positive and transformative.

More importantly, the ideas of modifying the BCS to carry more cars, and also to have a new source of power generation are essentially Band-Aid solutions that sustain the continued use of a cable ferry when the original problem was caused by the elimination of interoperable ferries in the first place.

Adding two extra vehicle lanes to the BCS will be an expensive addition to the already high fixed costs of the total cable ferry infrastructure. Modification will take the BCS out of service for at least 6 to 9 months, and will produce an ugly vessel of questionable stability that needs more power to move a ferry that is heavier, which will have the weight of extra vehicles on board as well, and which may require higher strength cables that may be mismatched with the current shore cable tethering system.

The idea of installing yet another experimental power system inside a heavily modified version of the current cable ferry is just asking for a future stream of profound technical headaches. This plan of action is may be completely self-destructive from a public relations point of view.

I advise against following this path. What to do then?

The management expert Peter Drucker has studied these kinds of problems and his solution is simple:

“Some things are obvious candidates for abandonment ...
“investments in managerial ego” are those programs that the organization’s leaders are convinced will succeed tomorrow—but tomorrow never comes. It is so difficult for any business or organization to abandon a program because the program may represent an investment by the people who introduced it and who nursed it along. Beware of commitment to ego as an excuse for maintaining status quo.”

It appears as if BCF is considering continuing the life of an ill-considered mismatched inept project. I suggest that the new BCF management team should just kill it now and get on with their lives.

Get rid of it quick and assign the negative publicity to their predecessors rather than continuing on and risking it harming their own reputations.

Pouring yet more money down this drain hole is not a solution. The management literature is full of similar disastrous stories under the generic title of ["Sunk Cost Fallacies."](#)

BCF management has a brief honeymoon period in which they can stick handle this in such a way so as to improve their reputation. It is the most politically expedient course of action for them to take.

I fully recognize that BCF management may wish to save face concerning the whole Baynes Sound Connector project. I have a simple solution to recommend.

Remove the Baynes Sound Connector from service under the guise of making the planned alterations. Install a replacement propeller driven ferry for the planned 9-month alteration project. After a few months make a small announcement saying that the alterations may take longer than thought.

And, later on, after everyone has gotten used to the new propeller driven ferry on the route, just announce that marine architects have indicated that the BSC is unfortunately unable to be modified. No one will really care any more, and BCF management can save face by not having to make any big formal announcement about scrapping the Baynes Sound Connector.

Colin Boyd

Landline 250 335 3362

colin.boyd@usask.ca

Appendix D

BC Ferries Commissioner Stoilen, BSC reliability stats ordered through to March, 2024

February 3, 2021

Mr. Jason Barabash
Vice President, General Counsel & Corporate Secretary
British Columbia Ferry Services Inc.
Suite 500, 1321 Blanshard Street
Victoria, BC V8W 0B7

Dear Mr. Barabash:

Re: *Baynes Sound Connector* – Service Reliability

Thank you for your comprehensive response to the Commissioner's request for an update on the service reliability of the *Baynes Sound Connector*.

The Commissioner concurs that despite an increase in the number of service interruptions recently, the *Baynes Sound Connector* has been successful in providing a higher service level than its predecessor relative to contract-required minimums. It has done so in a cost-efficient manner, which has decreased pressure on fares, and compared to a conventional ferry, it has substantially reduced greenhouse gas emissions. Furthermore, the *Baynes Sound Connector* appears to be operating at a reliability rate that is generally on par with the reliability of the rest of BC Ferries' fleet.

The Commissioner is satisfied that for those times when service interruptions have occurred, BC Ferries appears to have taken care to communicate with the community and made reasonable arrangements for alternative transportation. The Commissioner expects BC Ferries to always consider the interests of ferry users and to ensure timely communications with affected customers.

While the Commissioner accepts the explanations provided by BC Ferries for the recent increase in service interruptions and recognizes the effort it has made to improve service reliability, the Commissioner strongly encourages BC Ferries to continue all reasonable efforts to minimize service interruptions on Route 21. If service interruptions are perceived to be excessive over the long-term, public confidence in the ferry service may be undermined.

.../2

To that end, the Commissioner requests BC Ferries to report quarterly, for the remainder of Performance Term 5, on the service reliability of the *Baynes Sound Connector*, the measures taken to minimize service interruptions and communications with ferry users on Route 21.

Sincerely,

A handwritten signature in blue ink that reads "S. T. Stoilen". The signature is written in a cursive, flowing style.

Sheldon Stoilen
BC Ferries Commissioner

January 20, 2021

Mr. Sheldon Stoilen
British Columbia Ferries Commissioner
BC Ferry Commission
PO Box 9279 Stn Prov Gov
Victoria, BC V8W 9J7

Dear Mr. Stoilen:

Re: *Baynes Sound Connector* – Service Reliability

We are writing in response to the Commission’s request for an update regarding the service reliability of the *Baynes Sound Connector*.

In February 2016, BC Ferries replaced its conventional ferry service on the route connecting Buckley Bay with Denman Island (“Route 21”) with the *Baynes Sound Connector*, a cable ferry service that was expected to provide significant cost savings to offset pressure on future fare increases for all ferry users, while still allowing the Company to maintain its high standard of safety and reliability of service.

BC Ferries believes that overall, the *Baynes Sound Connector* and the cable ferry system has been a success. This vessel, similar to its predecessor, regularly provides service in excess of the daily and annual core service levels required by BC Ferries’ Coastal Ferry Services Contract with the Province. Also, in comparison to its predecessor, fuel savings allow the vessel to move more rapidly to shuttling between terminals, with the result that there have been increases in sailings relative to core service levels. Because of this, BC Ferries has been able to provide the community and other travellers with considerably more vehicle capacity than likely would have been available with the previous conventional vessel.

The *Baynes Sound Connector* is also beneficial to the environment relative to the previous vessel in terms of greenhouse gas emissions and underwater radiated noise. In May 2019, shortly after the *Bayes Sound Connector* marked its third year in service, BC Ferries announced that it had achieved savings of more than 415,000 litres of fuel compared to the conventional vessel that previously serviced the route, leading to a reduction in greenhouse gas emissions of approximately 50 percent. We also observed that with no propellers, it is an exceptionally quiet ship both above and below the waterline.

. . . /2

We acknowledge, however, that there have been service interruptions on the route due to terminal and vessel mechanical issues. Since the *Baynes Sound Connector* came into service in 2016, there have been between two and 10 days per year with a vessel or terminal mechanical interruption, inclusive of four separate years in which the vessel missed one full day of service. (Relief service may have been provided by water taxis or other vessels during those outages.)

BC Ferries committed in its section 55 submission to the Commission for the approval of the cable ferry project to provide a standard of service equivalent to that provided by the existing vessel. We have undertaken a mix of corrective and proactive initiatives on the vessel itself, the cable system, and the terminal infrastructure, all with the objective of improving safety, reliability, and operational performance. This includes technical improvements on cables, main engines and ancillary systems, hydraulic system and shore structures.

A number of initiatives are also in progress and are expected to be completed over the next few months. This month, we are installing the last of the three new flattened strand steel cables, this one located at the drive position. Additional improvements to existing systems will include the installation of upgraded bull-wheels and sheaves, likely in March or April. (In both instances, we will maintain detailed and advanced communications with the local communities.) With these and some other final enhancements, we are confident that these improvements will pay dividends over the life of the vessel, and service interruptions due to mechanical issues will be minimized. We expect the *Baynes Sound Connector* to continue to operate at a reliability rate that exceeds reliability targets and is on par with the rest of the fleet.

We are aware that concerns have been raised about service interruptions and off-island transport during medical emergencies. We care about the health and safety of our customers within island communities and whenever possible we support them in receiving medical attention as quickly as possible during emergencies. When there is a medical emergency during a service interruption on the route, alternative arrangements are made by the BC Ambulance Service. During service interruptions, however infrequently they may occur, we also take steps appropriate to the situation, including as needed:

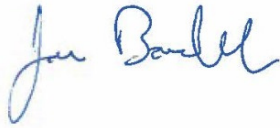
- Communications to the community through our website, service notices, news releases and social media;
- Alternative water taxi service and bus/shuttle service to nearby towns;
- Liaison with the local ferry advisory committee; and
- Vessel substitutions.

Overall, the *Baynes Sound Connector* has performed well and despite the infrequent cancellations, has been providing additional service relative to contract minimums in comparison to its predecessor. It is still a relatively new vessel and like all new vessels, there has been a 'break-in period' of several years where unfortunately some mechanical interruptions have occurred. We continue to make mechanical improvements to the vessel and going forward, we expect these cancellations to continue to diminish in number.

. . . /3

Should you have any questions or require further information please contact us.

Sincerely,

A handwritten signature in blue ink that reads "Jason Barabash". The signature is written in a cursive style with a large initial 'J'.

Jason Barabash
Vice President, General Counsel & Corporate Secretary

Appendix E

Hornby Ferry Action Discussion Group Participant list

APPENDIX E

Hornby Ferry Action Discussion Group, listed in no particular order

Expertise	Representing on the FAC	First Name	LastName	Email
Transport. Eng.		Bernhard	Weiss	bernhard.weiss.ca@gmail.com
Ret. Sr. Master, BCF		Pete	Kimmerly	pckimmer@telus.net
Ret. Capt. BCF		Harry	Fearman	harry-ark@uniserve.com
Ret. Deck BCF		Brian	Pannell	brianpannell51@gmail.com
Ret. Capt. BCF		Ron	Tuele	rwetue@gmail.com
HI Residents & Ratepayers Assoc		Kent	Lukinuk	kentlukinuk@shaw.ca
Prof. Trans. Ec.		Colin	Boyd	boyd@edwards.usask.ca
Island Trust Hornby		Grant	Scott	gscott@islandstrust.bc.ca
Comox Valley Regional District, Area A		Arbour	Daniel	reachme@danielarbour.ca
HORNBY FAC				
FAC	New Horizons/Hornby Denman Community Health Care Society	Ron	Edmonds	dr.jredmonds@gmail.com
FAC	Hornby Island Residents & Ratepayers	Rob	McCreary	mcreobhi@telus.net
FAC	Education/Hornby School	Sandra	Rutherford	sstrom@hotmail.com
FAC	HICEEC	Karen	Ross	karen@hiceec.org
FAC	Islands Trust - Hornby	Alex	Allen	aallen@islandstrust.bc.ca

FAC	Hornby Island - emergency/health services	Stephan	Wehner	stephanwehner@gmail.com
DENMAN FAC				
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FAC	Island Trust - Denman	Sam	Borthwick	leumaas@gmail.com
FAC	Denman Seniors and Museum Society	Jack	Forsyth	jackgill@telus.net
FAC	Denman Island Community School Board	Kevin	Hutton	jkevinhutton@msn.com