

Capstone 1

Neptune Point Fisheries Inc. — Case

Candidates are expected to use the case facts from the Capstone 1 case to complete their analysis. It is not expected that candidates consider the impact of emerging current events in their response. Candidates may choose to do so in a reasonable way; however, the impacts of current events are not meant to be a significant part of candidates' analyses.

Capstone 1

Neptune Point Fisheries Inc. — Case

CPA Evaluation — 2024

It is April 5, 2024, and you are working as a CPA with Sanderson & Harrop Consulting LLP (SHC). You have been assigned to prepare a report for the board of directors (board) and management of Neptune Point Fisheries Inc. (NPF).

NPF has approached SHC with a request to assist them in strategic analysis and to set a new direction for the company. Based on past years' results, the shareholders are concerned about the declining revenues and volatility of profits. There are conflicting viewpoints among the four shareholders as to how the company should grow in the future, as well as some additional issues that they would like you to analyze and address.

You have been provided with the following information to review and analyze (all dollar values are in Canadian dollars unless specifically stated otherwise).

Neptune Point Fisheries Inc.

NPF is a private company owned by spouses Colan and Yvonne McPherson and their two children, Kurt and Allan. Colan and Yvonne own 40% each, and Kurt and Allan each own 10%. The company was started in 1987 by Colan and Yvonne and has grown from that date. In 2023, annual sales were over \$32 million and operating income was over \$1.6 million.

The company's current operations involve ocean fishing in the Atlantic Ocean, and its head office is in Newfoundland and Labrador. It operates two fishing vessels that harvest Greenland halibut and shrimp in the northern Atlantic Ocean. The company performs initial processing and freezes the seafood on board its vessels. In addition to fishing ocean shrimp, NPF purchases freshly caught inshore shrimp to be processed and packaged at its on-land processing plant. The company distributes and markets its processed shrimp in a fresh and frozen state.

An organizational chart is provided in Appendix I. NPF's most recent financial statements for the years ended December 31, 2021, 2022, and 2023 (prepared under IFRS) are provided in Appendix II. Industry benchmarks are provided in Appendix III.

Industry information

Description and size

NPF operates in the fish and seafood industry, which includes segments such as ocean fishing, inland fishing (rivers and lakes), seafood aquaculture activities, importing and exporting, seafood processing and preparation, and wholesale and distribution. The industry also includes seafood retail and restaurants. In this industry analysis, "seafood"

includes all fresh, frozen, and canned fish and shellfish. Aquaculture, also referred to as fish farming, is the breeding, rearing, and harvesting of aquatic plants and animals. NPF operates in the ocean fishing and seafood processing segments of the fish and seafood industry.

Primary products in this industry are wild-caught shellfish, wild-caught finfish, and aquaculture shellfish and finfish. In 2020, the industry had total revenue of \$5.1 billion after suffering an 8% decline due to a global pandemic.¹ But growth to 2025 is expected to be 3.1% annually, driven by increased consumer spending and higher product selling prices.²

Fish and seafood are harvested from the Atlantic, Pacific, and Arctic oceans along Canada's borders. Overall, the industry is in its mature stage, with stable markets and well-defined product segmentation.³ The most significant change in the industry continues to be an increase to the proportionate market share of aquaculture.

Ocean fishing

Ocean fishing is broken down into three areas as defined by Fisheries and Oceans Canada:⁴

- Inshore: The fishing sector where licence holders are restricted to using vessels less than 19.8 metres (65 feet) length overall (LOA).
- Midshore: The fishing sector where licence holders are permitted to use vessels 19.8 metres (65 feet) LOA and greater, but less than 30.5 metres (100 feet) LOA.
- Offshore: The fishing sector where licence holders are permitted to use vessels 30.5 metres (100 feet) LOA and greater.

The size of the vessel required for harvesting seafood increases as the depth of the waters and mileage from shore increases. Global fish stocks are threatened by overfishing,⁵ whereas in Canada, the volume of seafood that can be harvested from the open waters is restricted by quota licences by species in order not to deplete populations.⁶

¹ Matthew Buchko, "Fishing and Seafood Aquaculture in Canada, Reel well: Improved export growth is expected to accelerate the industry's expansion," IBIS World Report 11411CA, August 2020.

² Ibid.

³ Ibid.

⁴ Government of Canada, "Maritimes Region Commercial Fisheries Licensing Policy," last modified August 23, 2021, <https://www.dfo-mpo.gc.ca/reports-rapports/regs/licences-permis/maritimes/licensing-pol-permis-peche-eng.htm>

⁵ Emilie Le Beau Lucchesi, "The Real Reason Global Fish Stocks Are Declining – And What You Can Do About It," *Discover Magazine*, November 8, 2022, <https://www.discovermagazine.com/planet-earth/the-real-reason-global-fish-stocks-are-declining-and-what-you-can-do-about>

⁶ Matthew Buchko, 2020.

Aquaculture

Aquaculture licences are issued and regulated by the provinces. Licences vary in length depending on the species. Unlike the quota limits imposed for open-water fishing, aquaculture often has no resource limits.⁷ As a result, there is increasing support for growth of this sector by both governments (federal and provincial) and private corporations. As aquaculture has grown in acceptance and investor interest, consolidation among existing companies has occurred to achieve economies of scale.⁸ There are low barriers to entry, allowing more producers to enter the aquaculture segment of this industry.⁹

The benefits of aquaculture in comparison to fishing include more predictable harvest volumes, fewer risk factors, less danger for the employees (in comparison to open-water fishing), more reliable input costs, and less damage to the environment.¹⁰ The one main drawback is reputational risk related to end consumers' perception of the use of antibiotics and chemicals required for breeding fish in concentrated farms to maximize the population and weight of the seafood.¹¹

Demand for animal protein is expected to increase by 52% by 2050,¹² and aquaculture is an efficient method to meet this demand. The number of operators in this segment is expected to grow by 2.6% to 21,172 enterprises in order to meet the increased demand of the export market.¹³

For aquaculture to be successful, a company must have a site that is on the water and has the right conditions for farming.¹⁴ Success in fish farming comes from achieving higher yields with lower input costs.¹⁵ Higher-quality farmed fish will yield higher revenues. As a result, this segment of the industry is heavily involved in researching and developing technological advances to genetically breed fish to be disease resistant, have higher reproductive rates, and have higher proportionate amounts of edible product to ensure success.¹⁶ Research is also involved in developing technologies for monitoring water temperature and monitoring for disease and sea lice.¹⁷ Operating profits for aquaculture are expected to increase due to higher seafood selling prices.¹⁸

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

¹² Best Aquaculture Practices, "Why Aquaculture?" accessed April 5, 2023, <https://www.bapcertification.org/WhoWeAre>

¹³ Matthew Buchko, 2020.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

Fish and seafood industry value chain

The following are the stages of the value chain for the fish and seafood industry:¹⁹

1. **Seafood harvesting** — Seafood is harvested by ocean fishing, inland fishing, or aquaculture (farming). Various sizes of vessels are used to harvest the catch. Maximum allowable quotas are set by licences regulated by the Canadian government, with the bulk of the quotas being given to commercial enterprises. Harvesters are paid the “landed price” per pound for their catch. The landed price is the market spot price that harvesters receive for their catch that is off-loaded at the shore’s docks. Once harvested, the seafood can be sold in its fresh state (unprocessed) direct to grocery retailers, restaurants (fast food or full service), food caterers, or the end consumer. Alternatively, the catch can be processed to the initial stage or further processed to a variety of other seafood products (as discussed below).
2. **Initial-stage processing for fresh or frozen** — Initial processing includes descaling, removing heads, and holding seafood in either a fresh or frozen state. This can be completed by the harvesters themselves either on board the vessels within an hour of catching or at onshore processing plants. Alternatively, the harvester can sell their catch to third-party processors that will complete this stage. The seafood can be sold intact in a fresh or frozen state direct to seafood processors (Stage 3), wholesale or retail customers (Stage 4), or the end consumer (Stage 5).
3. **Further processing by seafood processors** — This stage of processing includes removing usable parts of the fish and its shell. Seafood can be filleted and cut into smaller portions and sold fresh, or further processed into canned, smoked, jarred, pickled, salted, dried, or frozen products.²⁰ Fish and shellfish fats and oils are also produced at this stage.²¹ These processed products can be sold to wholesale or retail customers. Waste products from processing, such as bones and skin, can then be sold to animal feed producers.
4. **Sales to wholesale and retail customers** — Customers include full-service restaurants, supermarkets and grocery stores, fast food restaurants and caterers, fish markets, and grocery wholesalers.²² Many of these customers are willing to pay a premium to suppliers that can provide consistent quality, a wide variety of product, reliable delivery, and easy-to-prepare seafood.²³ As consolidation occurs among these customer segments, specifically the food retailers, this puts pressure on the pricing and trade terms for the upstream harvesters and processors.

¹⁹ Ibid.

²⁰ Matthew Buchko, “Seafood Preparation in Canada: Krillin’ it: A forecast improvement in the global economy is expected to drive further growth in industry revenue,” IBIS World Report 31171CA, January 2021.

²¹ Ibid.

²² Matthew Buchko, 2020.

²³ Clearwater Seafoods Incorporated, “Annual Information Form For the Year Ended December 31, 2019,” March 3, 2020, https://www.clearwater.ca/wp-content/uploads/2020/03/CLR-AIF-2019_Final.pdf

5. Sales to, and consumption by, the end consumer — The end consumer is looking for seafood that is easy to prepare and delicious.²⁴

Product segmentation

Within the fishing (ocean and inland) and seafood aquaculture segments in which NPF operates, the breakdown of product sales is as follows:²⁵

Type	Percentage of total segment revenues	Description
Wild-caught shellfish	54.6%	Includes lobster and crab, which sell for the highest prices, driving up the revenues from this segment. This segment also includes shrimp, scallops, clams, sea urchin, oysters, whelks, and sea cucumbers.
Wild-caught finfish	14.2%	Includes salmon (primarily off Pacific coast, and in smaller amounts inland and Atlantic and Arctic oceans). Halibut is 17% of this segment, but its share has been declining. This segment also includes herring, Greenland halibut (turbot), tuna, cod, redfish, and hake. This segment has increased due to end consumers' preference for finfish and its health benefits.
Aquaculture	31.2%	Includes trout and steelhead salmon. This segment also includes oysters (representing the highest category of shellfish), followed by mussels, clams, scallops, and shrimp. It is expected that this segment will grow due to increased consumer demand for farmed salmon and trout.
Total	100.0%	

Seafood products such as lobster, crab, salmon, and halibut are considered premium products that can be sold for higher-than-average prices, resulting in higher revenues for the fisheries operating in this segment of the industry.²⁶

²⁴ Ibid.

²⁵ Matthew Buchko, 2020.

²⁶ Ibid.

Customer segments

Customers in the fishing (ocean and inland) and seafood aquaculture segments are as follows, and described in detail below.²⁷

Type	Percentage of total revenues
Wholesalers and retailers	55.1%
Exporters	25.6%
Seafood preparers (food processing companies)	19.3%
Total	100.0%

Fresh and frozen seafood wholesalers and retailers

This segment of customers includes wholesale and retail buyers who distribute or resell the product, as well as sales by harvesters in fresh fish markets or farmers markets. Seafood wholesale revenues are expected to grow 1.5% annually by the end of 2024, and the number of operators in Canada is also expected to increase 0.9% annually over the same period to 1,177 in total.²⁸ This segment sells fresh and unpackaged frozen products and purchases product from both Canadian and non-Canadian harvesters. Although domestic demand is predicted to decrease during this period, this will be offset by increased global demand, opening of new foreign markets, and relaxing of tariffs on product shipped to the European Union.²⁹

Exporters

International trade agreements and the Canadian dollar exchange rate affect the volume of exports in this segment. Canada currently has free trade agreements with the European Union, with the United States and Mexico (USMCA), and with Japan, Peru, and others (the Trans-Pacific Partnership). Trade agreements with China could also result in increased exports. As the Canadian dollar appreciates against major foreign currencies, this makes exports more expensive in foreign countries and causes demand for exports to decline. The cost of Canadian currency is expected to decrease, representing an opportunity for companies to increase exports.³⁰ A key factor for success in this industry is having overseas contracts to increase exports of products³¹ and expand a company's geographic scope beyond its domestic market.

²⁷ Ibid.

²⁸ Eddie Gonzales, "Fish & Seafood Wholesaling in Canada: Keepin' it reel: Rising health consciousness is expected to assist industry growth," IBIS World Report 41314CA, December 2019.

²⁹ Ibid.

³⁰ Matthew Buchko, 2020.

³¹ Ibid.

Export sales represent 25.6% of the industry's total revenues. The table below identifies the percentage of total export revenues that were sold to the specific geographic regions:³²

Region	Percentage of total exports
United States	50.5%
China	34.0%
Other	8.7%
South Korea	3.8%
Hong Kong	3.0%
Total	100.0%

Seafood processors

This segment of customers includes companies that further process the seafood into shelf-stable or frozen products. Shelf-stable foods are those that can be safely stored at room temperature for a long period without needing to be cooked or refrigerated, such as canned, jarred, and pickled fish products. For this stage of the value chain, the total revenue that is earned by the seafood processors can be segmented into various product categories as shown below:³³

Product segment	Percentage of total revenue of the seafood processors' segment revenue	Description
Seafood and marine products	57.5%	Although shrimp and prawns represent the highest volume sold, lobster and crab represent a large portion of this revenue breakdown because their selling prices are significantly higher than the other types of seafood sold. Processed crab is exported primarily to the United States and Asia.
Canned and preserved fish	23.5%	This segment includes fish and seafood that generally cannot be sold as fresh or frozen and therefore needs to be canned, salted, or pickled to ensure it is safe to eat once delivered to the final consumer.

³² Ibid.

³³ Matthew Buchko, 2021.

Other seafood products	19.0%	Includes livers, roes and milt, anchovies, caviar, mussels, and scallops.
Total	100.0%	

In this segment, 69.3% of the prepared product is exported from Canada, and 23.1% is sold to domestic wholesalers and distributors. The remaining 7.6% represents sales that the seafood processors make directly to retailers, including seafood markets and franchise restaurant chains (for example, McDonalds and Red Lobster).³⁴

Competition

The fishing and seafood industry is a highly fragmented industry in which there are currently 18,579 operating enterprises.³⁵ There are only two companies with any significant amount of market share: Cooke Aquaculture (headquartered in New Brunswick) has an estimated 8.7% market share, and Mowi ASA (headquartered in Norway) has Canadian operations that represent 7.5% market share.³⁶ Consolidation has allowed competitors to become larger and more efficient than the smaller competitors by using more advanced processing equipment and reducing labour costs.³⁷

In addition, competitors may have the ability to process some of the harvest at sea, eliminating some of the intermediary steps. Successful competitors have vertically integrated to add value by further processing harvested seafood, and also wholesaling and retailing.³⁸ Having access to a supply of multiple species either by owning the quotas and licences or through strategic partnerships is vital for sustainable profits and success.³⁹ Some of these competitors are involved in both wild harvesting at sea and aquaculture. Having relationships with food retailers and food service companies, and identifying and targeting emerging profitable and growing customer markets and distribution channels helps to increase and diversify revenue streams.⁴⁰

Competition is based on price. Products are undifferentiated and sold in large volumes.⁴¹ Reputation and experience in the industry and the ability to sell product that consistently tastes and looks fresh helps differentiate from competitors.⁴² Aquaculture operators can produce the same product at a lower price, which increases internal competition for wild-caught seafood. The larger enterprises have a competitive advantage and are better able to withstand the volatility in the industry due to having a

³⁴ Ibid.

³⁵ Matthew Buchko, 2020.

³⁶ Ibid.

³⁷ Matthew Buchko, 2021.

³⁸ Matthew Buchko, 2020.

³⁹ Clearwater Seafoods Incorporated, 2020.

⁴⁰ Ibid.

⁴¹ Matthew Buchko, 2020.

⁴² Ibid.

greater diversification of products, greater access to financial resources, and established relationships with suppliers.⁴³

Strategies and business models of competitors

The inshore fishery segment is highly fragmented and composed of thousands of independent fishers who operate their own small fishing vessels and harvest one or more species of seafood.⁴⁴ These small enterprises fish close to shore on a daily basis and sell their catch to seafood processors located on land.

The larger and often vertically integrated enterprises fish in the offshore regions, operate a large fleet of fishing vessels, and harvest multiple species. In addition, these companies primarily harvest their own quotas, with only a small portion of the harvested catches being non-owned. These companies process their catch either on board the vessel or at multiple onshore processing plants.⁴⁵ They also purchase catches from the smaller fishers to process in their plants. These competitors both sell their products domestically and export to the international market. The number of these enterprises has declined in recent years, as consolidation has occurred to achieve economies of scale and increase efficiency.

Successful companies are also able to service customers quickly with the right products. Management of the fresh and frozen inventory is critical and requires adopting the latest technological advances in processing practices, inventory systems, cold storage facilities, freezing capabilities, and truck refrigeration. These technological advances are critical for improving costs, maintaining the safety of the product, and reducing losses.⁴⁶

Imports

Currently, imports represent 16.3% of total Canadian demand.⁴⁷ The highest percentage of imports come from the United States, due to the USMCA trade agreement and the United States' close proximity to Canada, which results in lower transportation costs. Imports from Japan and Chile have been increasing. Generally, the imported seafood are types that cannot be naturally found in Canadian waters, as Canadian consumers prefer Canadian-sourced seafood. However, as aquaculture techniques allow farming of species not native to Canada, domestic producers may be able to compete with these importers.

⁴³ Clearwater Seafoods Incorporated, 2020.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Eddie Gonzales, 2019.

⁴⁷ Matthew Buchko, 2021.

The table below shows the percentage of imports by country:⁴⁸

Region	Percentage of total imports
United States	44.4%
Other	34.9%
Chile	8.5%
Japan	7.7%
Greece	4.5%
Total	100%

There is a threat that farmed seafood can be produced more cheaply in other countries than in Canada.⁴⁹ Therefore, these imported prices may undercut domestic producers.⁵⁰

End consumers

When purchasing seafood, end consumers want trustworthy sustainability, affordable prices, and healthy and high-quality options, as described below:⁵¹

- High-quality items — Quality is the highest priority for end consumers. When purchasing seafood, end consumers first choose the type of product, then select by freshness, taste, and flavour; 67% of end consumers are concerned about freshness and quality.
- Healthy options — End consumers purchase seafood due to its health benefits, which are perceived to be better than those of substitutes such as pork or beef.
- Affordable prices — End consumers prefer to purchase cheaper-priced products. A survey found that 65% of end consumers purchase seafood products on impulse if the price is low or the item is on sale.
- Trustworthy sustainability — End consumers are concerned about overfishing and therefore want to purchase wild-caught product that has been harvested using only sustainable practices. They prefer products that have been certified by outside independent organizations. For farmed products, end consumers are looking for certification that indicates farmed fish have also been produced using acceptable practices.

From the processor's point of view, end consumers will be attracted to a product that has a reputation or brand that encompasses these characteristics of being affordably priced, sustainably caught (or farmed), and of consistent high quality.

⁴⁸ Matthew Buchko, 2021.

⁴⁹ Matthew Buchko, 2021.

⁵⁰ Matthew Buchko, 2021.

⁵¹ "What Seafood Consumers Want: A Complete Guide," Northscope, July 1, 2020, <https://myfoodsoftware.com/blog/what-seafood-consumers-want/>

Workforce

The crew working on a commercial fishing vessel must be experienced and skilled to ensure harvesting trips are successful.⁵² Many regions require that fishers be commercially licensed or in training to become fully licensed. Although a formal education is not required, a two-year program in fishery technology is often sought by employers. Skilled employees have education or experience in areas related to seamanship, marine safety, navigation, vessel operations, vessel repairs, and fishing gear technology.⁵³

Fishers are usually paid a “crew share,” which is based on a percentage of the boat’s overall catch, and therefore compensation will vary based on the volume caught and the prevailing market price of the catch per pound. In 2021, average salaries for the crew were \$53,625 for a season.⁵⁴ The work is physically demanding, requiring long and irregular shifts while out on the boat and being away from home for weeks or months at a time. It is also very dangerous due to extreme weather that can occur at sea. Employers are required to maintain safe vessels in compliance with regulatory requirements of Transport Canada and provincial agencies.⁵⁵ As such, vessels are regularly inspected and certified for the regions within which they operate. Safety factors assessed include vessel seaworthiness, the condition of personal protective and life-saving gear, and whether the crew are properly trained.⁵⁶ Employers also need to ensure that they have protocols and safety measures in place to protect the crew.⁵⁷

Vessels

Vessels of various sizes are used for commercial fishing purposes. The type and size of the vessel will depend on the nature of seafood caught, the length of time the vessel is at sea (for example, requiring crew sleeping quarters and a food preparation area), the distance from shore that the vessel journeys, the depth of the waters being fished, and whether any processing is completed on board. The cost of a fishing vessel can range from \$200,000 to \$5,000,000 or more. In addition, there are capital costs for additional equipment required on board, such as the fishing gear.

⁵² Matthew Buchko, 2020.

⁵³ “How Much Does a Crab Fisher Make?” Indeed Career Guide, February 22, 2021, <https://www.indeed.com/career-advice/pay-salary/crab-fisherman-salaries>

⁵⁴ “Fishing Average Salary in Canada 2023,” Talent.com, accessed April 5, 2023, <https://ca.talent.com/salary?job=fishing>

⁵⁵ Government of Canada, “Commercial Fisheries Licensing Rules and Policies Reference Document Pacific Region, Fishing Vessel Safety,” last modified April 28, 2019, <https://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/docs/commercial-licence-permis-ref/safety-securite-eng.html>

⁵⁶ Ibid.

⁵⁷ Matthew Buchko, 2020.

Fishing licence lease arrangements

Fishing licence lease arrangements are common in the offshore fishing segment because of the significant upfront capital costs and the fact that the revenue earned from fishing the quota for a single licence is not enough to cover the costs of operating the fishing vessel.⁵⁸ As such, the owners of a vessel will harvest not only their own quotas but also quotas leased from other enterprises that cannot afford their own vessels. Royalties based on a percentage of the landed price per pound are paid on the catch on these leased fishing licences.

Regulations

Fishing licences

Fisheries and Oceans Canada (DFO) is the federal department mandated to protect and preserve fish stock in Canadian coastal waters. The relevant regulations to manage fisheries are detailed in the Fisheries Act.⁵⁹ Commercial fishing licences specifying the type of seafood and annual quotas allowed to be caught are used to manage fish populations to prevent depletion.

Licences are required to fish in ocean and inland waters. DFO and regional provincial governments regulate licensing through commercial fishing licences and quotas. The licences authorize the holder to harvest identified species of seafood subject to conditions attached to the licence.⁶⁰ Conditions of the licences include the volumes (quotas) that can be annually caught, the type of vessel and methods used for harvesting, and the specific months and regions allowed for fishing each species.⁶¹

Licences must be renewed by December 31 each year by paying the related nominal fees, or they are cancelled and the licence is terminated. Ownership of these licences and having a good reputation with the regulatory authorities helps ensure that the licences can be renewed as they expire.⁶² A good reputation is maintained by following sustainable and ethical best production practices.

Aquaculture

Aquaculture is also regulated under the Fisheries Act. However, under DFO, the Sustainable Aquaculture Program has been set up to streamline regulations, improve regulatory management, increase scientific knowledge and science-based decision-

⁵⁸ Keith Storey and Meghan Eibner, “Reinvesting Fishery Profits for Economic and Social Development: A Case Study of the Northern Coalition,” April 2021, https://www.mun.ca/harriscentre/media/production/memorial/administrative/the-harris-centre/media-library/Northern_Coalition_Project.pdf

⁵⁹ Matthew Buchko, 2020.

⁶⁰ Fisheries and Oceans Canada, “Fisheries Licensing Policy Newfoundland and Labrador” last modified May 30, 2022, <https://www.dfo-mpo.gc.ca/reports-rapports/regs/licences-permis/nfld-Labrador-tn-labrador-eng.htm>

⁶¹ Ibid.

⁶² Matthew Buchko, 2020.

making, and ensure transparency through enhanced public reporting.⁶³ The provinces issue licences for the operation of a specific site, and additional licences are required if activities include imports and transfers of fish. The length of time that the licence is valid for will depend on the species that is farmed. Aquaculture licensees must meet the conditions of their licences throughout the term of the licence. These conditions include operational and reporting requirements as well as site-specific requirements based on geographic location.⁶⁴

Seafood processing

For some species, the volumes that can be processed by an enterprise are also regulated by quotas from DFO. In processing the harvested seafood, federal and provincial licences are required to operate and comply with standards related to food safety and handling. The Canadian Food Inspection Agency under the Food and Drugs Act and the Fish Inspection Act require that a quality management plan covering all aspects of seafood processing be implemented. Specifically, companies must ensure that food-borne illnesses are prevented throughout all steps of the process.⁶⁵

For some species, such as snow crab, an enterprise cannot own both a licence to harvest the species and a licence to process the same species.

Sustainable and ethical practices

Fishing practices

Sustainable fishing practices have been defined by the Marine Stewardship Council (MSC) as follows: “Sustainable fishing means leaving enough fish in the ocean and protecting habitats and threatened species. By safeguarding the oceans, people who depend on fishing can maintain their livelihoods.”⁶⁶ Specifically, the MSC breaks this down into the following issues:⁶⁷

- Overfishing results when too many adult fish are caught, leaving insufficient numbers to breed and maintain a healthy population. This in turn causes the collapse of the marine ecosystem, impacting other marine species and humans who make their livelihood from the seafood industry. Overfishing occurs when the regulatory bodies fail to set appropriate allowable catch levels and/or fail to enforce and punish when these catch levels are exceeded.
- Illegal fishing refers to fishing without an appropriate licence, fishing in prohibited areas, catching in excess of quotas, or fishing prohibited species. As with

⁶³ Fisheries and Oceans Canada, “Canada’s Sustainable Aquaculture Program,” last modified March 3, 2015, <https://www.dfo-mpo.gc.ca/aquaculture/programs-programmes/sustainable-durable/index-eng.htm>

⁶⁴ Fisheries and Oceans Canada, “Aquaculture Licensing in British Columbia,” last modified April 3, 2023, <https://www.pac.dfo-mpo.gc.ca/aquaculture/licence-permis/index-eng.html>

⁶⁵ Clearwater Seafoods Incorporated, 2020.

⁶⁶ Marine Stewardship Council, “What Is Sustainable Fishing?” accessed April 5, 2023, <https://www.msc.org/what-we-are-doing/our-approach/what-is-sustainable-fishing>

⁶⁷ Marine Stewardship Council, “Overfishing, Illegal and Destructive Fishing,” accessed April 5, 2023, <https://www.msc.org/what-we-are-doing/oceans-at-risk/overfishing-illegal-and-destructive-fishing>

overfishing, illegal fishing threatens the marine ecosystem and marine species populations.

- Destructive fishing refers to fishing practices that destroy habitats and the ecosystem. For example, the use of toxins, explosives, or large bottom trawling nets that pick up everything causes irreversible damage to the marine environment. Depending on the species, the goal is to use the correct size and type of fishing gear to cause the least impact on the marine habitat.

Consumers are able to make a difference in ensuring sustainability in the industry by purchasing wild fish and seafood products only from enterprises that have been certified as following sustainable fishing practices. The MSC Fisheries Standard is one such certification and is indicated on products with the MSC's blue label. A company that has achieved this certification has met the standards set by the MSC, which are developed in partnership with scientists, conservation groups, and the fishing and seafood industry.⁶⁸ Independent contractors perform the certifications and assess the impacts on wild fish populations and the ecosystems related to the specific species caught. It can take many years for a harvester to meet all the criteria for initial certification. Once certified, assessors annually review and observe, and every five years there is a total reassessment.

In addition, there is also an MSC Chain of Custody Standard certification for restaurants, supermarkets, preparers, distributors, and warehouses.⁶⁹ In this certification process, the entire supply chain is reviewed and separated into certified and non-certified products. Annual unannounced audits are performed at these businesses to ensure they continue to follow the protocols related to traceability, labelling, and segregation.⁷⁰

Aquaculture practices

There is also certification that can be given to producers using aquaculture. This third-party seafood certification is given by Best Aquaculture Practices (BAP), which has sustainability standards related to four areas: environmental, social, food safety, and animal health and welfare.⁷¹ The certification process reviews the entire production chain, including the processing plant, farm, hatchery, and feed mill.⁷²

⁶⁸ Marine Stewardship Council, "What Does the Blue MSC Label Mean?" accessed April 5, 2023, <https://www.msc.org/what-we-are-doing/our-approach/what-does-the-blue-msc-label-mean>

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Best Aquaculture Practices, "What We Do – Certification," accessed April 5, 2023, <https://www.bapcertification.org/WhatWeDo>

⁷² Best Aquaculture Practices, "Program Standards," accessed April 5, 2023, <https://www.bapcertification.org/Standards>

Use of technology

Within this industry, technological improvements can result in increased product quality, reduced operating costs, improved stewardship of the seafood resources, and development of new products related to untapped species. Improvements also include data collection to provide better information. Therefore, a key to success is adapting new technologies and innovations to accomplish these objectives. Research can be conducted to enhance on-board visualizations of the ocean floor, which are used to better see a specific species' population characteristics, habitats, and size.⁷³ Companies will often work in conjunction with university researchers who conduct similar research.

*Demand drivers*⁷⁴

- Per capita seafood consumption — As the per capita consumption of seafood increases, there is increased demand for seafood. However, the per capita consumption is expected to decline, posing a threat to the industry in Canada.
- Price of seafood — As the price of seafood increases, demand falls, and consumers move to cheaper protein substitutes like poultry, beef, and pork. The price of farm-raised seafood in comparison to wild seafood also impacts product demand.
- Per capita disposable income — As end consumers' disposable income increases, there is more spent on fish and shellfish, which are more expensive meat and poultry alternatives. Per capita disposable income is expected to decline in the near future.
- Health benefits — Fish is seen to be a healthier protein choice than meat and poultry. However, end consumers are also concerned about the level of chemicals (for example, mercury) in seafood, which might reduce the amounts of seafood consumed.
- Demand for processed seafood from abroad — The higher the demand for Canadian-caught and -processed seafood from international consumers, the higher the amount of exports in this industry.

Trends within the industry

- Health trends associated with the consumption of specific types of seafood can change consumption behaviour.⁷⁵ Many types of seafood are high in protein and omega-3 fatty acids and low in calories, making them a healthy food choice.
- Production in the aquaculture segment will continue to increase to meet the increased demand for seafood⁷⁶ due to the advantages over harvesting wild-caught

⁷³ Clearwater Seafoods Incorporated, 2020.

⁷⁴ Matthew Buchko, 2020.

⁷⁵ Ibid.

⁷⁶ Ibid.

fish. Farming provides a year-round supply of fresh seafood and reduces the risk of overfishing the wild population, which is attractive for many consumers.

- More end consumers are purchasing seafood for at-home preparation and consumption, as well as for preparation in restaurants.⁷⁷ There is also an increased willingness for seafood end consumers to try new types of seafood.⁷⁸ Food retailers and restaurants will expand their inventory of seafood products to meet this increased demand.
- End consumers are also interested in value-added options such as “heat-and-eat” or “grab-and-go” seafood meals.⁷⁹ The growing market for these innovative products can be met by seafood preparers expanding their product offerings. Demand for prepared ready-to-go products is expected to increase 5% to 10% in North America.⁸⁰
- Revenue volatility remains a constant in the industry due to governments’ fish population management strategies and resource availability. Historically, revenues have varied by 7.5% annually.⁸¹
- International trade will continue to be an important market for Canadian fishing companies.⁸² Exports of Canadian seafood are expected to increase at a faster rate than they have historically, and more quickly than domestic sales.⁸³ The Comprehensive Economic and Trade Agreement (CETA) between the European Union and Canada eliminates historically high tariffs, resulting in higher amounts of exports to the European Union at higher profits for Canadian seafood preparers.⁸⁴ Exports to the United States and other countries are also expected to increase. Although per capita domestic consumption of seafood is expected to decline, increased global demand for Canadian-sourced seafood, particularly from East Asia, is expected to increase.⁸⁵
- Enterprises are expected to continue to consolidate rather than expand organically. These larger operations will become more streamlined and require fewer employees working in processing plants.⁸⁶

⁷⁷ Matt Craze, “Seafood’s newfound retail popularity has a permanent feel to it,” Global Seafood Alliance, May 17, 2021, <https://www.globalseafood.org/advocate/seafoods-newfound-retail-popularity-has-a-permanent-feel-to-it/>

⁷⁸ Michael Browne, “Seafood sales at retail hit \$16.9 billion in 2021” *Supermarket News*, March 14, 2022, <https://www.supermarketnews.com/seafood/seafood-sales-retail-hit-169-billion-2021> (note this is the U.S. market)

⁷⁹ Ibid.

⁸⁰ Matt Craze, 2021.

⁸¹ Matthew Buchko, 2020.

⁸² Ibid.

⁸³ Matthew Buchko, 2021.

⁸⁴ Ibid.

⁸⁵ Matthew Buchko, 2020.

⁸⁶ Matthew Buchko, 2021.

- The amount of seafood imported is expected to increase, especially in the frozen and canned fish and seafood segments.⁸⁷ However, the imports will be of a lesser quality than similar Canadian-caught and -processed products.

General risks in the industry

- Resource supply risk — Since the volume of the annual catch is limited by quotas imposed by the federal and provincial regulators, the amount of catch available to sell will fluctuate based on these limits. If, for a specific species, the amount of resource is declining, quotas will be reduced to allow for that population to come back to sustainable levels. Fluctuating volumes of harvested fish will cause volatility in sales from year to year.
- Licensing risk — There is a risk that the harvester will lose its licence to harvest the specific seafood because it has contravened one of the many regulations. If this occurs, the harvester will lose its right to fish and will have no product to sell.
- Fluctuating market price paid to the fish harvester — The market price per pound that a fish harvester receives is dependent on supply and demand in the market for the specific species. Volatile prices result in volatile sales, cash inflows, and profits.
- Foreign exchange risk — For those entities that export or sell products that compete with products that are imported, foreign exchange risk can be high. International sales will fluctuate as the Canadian dollar fluctuates against other currencies. As the Canadian dollar appreciates relative to other currencies, the cost of imported products declines, increasing the presence and competition of these imported products. Companies can mitigate this risk by limiting long-term sales contracts to less than six months, entering into forward contracts to hedge foreign exchange risk, or borrowing in foreign currencies to provide a natural hedge for cash inflows and outflows in the same currency.⁸⁸
- Operating input costs — Marine diesel fuel is required for harvesting vessels and represents a high proportion of the input costs for harvesters. As cost of fuel increases, profits decline. Harvesting is a very labour-intensive activity, and there is the risk of increased labour costs or a shortage of skilled labour. The risk of higher labour costs is partially mitigated because employees' compensation is often a percentage of the catch.
- Customer risk — As consolidation of wholesale and retail customers increases, this could result in a potential loss of a customer base.⁸⁹ This risk can be partially mitigated by having a diverse customer base.
- Weather and access to shipping routes — Unfavourable weather can delay the ability of the vessels to fish offshore or reduce the amount of catch per voyage. In addition, access to the fishing region may be hampered by changes in shipping routes or other adverse conditions. These occurrences will result in increased

⁸⁷ Ibid.

⁸⁸ Clearwater Seafoods Incorporated, 2020.

⁸⁹ Ibid.

operating costs for the company and reduced profits. In addition, severe weather can result in extensive damage to the vessels, requiring major repairs or complete replacement. If a vessel sinks or must be docked to complete major repairs, this results in reduced volumes of catch sold during the season.⁹⁰ Climate change will impact the numbers and types of seafood that can live in certain regions, as well as migratory patterns.⁹¹ Severe weather conditions can lead to accidents, resulting in injury to workers.

Greenland halibut

Greenland halibut, also known as turbot, is primarily fished 200 or more miles offshore in waters off the continental shelf that are 800-1,500 metres deep.⁹² It is harvested using large fishing trawlers, generally more than 100 feet in length. In many cases, these trawlers have freezing capabilities on board that can freeze the fish shortly after it is caught. Because Greenland halibut has naturally oily flesh, its quality is best maintained when it is caught and frozen at sea.⁹³ International customers are willing to pay a premium price for this product, and much of the catch is exported.⁹⁴

The harvesting of Greenland halibut takes place year-round, and the catch is off-loaded in Newfoundland, Nova Scotia, or Greenland.⁹⁵

Cold-water shrimp

Cold-water shrimp can be harvested offshore in the deep waters, similar to Greenland halibut, but also inshore. The offshore fishing is done year-round using large fishing trawlers to catch and freeze the shrimp on board. In recent years, there were 10 factory freezer trawlers operating in the offshore northern fishing areas and 17 fishing licences in total.⁹⁶ The shrimp that is frozen at sea has its shell intact and is generally sold to the Japanese and Asian markets.⁹⁷

Inshore harvesting is done on smaller vessels that range from 50 to 89 feet in length and only from April to October. These smaller vessels are owned by entities that reside and fish locally, as their fishing quota licences are based on the owner's place of residence.⁹⁸ The shrimp harvested inshore are sold fresh or processed locally into shell-off cooked fresh or frozen shrimp.⁹⁹

⁹⁰ Ibid.

⁹¹ "Climate Change and Fisheries," OECD, accessed April 5, 2023,

<https://www.oecd.org/greengrowth/fisheries/climatechangeandfisheries.htm>

⁹² "Greenland Halibut Quota Increase to Boost Fishing Jobs in N.L.," *Saltwire*, September 30, 2017,

<https://www.saltwire.com/newfoundland-labrador/business/greenland-halibut-quota-increase-to-boost-fishing-jobs-in-nl-27895/>

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Keith Storey and Meghan Eibner, 2021.

⁹⁶ Ibid.

⁹⁷ Ibid.

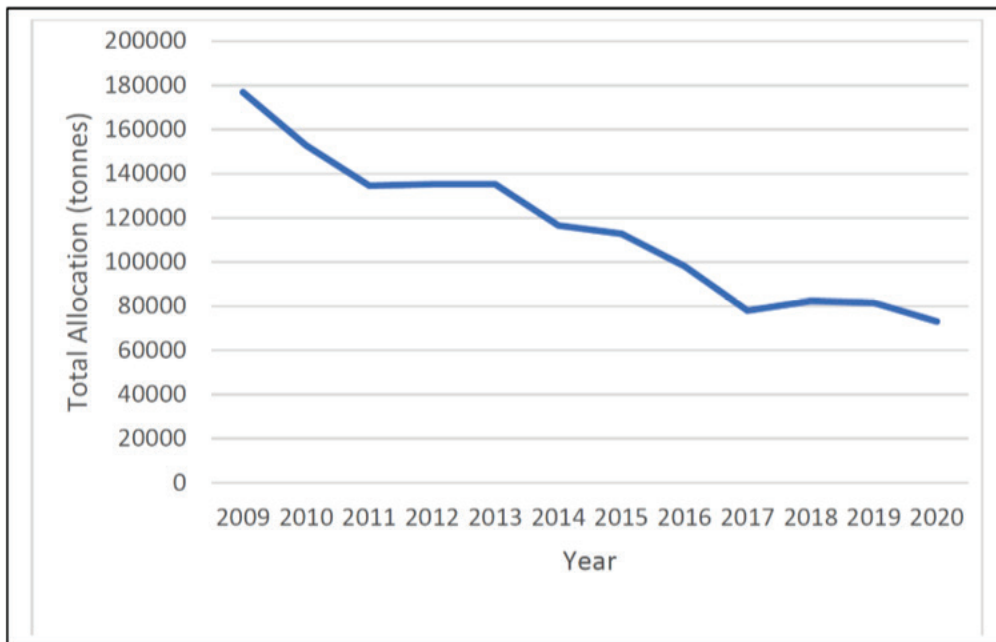
⁹⁸ Ibid.

⁹⁹ Ibid.

Licences and quotas

The offshore shrimp segment operates under an enterprise allocation system, meaning that total allowable catch for the year is divided evenly across the available licences.

The total allowable catch for inshore shrimp has declined significantly over the past few years, falling from almost 180,000 tonnes in 2009 to below 80,000 tonnes in recent years, as shown in the figure below.¹⁰⁰



Source: Canada 2020

The drastic reductions in the total amount that can be harvested annually are related to a changing ecosystem, impacted by the following factors:¹⁰¹

- Since 2017, there have been warmer than average bottom temperatures in the areas in which shrimp thrive and below-average surface temperatures between 2013 to 2019.
- There has been a change in the shrimp's food source availability.
- Shrimp mortality rates from predators have been at record highs.

¹⁰⁰ Memorial University of Newfoundland, "Reinvesting Fishery Profits for Economic and Social Development: A Case Study of the Northern Coalition," April 2021, https://www.mun.ca/harriscentre/media/production/memorial/administrative/the-harris-centre/media-library/Northern_Coalition_Project.pdf

¹⁰¹ Government of Canada, "An Assessment of Northern Shrimp (*Pandalus Borealis*) in Shrimp Fishing Areas 4-6 and of Striped Shrimp (*Pandalus Montagu*) in Shrimp Fishing Area 4 in 2020," last modified November 2021, https://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2021/2021_049-eng.html

Consistent with these large decreases in the total allowable catch for the cold-water shrimp, the offshore and inshore catch volumes have greatly declined. This has impacted the volume of shrimp that is cooked and peeled in the processing plants. Findings for the cold-water shrimp market from 2023 were summarized in a Seafood Datasearch report as follows:¹⁰²

- The demand for cooked and peeled shrimp has been weakening.
- Increases in production have further weakened prices.
- China has increased its demand for this product.
- The UK is buying similar volumes at similar prices.
- The pandemic impacted the demand from restaurants due to the number of restaurants that closed, but retail demand increased as more product was consumed at home.

Shrimp farming

Indoor shrimp farming is a relatively new segment of the industry in Canada, having started in 2014. Canadian farmed shrimp tend to be much larger than wild-caught shrimp and can be sold at a premium price (three to four times the price of Asian farmed varieties), since they are a delicacy sold to high-end restaurants and fishmongers.¹⁰³ Shrimp farming is also less ecologically harmful than catching wild shrimp. However, Canadian shrimp farming is not without its challenges, including getting access to shrimp babies from the United States; a low survival rate of only 50%; needing to maintain the water at the right temperature, salinity, and pH; and the 10 million gallons of water required to pass through the system per day.¹⁰⁴

Snow crab

The snow crab is found in the North Atlantic and North Pacific oceans. A crab has five pairs of legs, of which the front pair are its claws. Only male crabs can be harvested, and it usually takes seven to nine years for them to reach their minimum harvestable size of 95 millimetres.¹⁰⁵ Because snow crabs prefer deep and cold water, Canada is the largest producer in the world.

Vessels that harvest (but do not process) snow crabs are generally less than 20 metres in length and use traps that are laid between 50 to 380 metres down.¹⁰⁶ The harvest

¹⁰² John Sackton, "Update on Shrimp Markets for 2023," Seafood Datasearch, Province of New Brunswick, March 2023, <https://www2.gnb.ca/content/dam/gnb/Departments/10/pdf/Publications/Fish-Peches/coldwater-shrimp-presentation-2023.pdf>

¹⁰³ Jake Edmiston, "How Canada's Fledgling Land Shrimp Industry Is Working toward Becoming the 'New Cannabis,'" *Financial Post*, April 25, 2019, <https://financialpost.com/news/retail-marketing/canadian-land-shrimp-industry-has-work-to-do-if-its-going-to-be-the-new-cannabis>

¹⁰⁴ Ibid.

¹⁰⁵ "Snow Crab – Atlantic Canada's Finest – Food Service Guide," accessed April 5, 2023, http://bestofsea.com/wp-content/uploads/2015/10/Snow_Crab_Guide-LR.pdf

¹⁰⁶ Ibid.

and processing season in Canada runs from April to November. About 80% of the catch is from fishing areas near the shore.

Snow crab can be processed directly on the vessel or at a land-based processing plant. Vessels can be designed to catch and process and then store the processed snow crab until land is reached. The edible meat of the Atlantic snow crab is found in the claws, legs, and the section between the legs and body. The white meat found in the claws and legs is low in fat and high in protein, whereas the brown meat found in the body has higher fat content but is also high in omega-3 fatty acids¹⁰⁷ and therefore is a healthy food choice. Snow crab can be sold fresh when in season, or frozen. In the frozen state, it is vacuum packaged and sold as claws, mixed meat, 100% legs, or combo packages.

The crab is kept in its frozen state and has a shelf life of 18 months.¹⁰⁸ It can be shipped and sold in its frozen state.

Snow crab fishing licences¹⁰⁹

Below are the specific issues related to the licences for snow crab in the Newfoundland and Labrador region.

The snow crab fishery has limited entry, and therefore no new licences are available. Only fish harvesters who had licences in the previous year may renew. Fish harvesters that currently hold snow crab licences (and meet fleet and regional area eligibility) may acquire additional licences from enterprises that are exiting the snow crab segment. When this occurs, the licences owned by the remaining harvester are now combined into one. As a result, the total number of licences issued by DFO has declined over time.

DFO sets annual total allowable catches by region based on advice from scientists and assessments of the stock available. The total allowable catch is the total volume of snow crab that can be caught in each specified region annually, which is used to determine the annual quota limits that each licensed holder can harvest in the year.

The landed quota allowed for in 2021 increased significantly from 2020. In 2021, the lead biologist for snow crab in Newfoundland reported that the snow crab population was expected to increase over the next two to four years in most fishing areas.¹¹⁰

¹⁰⁷ Northern Delights, “Brown and White Crab Meat: What’s the Difference?” September 29, 2021, <https://northerndelights.com/editorial/brown-and-white-crab-meat/>

¹⁰⁸ “Snow Crab – Atlantic Canada’s Finest – Food Service Guide,” accessed April 5, 2023, http://bestofsea.com/wp-content/uploads/2015/10/Snow_Crab_Guide-LR.pdf

¹⁰⁹ Fisheries and Oceans Canada. “Snow Crab - Newfoundland and Labrador Region,” last modified May 15, 2019, <https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/snow-crab-neige/2019/index-eng.html>

¹¹⁰ Barb Dean-Simmons, “Latest snow crab science is good news for Newfoundland fishers, plant workers and processors,” *Saltwire*, March 2, 2021, <https://www.saltwire.com/nova-scotia/business/latest-snow-crab-science-is-good-news-for-newfoundland-fishers-plant-workers-processors-557396/>

Snow crab processing

Quota licences are also required to process snow crab in processing plants. Therefore, there is a limit on the volume that can be processed annually.

Retail market demand and prices

There has been an increase in the demand for snow crab, which, with limited resource supply, should lead to higher retail values for the sellers of the product. Much of this increased demand is from the end consumer buying frozen product for at-home consumption rather than waiting to dine out.¹¹¹ Increasingly, snow crab is being consumed at home, in comparison to historical consumption rates at hotels, at restaurants, and on cruise ships. This has driven up overall demand for the product, driving up market prices, which are expected to stay at these high levels into the future. In addition, end consumers are interested in the health benefits related to seafood.

From the preparers' perspective of the market, the retail market was getting more concentrated in the United States, attracting other suppliers from Russia and Norway.

Market prices for snow crab have increased steadily in recent years to \$12 per pound for the 5-8 ounce size.¹¹²

Cluster sizes of 10 ounces and up were selling at prices for up to \$23.00 per pound in 2021.

Company background

Colan McPherson started out crewing on a fishing trawler owned by J & J Coastal Fisheries Ltd. (J&J) in Newfoundland and eventually worked his way up to be captain of a crew. The trawler fished for shrimp and Greenland halibut up and down the coast of Newfoundland to Greenland in the offshore regions.

In 1987, Colan and Yvonne incorporated NPF and purchased a commercial offshore cold-water shrimp licence. However, as NPF did not have the resources to purchase its own vessel, Colan leased the quota rights of this licence to J&J to fish NPF's quota, and in return, NPF received a royalty based on a percentage of the price per pound for the landed catch. Colan continued his employment as captain for J&J.

By 1995, NPF had saved enough cash for a down payment on a fishing trawler, called the *Charlie K*, that was owned by J&J and was being sold. NPF borrowed the remaining funds required to purchase this 35-metre fishing trawler, and Colan left his employment with J&J to captain his own vessel. Colan was able to negotiate lease arrangements

¹¹¹ "Standing Fish Price-Setting Panel, Snow Crab Fishery 2021," accessed April 5, 2023, https://www.gov.nl.ca/fishpanel/pricingdecisions/2021/2021_Crab_Fishery_Decision_dated_March_31_2021.pdf

¹¹² "2021 Seafood Market Outlook, APC Fisheries Workshop," Presented by TriNav Fisheries Consultants Inc., prepared by Zach Whynot, Manager, accessed April 5, 2023, https://www.apcfn.ca/wp-content/uploads/2021/01/2021-Seafood-Market-Outlook-Zach-Whynot_compressed.pdf

with other shrimp licence holders to fish their offshore shrimp quotas in return for royalty revenue. In addition, NPF signed fishing licence lease arrangements with owners of Greenland halibut licences to also harvest their quotas in return for royalty revenue.

From 1996 to 2005, NPF continued to harvest offshore shrimp and Greenland halibut on a year-round basis, as allowed under the licences. The catch was landed in Newfoundland or Greenland, where it was sold to various preparers and wholesalers. In 2005, NPF purchased a single commercial quota licence for Greenland halibut from one of its partners who had decided to retire. This increased NPF's owned quota licences to two: one for offshore cold-water shrimp and one for Greenland halibut.

In 2014, Colan decided to purchase a state-of-the-art 60-metre fishing trawler. This fishing trawler, named the *North Allotta*, is a full-service offshore harvesting and production vessel. The *North Allotta* fishes the Labrador coastline up to Baffin Island, Nunavut, for cold-water shrimp and Greenland halibut. The new vessel allowed NPF to increase the number of its fishing trips per year, thereby increasing its annual catch, and to process its catch into frozen products on board immediately after harvesting. Greenland halibut is all frozen at sea and landed in Newfoundland, from where it is ultimately shipped to international markets. Part of the shrimp catch is frozen at sea, and some is landed fresh to be processed on land in Newfoundland.

With the ability for NPF to process the catch, the arrangements with the other quota licence holders was amended. NPF now paid a royalty based on the landed price of the catch to these owners, giving NPF ownership of the catch. In this way, revenue from the sale of the processed Greenland halibut and shrimp would all be earned by NPF. The cost of goods sold would include all the costs related to the royalties paid to quota-holders, vessel and crew costs, and all processing costs.

The company also created a new brand name, Neptune's Tasties, in 2015. Today, all of NPF's processed products are marketed under this brand name. This brand is known for high quality, fresh taste, and ethically sourced products. In creating this brand, Colan was adamant that the company would always ensure that its products lived up to these three traits. One of the main objectives of the company has been to always ensure that the value proposition of this brand is maintained.

Colan and Yvonne's children, Kurt and Allan, both joined the company as employees in 2016. Both children worked on the *North Allotta* or the *Charlie K* after finishing university and taking the training courses required for working on offshore vessels. At various times, Kurt and Allan worked as crew on these vessels to gain experience and knowledge of offshore fishing.

In 2016, after a rigorous certification process, the company received its MSC certification, meaning NPF was now required to follow sustainable fishing practices. NPF is in good standing and has maintained its certification.

In 2018, NPF purchased an existing cold-water shrimp processing plant in Newfoundland and paid a fair price due to the owner moving out of the province. The

plant processes primarily premium North Atlantic shrimp caught inshore, although it also processes any shrimp caught by NPF that is not frozen at sea. It operates during the shrimp inshore fishing season, which is from May to October.

Also in 2018, with this forward vertical integration expansion into processing, Colan and Yvonne decided to gift each of their children 10% of NPF and have their children take on more management responsibilities in the company. Kurt decided to stay on land and learn the operations of the processing plant, and Allan decided to continue to crew on the *North Allotta*.

In 2021, the *Charlie K* underwent a major retrofit and added new updated equipment, including freezing capabilities on board.

Company overview

Today, NPF continues to catch Greenland halibut and offshore cold-water shrimp and freeze them on board the *North Allotta* and the *Charlie K*. These products are referred to as “frozen-at-sea.” As the frozen-at-sea Greenland halibut and the frozen-at-sea shrimp appeal more to international consumers, all of the frozen-at-sea products are sold internationally through the company’s export distributor. Any shrimp not frozen at sea is processed on land at the plant.

NPF still owns only one quota licence for Greenland halibut and one for offshore shrimp. In addition, the company has fishing licence lease arrangements with other owners of quotas for Greenland halibut and shrimp, referred to internally as “harvesting partners.” There have been no new fishing lease arrangements in years.

During the summer months, the shrimp processing plant processes premium cold-water shrimp that is purchased from inshore fishers or offshore shrimp caught by NPF but not processed on board. This processed shrimp are sold fresh or frozen. The plant is Brand Reputation Compliance Global Standards (BRCGS) certified, which is a global standard for food safety, packaging, or storage and distribution and indicates that the company practises the best methods for ensuring food safety for the end consumer.

NPF has annual supply contracts with inshore fishers in which they agree to sell their shrimp catches to NPF for processing. Therefore, the volume of shrimp that NPF receives to process is dependent on the quotas that these fishers are allowed to catch and the number of fishers that NPF has contracted in that season. Similar to frozen-at-sea products, the maximum volume of catch inshore fishers can deliver for processing is fixed by the quotas of allowable catch for the year. Actual volumes caught and delivered are also dependent on many biological factors.

The price to be paid to the inshore fishers for the shrimp is the landed market price at the time of landing. This landed price also influences the selling price that NPF can charge for processed shrimp. As the landed price for shrimp declines, NPF’s selling price of the processed shrimp also declines, and vice versa.

Annual catch quotas for NPF's species are declining, as are landed prices and selling prices in all product categories. These factors caused 2023 revenues to decline, and revenues are expected to further decline in 2024.

Because the company's viability depends solely on the available supply of Greenland halibut and shrimp, Colan has always followed sustainable fishing and environmentally responsible practices. He is proud that the company has maintained its MSC certification with good standing. Although the company does not have the resources to invest in the research and development of various initiatives to improve long-term sustainability of the fisheries, Colan stays in contact with the experts and implements changes to stay up to date with best practices.

The company's brand, Neptune's Tasties, continues to enjoy a good reputation for being high quality, fresh tasting, healthy, and ethically sourced. The success of this brand lies with Colan and Yvonne in their total commitment to their customers to ensure that what NPF advertises is what it delivers.

Colan and Yvonne, having been in this business for so long, believe that the company has the ability to ride out any industry fluctuations as it has done in the past and that this is just the nature of the fishing and seafood industry. As such, their philosophy has always been to retain cash in the business by not paying dividends, only making capital investments that will improve efficiencies, reducing NPF's environmental impact, and improving sustainable fishing practices. Although Colan is not interested in branching out into any other segments of the industry in order to diversify NPF's revenues, Yvonne does believe that a broader mix of fish products is required to attract more customers.

Kurt and Allan, on the other hand, are concerned with having more stability in revenues and profits and less reliance on only two species of wild-caught seafood. Kurt sees the declining quotas and market prices as being permanent and an indication that now might be the time to get into other business segments of the industry that are less dependent on these factors.

Corporate vision and mission

When Kurt and Allan became shareholders in 2018, a new vision statement and mission statement were approved, as follows:

Vision statement: We envision a future with thriving natural seafood populations in the Atlantic region, allowing us to continue to deliver the world's best seafood to our customers around the globe.

Mission statement: Our mission is to supply consistently high-quality, tasty, healthy, and ethically sourced Greenland halibut and shrimp to all our customers. We strive to follow sustainable fishing and processing practices using state-of-the-art vessels and equipment and to treat our partners, crews, employees, customers, and suppliers fairly and with respect. We will make decisions that ensure good stewardship of the ocean's resources.

Corporate values

The company also approved the following five core values in 2018:

1. Build long-term, loyal, and trustworthy relationships with local fishing enterprises.
2. Continually improve our harvesting and processing procedures to embrace best practices, benchmark against the industry's best, and maintain MSC and BRCGS certifications in good standing.
3. Nurture our brand by ensuring that our products continue to exceed customer expectations.
4. Treat our crews and employees with respect, and ensure that a safe working environment is our number one priority.
5. Respect and protect the environment and the fish populations for future generations.

Future plans and objectives

In November 2023, the board set the following objectives for 2024, 2025, and 2026:

- By 2026, achieve an annual growth rate of 10% for total revenues.
- By 2026, increase the number of products offered under the Neptune's Tasties brand name by three in total.
- By 2026, add at least two more product lines.
- By 2026, increase the three-year average EBITDA margin (that is, EBITDA as a percentage of revenue) to 18%.

This was the first time that the company had outlined specific objectives to be achieved. Previously, Colan had always argued that there was not really any point to this because NPF's revenues and profits were entirely dependent on factors out of the control of the company. However, Allan and Kurt felt strongly that these objectives should be articulated, as it could help the company to properly plan for growth and changes, so Colan reluctantly agreed.

Company structure

The company has a board of directors that consists of all four shareholders. The board meets monthly to discuss financial, operating, and selling strategies and make decisions. Any contract issues or new corporate policies that arise are also discussed. Annually, the officers are elected and appointed to the various positions. The company has no supporting committees. Each director has one vote.

Management team

NPF's corporate management team is made up of the following individuals.

Colan McPherson, chair of the board and CEO

Colan is 59 years old and has spent his entire working life in the fishing and seafood industry in Newfoundland. Having started as crew and worked up to owning his own vessel and company, Colan has extensive experience with Greenland halibut and shrimp. He has worked through the many cycles of the industry as allowable catches and landed prices have fluctuated through the years. Given this experience, he has set ideas on how to position the company to be able to weather these cycles by having a strong balance sheet with low debt, using state-of-the-art equipment, and always supporting and treating the crew, employees, and all other stakeholders fairly and loyally even in difficult times. Although he embraces innovations for current operations, Colan does not want to risk investing in new strategies and directions.

Colan's decisions are grounded in a strong ethical moral code and his lifelong belief that we are all only stewards of the ocean and must not exploit it for current needs but protect it for future generations.

Colan still goes out on some fishing expeditions. He has a good reputation and is well respected by local fishing industry workers and quota licence holders. Given his experience and reputation, Colan negotiates the contracts with NPF's various harvesting partners and suppliers.

Yvonne McPherson, VP sales and marketing

Yvonne is 57 years old and has worked at NPF full time since it was incorporated. Previous to becoming a shareholder of NPF, Yvonne completed her university degree in marketing and worked as a regional marketing manager for a global food manufacturer. She now heads the sales and marketing department of NPF. Yvonne has also been responsible for creating and building the Neptune's Tasties brand name. Yvonne negotiated the contract with its export distributor, which has been very successful for the company. She continues to deal with customers on a regular basis. She is a firm believer that having stellar brand name recognition and a well-defined brand are keys for success in the food industry, where the products are all very similar. Accordingly, the company has spent millions to build and maintain this reputation.

Yvonne travels around Canada to further promote the company's products. Given her long-time experience in the industry and continuous interaction with customers, she strongly believes that the company needs to have a broader mix of products and offer more than two types of seafood in order to appeal to more customers.

Kurt McPherson, VP plant operations

Kurt is 32 years old. After graduating with an engineering degree, Kurt went to work as a line supervisor for a large food manufacturing company that had multiple plants across Canada. After joining NPF as a line supervisor, Kurt became the plant manager for the shrimp processing plant in 2023. Kurt is interested in continuous improvement of plant operations in order to reduce operating costs and the impact on the environment. Kurt's strengths are his ability to be open to new ideas and to find and embrace creative

and practical solutions to employee issues that might arise. Employees find him very approachable, and he prefers to spend his time on the plant floor interacting with employees rather than in the office dealing with paperwork.

Allan McPherson, VP finance and human resources

Allan is 30 years old. After graduating with a business degree, Allan worked as a financial analyst with an import/export company. He then left that company to join NPF. Allan now manages the accounting, finance, human resources, and IT systems. By delegating work to his support staff, Allan is still able to crew on numerous fishing trips per season. This gives him first-hand knowledge of what is happening on the vessels.

Allan is very goal oriented and was key to getting Colan and the other directors to agree to specific future goals for the company for 2024. Allan is flexible and adaptable to unexpected situations, is willing to take risks on new ventures if there is qualitative and quantitative support, and is eager to adopt new technologies and information system improvements.

Captain Jonathan Patterson, VP vessels

Jonathan has total responsibility for all operations of the *North Allotta* and the *Charlie K*, including overseeing the hiring, training, and safety of the crew members. Jonathan has been captain of the *North Allotta* since it was purchased by NPF. The captain of the *Charlie K* also reports to Jonathan. Prior to working for NPF, Jonathan served in the Canadian navy. Jonathan is a native of Newfoundland, and his family has fished in the Atlantic Ocean for generations. Jonathan was drawn to working with NPF because of the company's strong ethical practices and reputation in the local fishing and seafood industry.

Human resources

The company has employees who work as the crew on its two vessels, *North Allotta* and *Charlie K*. Crews are paid a small fixed salary and a larger variable portion based on the landed price for the catch on that voyage.

At its processing plant, the company has 125 employees who work during the processing season, which is June to October. These employees are paid, on average, \$14,500 (which includes benefits) for the five months of work, which is comparable with local wage rates.

Finally, the company has the *Charlie K* captain, plant supervisors, management staff, and selling and administrative staff. These salaries are included in administrative and selling expenses. The salaries for the four shareholders are also included in this category.

Overall, the company has a low attrition rate in comparison to the industry average. All its employees come from the local area, and since work is difficult to find, employees

remain with the company for many years. This results in very low employee turnover each year.

The company recently participated in a Canada-wide survey regarding its workforce and found that its results for women employed was far below the national averages, as summarized below:

	Percentage of women working at NPF	Canadian average
Fishing — crew members on the vessels	2%	15%
Seafood preparation and packaging	35%	44%

Company operations

During any year, the *North Allotta* and the *Charlie K* each make between nine and 12 fishing trips, depending on the weather and dockside time required for maintenance and equipment failures. The number of fishing trips that can be completed and the total allowable catch allowed for the licences will impact the actual volumes of Greenland halibut and shrimp that are harvested annually. Currently, the vessels have excess capacity available to harvest and process higher volumes.

The maximum volume of catch that can be harvested is fixed by the quotas of allowable catch for the year. Actual volumes caught and available for on-board processing are dependent on the state of Greenland halibut and offshore cold-water shrimp populations, how accessible they are to harvesting, and the maximum catches allowed under the quotas each year. The fish populations naturally fluctuate year over year, but these normal fluctuations may be worsened by changing water temperatures, type of food available, and disease.

The selling price of frozen-at-sea products is also dependent on the landed market price at the time, and represents about 85% to 90% of NPF's selling price. As the landed price for a species increases, the selling price of the frozen-at-sea product increases, and vice versa.

Revenues

The price received for the various products is dependent on the prevailing market price of the fresh catch, the customer, and the amount of processing the product has undergone. Currently, the company sells frozen-at-sea Greenland halibut; frozen-at-sea shrimp; and fresh and frozen headless, peeled, and cooked shrimp. The final products are sold across Canada and internationally under the name Neptune's Tasties, the company's own brand name. All frozen-at-sea products are sold as MSC certified.

International sales are all made to an exporter distributor, Atlantic Oceania International Seafood Exporters Ltd. (AOISE). Sales to AOISE are priced in U.S. dollars, and currently AOISE purchases all the available frozen-at-sea product, which is all of NPF's Greenland halibut and part of its offshore cold-water shrimp catch. NPF has a five-year contract with AOISE that requires AOISE to purchase all of its available product. The selling price is based on prevailing market rates at the time of the sale, and all sales are made on credit. The existing contract matures in 2027 but has another five-year renewal option, if agreeable to both parties. AOISE has similar core values to NPF, requiring its suppliers to be MSC certified, to embrace sustainability practices, and to produce high-quality, wild-caught, all-natural products. AOISE takes immediate ownership of the product at the dock and incurs all costs for storage, freight, and distribution.

Frozen-at-sea Greenland halibut

For processing, Greenland halibut is beheaded, gutted, and cleaned on board the vessel. The fish is separated into three saleable products prior to freezing: head, tail, and various cuts for the body. It is then frozen immediately to retain its freshness and stored below deck in freezers until port is reached. The halibut is premium quality and all natural with no preservatives. The frozen product is packaged and off-loaded in Newfoundland or Greenland, where it is immediately sold to AOISE, who takes ownership and control.

Frozen-at-sea shrimp

The processing of the live shrimp on board involves flash freezing the shrimp within minutes of harvesting at a temperature of -20°F (-28.8°C), which maintains the taste, flavour, and texture of “freshly caught” shrimp. The environmentally friendly process requires no water, salt brine, or additives. The shrimp are graded, weighed, and then bagged and boxed, and stored in freezers on board the vessel. Once at dockside, the shrimp are sold to AOISE, who takes ownership and control.

Processed fresh and frozen shrimp

The plant processes premium North Atlantic shrimp caught inshore, as well as a portion of the offshore shrimp caught by NPF. Annual production totals range between 1.5 and 3 million kilograms of caught shrimp (not yet processed), and the plant operates during the inshore fishing season of June to October. Inshore shrimp are landed directly at the plant by inshore fishers. As soon as the shrimp are landed, they are weighed and soaked in water-based solutions. From that point, they may be beheaded or peeled and then cooked. The shrimp are packaged and sold as fresh (beheaded or peeled and cooked) or frozen product. The cooked shrimp are vacuum packaged for shipping. No additives are used in the process.

The fresh and cooked shrimp products are sold locally or across Canada. The company receives orders from distributors and local grocery retailers and restaurants operating in Eastern Canada. The distributors sell primarily to restaurants, specialty fish retailers, and grocery retailers across Canada outside of the eastern provinces. NPF has no long-

term contracts with these customers, and every year the company will gain some new customers and lose others to competitors' products. The company has not been able to secure large, multi-year contracts with larger distributors, grocery retailers, or restaurant chains because its product mix is too limited. In fact, many potential customers have indicated that they cannot contract with the company due to its limited product mix.

During the year, all of the company's available product will be sold within three months of the processing date, resulting in only one month's worth of production being left on hand at year end. Sales to distributors are at lower prices than sales direct to local grocery retailers and restaurants operating in Eastern Canada. The company does not sell any of its product online.

Harvesting partners

Effective April 1, 2021, the company renewed its fishing licence lease agreements for its Greenland halibut and shrimp quota licence owners for another 10 years. The renewal of these leases allows NPF to continue to harvest the combined quotas (its own and its partners' quotas), making it more efficient to operate its vessel and improve profits. Based on the agreements, harvesting partners are paid a percentage of the prevailing landed market price for the shrimp or Greenland halibut for their quota volumes. Although the company has not lost any harvesting partners, it also has not been able to sign on any new ones. The primary reason for this is that no new quota licences have been issued and there is very little turnover in ownership.

Shrimp supplier contracts

For the shrimp supplier contracts with the inshore fishing enterprises, NPF completes background checks on new suppliers, and the legal contractual agreement requires each fishing enterprise to adhere to ethical harvesting practices. This is necessary to ensure that the company maintains its MSC certification. In 2023, the company had 60 fishing enterprises selling their shrimp catch to the processing plant. This is down from 70 in previous years due to some enterprises selling their licences and others not complying with the company's high standards for ethical sourcing. For the licences that were sold, the new owners already had processing contracts elsewhere and found no reason to switch to NPF.

Ethical sourcing of seafood

Ethical sourcing of seafood includes harvesting catches within the annual allowable limits under government-issued quota licences and using harvesting techniques that use the appropriate size and type of fishing gear to minimize the impact on the marine habitat. Because NPF does its own harvesting for products frozen at sea, it can be sure that catches of Greenland halibut and offshore shrimp have been ethically sourced.

Traceability

Once Greenland halibut or shrimp are caught, they are assigned a reference number that identifies the *North Allotta* or the *Charlie K* as the vessel, the fishing area, the time

of the catch, and other important factors. This allows the product to be traceable from catch to end consumer. The frozen products are also given a unique product code that ties to this traceable reference number and provides information on when the product was processed. For processed shrimp products, finished goods are given lot codes allowing for full traceability. The products are tested for quality at various points in the process.

Harvesting and procurement costs

These costs relate to the frozen-at-sea products, including operation of the vessel and on-board freezing costs. Costs required to operate the vessels include fuel, labour, crew costs, repairs and maintenance, fishing gear, supplies, licence fees, and other costs. Royalties paid to harvesting partners on quota catches not owned by NPF are also included, at a fixed percentage of the landed price multiplied by the volume of the catch.

Processing costs

Processing costs include the purchase of the harvest from the shrimp suppliers and costs to process and package the fresh and frozen shrimp. Purchase costs are paid to the inshore shrimp fishing enterprises at the landed market price of their catch delivered to the processing plant. The plant processing costs include wages paid to the plant employees and all other plant costs.

During the various processing steps for the shrimp, the shell and the head remain as waste after the beheading and peeling stages. During 2023, NPF sold 600,000 kilograms of this waste at a net selling price of \$0.32 per kilogram to a fertilizer producer under a five-year contract. The net value of this waste is included in processing costs.

Inventories

Depending on the time of year, the company may have frozen-at-sea Greenland halibut and frozen-at-sea offshore shrimp on the vessel waiting to be sold to AOISE when the vessel docks. During the inshore shrimp processing season, the company may have fresh or frozen shrimp. After October, when the processing has been stopped for the season, the inventory will be only frozen shrimp.

Fresh catch deteriorates quickly and so must be consumed within two days of the catch and kept refrigerated the entire time. Therefore, fresh shrimp are sold immediately on receipt. Frozen shrimp product is best consumed within three months to retain a high-quality taste; however, it can still be safely consumed up to 12 months later provided a frozen temperature of 0°F (−17.78°C) is maintained. Even a small fluctuation in the temperature at a processing/storage facility can result in significant inventory having to be destroyed or sold to a second-tier market (for example, pet food) for a greatly discounted price.

NPF has implemented state-of-the-art controls for tracking inventory and for temperature monitoring within the refrigerated and freezer warehouses and its delivery trucks, to reduce inventory losses. Radio technology allows for product-implemented

identification tags to track product all the way from harvest time and source to final delivery to the customer. Technology is also used during transportation of the product to ensure regulatory and safety compliance and fast delivery of high-quality, undamaged products. Because the inventory is sensitive to temperature changes, the company's own delivery trucks are also monitored for refrigeration and freezer temperatures. As the frozen processed inventory is sold and depleted over the year, the company has increasing excess warehouse space available that sits empty until the next harvest season.

Property, plant, and equipment

The company does not lease any assets. The offices, wharfs, and processing plant are all located in a coastal town in Newfoundland. The company has some vacant land that could be used for expansion purposes. The net book values of the asset classes are as follows:

Asset	Value (in \$'000s)	Depreciation policy
Land	125	
Office building, wharfs, and processing plant	4,147	Straight-line over 50 years
Processing and office equipment	6,230	Straight-line over 10 years
Vessels	10,766	Straight-line over 20 years
Vehicles	<u>121</u>	Straight-line over 8 years
Total net book value	21,389	

Since investing in the *North Allotta*, the shareholders have believed that in order for the company to differentiate itself, it has to continuously upgrade to state-of-art equipment on its vessels and in its processing plant. NPF expects to spend \$3 million annually on upgrading and refurbishing its property, plant, and equipment for the next five years.

Colan believes that continuously upgrading the equipment to adopt best and leading practices has resulted in the company being able to lower its greenhouse gas emissions, achieve greater efficiency, and lower its operating costs and carbon footprint. This has been a way for NPF to differentiate itself from the many smaller fish enterprises. In addition, the state-of-the-art equipment on board the vessels provides better ocean bottom mapping, which the company provides to Memorial University in Newfoundland to be used for research and analysis of the fish populations. Finally, these investments have also allowed the company to maintain its MSC certification and achieve excellent ratings in its recertification audits.

Marketing and advertising

Marketing of the Neptune's Tasties brand promotes the product as being tasty, healthy, and ethically sourced. The frozen-at-sea products are labelled as MSC certified. For the frozen-at-sea products, the taste of freshly caught fish is achieved by freezing on board within one hour of catching. For the shrimp, immediately processing and packaging the freshly caught shrimp ensures that the fresh taste is maintained. All products are

considered healthy because nothing is added to the products and so they are completely additive-free. Finally, by harvesting within the quota limits using only approved harvesting techniques, Greenland halibut and offshore shrimp have been ethically sourced.

By following these practices, the company's products have a good reputation in the industry for being high quality and ethically sourced. Marketing expenses include maintenance and updating of NPF's website and marketing costs to promote its commitment to sustainable fishing and food safety practices.

Research and development

Currently, the company does not invest in any research and development but relies on associations of which it is a member to fund a variety of projects. NPF does not have the size and resources to devote to the initial development of these ever-changing technologies. However, as Colan and Allan have an interest in this area, they keep current on new developments. Once new methods or technologies have been proven, NPF makes investments to improve sustainable harvesting techniques, production efficiencies, and inventory management. The company does not spend any resources on new product development.

In addition, for years now, NPF has collaborated with the scientists at Memorial University by providing catch data on Greenland halibut and offshore shrimp harvested annually. When requested, NPF has also allowed scientists to come on board its vessels while out on fishing trips to allow for the gathering of other scientific data.

Data analytics

Currently, NPF uses few data analytics, although it captures a variety of data on its vessels. Colan and Allan both believe that with more advanced tools and technologies, NPF could achieve precision fishing, which is a practice that allows captains to determine where to go to catch their quotas most efficiently before even leaving the dock.¹¹³

Currently NPF gathers information that includes the following:

- Vessel data — gear types, date of catch, weather, and fuel consumption
- Data collected from the vessel monitoring system — position, speed, heading, and start and end times for the catch
- Catch data — species, volume, biophysical characteristics, and volume of discards

¹¹³ Philip Christiani, Julien Claes, Elin Sandnes, and Antoine Stevens, "Precision Fisheries: Navigating a Sea of Troubles with Advanced Analytics," December 2019, <https://www.mckinsey.com/~media/mckinsey/industries/agriculture/our%20insights/precision%20fisheries%20navigating%20a%20sea%20of%20troubles%20with%20advanced%20analytics/precision-fisheries-navigating-a-sea-of-troubles-with-advanced-analytics-vf.pdf?sho>

- Sensor and oceanographic data — depth, water temperature at various depths, ocean currents, salinity, pressure, and dissolved oxygen

The local fisheries association recently began gathering select data from fisheries in the area, and it has been shared within the association in order to help facilitate precision fishing. Given that fishing spots can be closely guarded, as they are viewed by many fisheries as a competitive advantage, fisheries were asked to report their catch data by zone. The area where shrimp and Greenland halibut are caught was divided into three zones, with Zone 1 being the closest to Newfoundland and Zone 3 being the farthest away up the coast. The first set of data from May to October of the prior year has been shared within the association and includes the following:

- The type of vessel (35-metre trawler or 60-metre trawler)
- Species caught (shrimp or Greenland halibut)
- Catch total (average total per vessel in tonnes)
- Area of catch (Zone 1, 2, or 3)
- Month

Colan and Allan are looking to compare their own data to that provided by the fisheries association. One area of concern for NPF is the cost of fuel. Given that it is farther up the coast, fuel costs to reach Zone 3 are much higher than to reach Zone 1 or 2, which ultimately has an impact on NPF's profit margin.

Financial reporting and budgeting

NPF follows IFRS for reporting purposes, as it had previously received financing from a U.S. bank and IFRS was required for its reporting. Although that loan has since been repaid, the company has continued to use IFRS because its accounting systems and processes are designed for these accounting policies. NPF's auditors, Peterson & Co. LLP, have been preparing the company's audited financial statements since incorporation. The 2023 audit was completed in March 2024. NPF's corporate bank, Madison Bank, receives a copy of the annual audited financial statements. The company does not use derivatives to mitigate exchange rate fluctuations between the U.S. dollar and Canadian dollar.

Colan has always believed in paying fair wages to the shareholders and leaving any excess cash in the company in case of unexpected needs that might arise. Therefore, the company has never paid dividends, and there are no plans to change this policy in the near future. Both Kurt and Allan have the same philosophy toward maintaining cash in the business and support this policy.

The company prepares annual budgets, although the actuals are rarely in line with the budgets due to changes in environmental factors, over which management has little control.

Banking and financing

NPF uses Madison Bank for its corporate accounts, line of credit, and long-term loan. The McPhersons also use this bank for all their personal banking needs. The following line of credit and a long-term loan are outstanding:

- Line of credit — The company has access to a line of credit, up to a maximum amount of \$2 million. Any drawn amount incurs interest at prime (currently at 5%) plus 1%. The line of credit is secured with a general security agreement on the assets of the company.
- Long-term debt: term loan — The loan bears interest at 6%, payable monthly, requires annual principal payments of \$500,000 on July 31, and matures in 2029. The loan is secured by the *North Allotta*.

The company has found two alternative sources of funds for any new long-term investments. The terms and conditions proposed for each alternative are provided in Appendix IV.

Board meeting dialogue

The board met on April 3, 2024. Prior to the meeting, a briefing was distributed to the board members on the four potential new projects and some other additional issues that had been discussed at earlier meetings:

- Investment in Tillyton Salmon Farms Ltd. (Appendix V)
- Cold storage facility expansion (Appendix VI)
- Seafood retail locations (Appendix VII)
- Acquisition of Cabot Bay Fisheries Inc. (snow crab processor) (Appendix VIII)
- Information on other issues (Appendix IX)

The meeting's agenda was as follows:

1. Consider the four proposed strategic alternatives.
2. Discuss any other business.

Excerpts from the discussions that took place are detailed below.

Colan: Thank you all for coming. We have a lot to discuss today.

Kurt: Let me start, then, with my proposal. As you know, I have been friends with Jerod Jenkins since Grade 4 and am happy to see him back in Newfoundland. Jerod recently approached me about NPF investing in Tillyton Salmon Farms Ltd. (TSF), in which he is a shareholder. One of the other shareholders, Irene, had always planned to sell her shares in 2024 due to personal reasons. Jerod believes that she would accept

\$10 million for this sale. If we decide to invest, we will have one of the three seats on the board of directors.

Allan: I think this is a good idea. Aquaculture is a growing segment and would give us more control over the amount of product that is harvested and sold because there are no annual quotas. This would provide more stability to our revenues and profits. I also have a lot of respect for Jerod and his sister, Lydia, who are fast becoming experts in this field.

Yvonne: I like the idea of NPF selling another type of seafood. Perhaps, in the future, we could process and sell the salmon under our brand name. But I am concerned about reputational risk related to consumers' perception of the use of antibiotics and chemicals in salmon farming.

Kurt: I do know that Jerod's philosophy is to try nurturing the fish stock with no chemicals, using antibiotics and medicines only as required to ensure the stock's good health. Right now, they use the best breeding and sustainable practices in the industry segment, including reductions in untreated waste, which is a concern from environmental groups. He hopes, based on their data analysis and research, to develop and implement even better practices. I have full confidence in Jerod and Lydia.

Colan: I am concerned about the number of factors that impact the annual yield. From my reading, I have learned that diseases and parasites spread quickly in densely populated environments, which could severely reduce the harvest in any given year. There is the added risk that the natural salmon population will also become infected, or that the farmed salmon will escape. As well, the stock can be impacted by environmental factors such as high water temperatures or algae blooms.

Allan: This is a concern, but Jerod has highly advanced monitoring systems that should detect these issues quickly so the fish can be immediately treated. I also know, from my discussions with Jerod, that the research he conducted in B.C. and will continue to do in Newfoundland has helped stakeholders understand the salmon life cycle. This understanding can be applied to wild salmon research to better forecast salmon populations.

Kurt: Fish farming allows the food fish supply to be replenished at a faster rate than the oceans can produce wild-caught fish, allowing suppliers to keep up with demand. Because worldwide demand for seafood is increasing, much of this demand can be met with farmed salmon, reducing the risk of overfishing the natural populations.

I also want to go back to an earlier comment Mom made. I think we can use our experience in downstream integration with TSF. I see in the future us having a contract with the processor that they will prepare and package the salmon under our brand. This will ensure traceability right to the end consumer, as we have now. It will also allow us to attract more customers. And don't forget, this operation is year-round, whereas our current operations are very seasonal.

Colan: I think everyone has voiced their thoughts, so let's move on to Allan's idea.

Kurt: Just one more item on TSF. I saw agricultural inventories on TSF's financial statements and wondered what this represents and how it is accounted for.

Allan: We can ask SHC to comment on this in their report. Since TSF follows ASPE and not IFRS, I would also be interested in knowing this. Now, I want to discuss my proposal for expanding our cold storage facilities. Currently, NPF has marginal excess storage capacity at the low point in the season once the inventory has been depleted, and this led me to consider building a warehouse for cold storage. We have state-of-the-art monitoring and inventory management systems. I propose we take advantage of these capabilities. We could provide storage and warehousing services to other seafood harvesters and processors that need refrigerator and freezer storage. We could also offer warehousing services for tracking customers' inventory. In talking to the local community, I know many fish harvesters and processors who must upgrade their outdated storage facilities, particularly if they want to be certified. We could offer this outsourcing opportunity and provide NPF with a new revenue stream.

Kurt: I like the idea of long-term contracts to help stabilize our revenues, and I've heard this is critical for success in the cold storage industry. This is a great idea to provide a return on our excess capacity, and if this works, we could also expand at some future date to include distribution. We currently use state-of-the-art temperature monitoring in our trucks, and we would just need to expand on our fleet to offer this additional service.

Yvonne: If we enter the aquaculture segment, our need for storage might also grow. I can also think of some local organic food processors that might also want this capability. Because organic products have no preservatives, immediate and proper cold storage is vital to preserve the freshness. Organic food processors also might want to show traceability of their product, which we could provide with our inventory tracking automation.

Colan: Hold on a minute! There are a lot of risks in the cold storage and warehousing services industry that we have to consider. We are always hearing about lost and damaged inventories, which we would now be held responsible for. Secondly, we are located about 50 kilometres from the closest large town, and the local residents and municipality may not support this new building. To be successful, shouldn't cold storage be in major population centres and on transportation routes?

Allan: We can purchase insurance to cover the losses due to damages. There are some customers that operate close to us that I think could use our storage capabilities. We are just going to be a small operator, not one of the large national chains.

Kurt: I know that success compared to the competition in the storage industry is based on price, quality, and speed of service. By providing better-quality service, we could have some control over the prices we charge and make it attractive to our local customers. Being closer to the customers also reduces their trucking costs.

Colan: We do not have any experience in selling these services or managing other customers' expectations with respect to inventory management. We might even find

ourselves in a position where we have to compromise our own inventory to service the immediate needs of a customer and keep them happy.

Yvonne: I am concerned about the large amount of upfront cash required for this expansion, which is a start-up and might fail. We don't have any excess cash on hand.

Colan: I do not think we can compete against the well-known large competitors that operate large facilities in town and have access to larger amounts of resources compared to us. I cannot see how we would differentiate ourselves.

Allan: We are known in this area, and I anticipate that our reputation for quality and following best practices in all that we do would attract customers.

Colan: Or the flipside, if something happened where we somehow caused a local customer to lose their inventory, the bad publicity alone could destroy our reputation. We have worked too hard and too long to build this reputation to take this risk. I am absolutely against this idea.

Allan: I think you are blowing these risks out of proportion. We have years of experience in managing perishable inventories and use updated equipment to ensure that the right temperatures can be maintained continuously. That's critical for success in this industry, and I think somewhat mitigates many of your concerns. I think that with optimum capacity utilization and eventually long-term contracts once we get more established, we can be successful. We can ask SHC to perform research on the trends and risks in the industry to assist with our decision.

Colan: Let's move on to our next proposal. Yvonne, do you want to go next?

Yvonne: I am really excited about this proposal, which is to initially open three retail outlets that specialize in only seafood. We would sell fresh and frozen products of not only our own products but also others. The premium, high-quality product would be sold directly to end consumers and local restaurants. The stores would also cut fresh fish and seafood upon request. I would name the stores using a new brand name, Neptune's Seafood Market. Products could be sourced locally but also from other parts of Canada for other types of species. I propose we immediately start with the storefront of one of our customers in town, Larina Fetcher, who is closing her store. Then I propose we add one more location each year over the next two years in other surrounding towns. We will be able to differentiate ourselves from competitors because we catch the fish, we know quality and good taste, and all the products meet our strict ethical standards of harvest.

Colan: This is a great idea and gives us a direct link to end consumers. We currently sell to Larina's store, so we would not be losing a customer when the store closes.

Kurt: Why is Larina closing the store — has business been declining? Because we are not buying Larina's business, we unfortunately cannot see her historical revenues and profits.

Yvonne: Larina is well known in town, as is the store, and she did help me work out the assumptions for revenues and costs, so I believe they are reasonable. We would have direct contact with end consumers and hear about what they like and don't like about our products. This would help us to improve our current products. We could also use these customers to test out new products.

Allan: Being a retailer means that we might be competing against some of our customers, not only in town but in the other future locations also. These customers might decide not to deal with us if we become one of their competitors.

Yvonne: In selecting the other locations, we might consider only those locations that do not currently sell our product locally.

Kurt: Why would we want to get into a business in which we have no experience? There are a few key factors to being successful in the retail segment, which we don't really have, like having an experienced workforce that can answer consumers' questions about the seafood and how to prepare it, and being in the right location to attract customers. I think in order to be successful, it will also be important to be able to identify what products are popular with consumers and have supplier relationships to access these products.

Yvonne: Larina said that she would be happy to work on a part-time basis for the first year to help us manage the store and build a relationship with her suppliers.

Allan: Retail is a fiercely competitive segment. I just do not know how we would differentiate ourselves. How do we compete on price with the large grocery stores and larger seafood retailers?

Yvonne: I think we compete by selling only premium and ethically sourced products to a customer group that is concerned about the environment. We can try with the first location and if this doesn't work, then we won't expand further. But I also think there would be potential to expand the retail offering to include prepared cooked, ready-to-go seafood.

Allan: We would be totally reliant on a variety of different suppliers to ensure that we got the product when we needed it. Managing the inventory of multiple fresh and frozen products based on consumers' desires is a key to success that will be a challenge. What happens if there is a disruption in the supply and we cannot get what we need on time?

Yvonne: We could possibly use our current distributors to provide us with the other products. This might increase our power with these distributors if we are both a supplier and a customer.

Kurt: I am against this proposal. It requires \$3 million for equipment, and leasehold improvements are on top of this. I think we can better spend this on some of the other options that I think are more profitable.

Allan: I am also against this proposal — I just don't think we have anything unique to bring to the retail market, and it does not use our existing core competencies. I am also concerned about having sufficient inventory. Right now, we sell out of all our products over the year. Selling to our own retail locations might cause us to not be able to meet our commitments to existing customers.

Colan: We could consider trying a single location and see how it works. The amount of inventory NPF would sell to these retail outlets would be minimal and have little impact on current sales and customers. The timing seems to be appropriate with Larina planning to close her store. I like that we can educate end consumers directly on why it is important to support companies that use only sustainable fishing practices and not those that exploit the resources and do not act responsibly. But let's move on to our last alternative. I have been in discussions with my long-term friend, David Capriola, the sole shareholder of Cabot Bay Fisheries Inc. (CBF) about NPF purchasing his snow crab processing plant. He is proposing NPF purchase at least 60% of his company, with the remaining 40% being sold to a foreign investor, Larsen. Although he did state that he would prefer NPF purchasing 100% of the shares if we can afford it.

Yvonne: I like this idea because it will give us another product line to sell, and we can sell this under our brand. We can leverage our existing distribution channels and customers to sell these products and may be able to attract some additional customers as well.

Kurt: But how do we know that it meets our standards of high quality and taste?

Colan: Yvonne and I have purchased this product quite often and can attest that it is of high quality and very tasty. My biggest concerns are having a foreign investor and the upfront capital required.

Allan: I really don't want to get involved with foreign owners. There has been a lot of negative publicity and pushback from locals regarding foreign ownership in processing plants around the province.

Kurt: There are some positives about being in partnership with a large company that has the resources and access to capital to be able to weather the volatility in cash flows. I have spoken to the managers of some of the local companies in which Larsen owns equity, and they all speak very positively about the company. Larsen's representatives are very knowledgeable and experienced and have brought many new ideas for operational improvements. They have also left the management and employees in place with no terminations or cultural changes. Most people I spoke to said that it has been a win-win situation. Most of Larsen's plants are globally certified, which means they embrace the same principles we do.

Yvonne: We also might be able to use their contacts to get new customers for our own NPF products. Perhaps with their backing, we could get longer-term commitments from our existing NPF customers.

Colan: The snow crab segment has the same risks as we are already facing — volatile purchase prices and volatile selling prices. Although right now they are trending upwards, I am not sure how long this will last.

Allan: I am concerned about the amount of cash required. If we purchase 60%, we will have a minority foreign investor that we know nothing about. If we purchase 100%, then we will be sinking \$12.5 million into this venture. I think we need SHC to perform research on the snow crab segment outlook and the issue of foreign investment.

Kurt: In addition to the synergies that were already noted, NPF may be able to achieve other economies of scale by purchasing processing supplies required for both plants from a single supplier and receiving some volume discounts.

Allan: As David and his wife are the current managers but are leaving, who will we get to manage this operation? None of us can do it on a regular basis, since it is 200 kilometres away from where we live and work, and the operational season is the same as we have at our plant. Without daily on-site management, this significantly increases the risk of operational issues and losses occurring.

Kurt: David has said that he has two well-qualified and long-term employees who could be promoted into management roles.

Colan: I am concerned that Larsen, as a larger company, may try to use its influence to change the culture or practices or daily operations within CBF. Although we may be able to purchase 100% of the shares, this is a huge amount of cash to put up. Okay, I think everyone has shared their thoughts and we can ask SHC to go ahead with their analysis and prepare their report. But before we wrap up, I just wanted to repeat what I have said many times before. No matter what options we decide to invest in, it is imperative that we maintain a strong balance sheet and try to not take on any needless risks. Therefore, I want us all to agree that, regardless of the final investments decided on, our new total debt to total assets will not exceed the industry average of 60%. Agreed?

Allan, Kurt, and Yvonne: Yes, agreed.

Allan: I have two other tasks for SHC. Mom and I were reviewing the results of the workforce survey, and we are concerned about the lack of gender diversity at the company and how few women work at NPF in comparison to the national averages. We would like to understand the challenges and barriers to equality that women face in these types of jobs, along with the steps NPF should take to tackle these inequality issues and increase the number of women working on the vessels and in the processing plant. In addition, I would also like to know what procedures and mechanisms we could implement to help us remain current on the changing regulatory requirements and to ensure continued compliance. Right now, we rely on news reports to be made aware of changes, and I think we could be doing more.

Kurt: I also have some additional work required. First, as part of my wrap-up for the shrimp processing season, I ran a new report from the data analytics program I

purchased a few months ago. I wanted to see which shrimp suppliers had increased volumes from the prior year, so I set the report to show suppliers with a 5% or greater increase from the prior year. I noticed that most were consistent with the prior year but one, Atlantic Shrimp Inc. (ASI), had a 16% increase. I contacted the president, as I thought there may have been an error on our end. After several conversations, she finally admitted that they have been having a hard time financially and they exceeded their quota limit by fishing in an unrestricted area. She didn't think we would catch on because we don't ask our suppliers for the quota limits, as it is the supplier's responsibility to adhere to the quotas in their licences.

Second, I have been researching whether the company should process the waste from shrimp processing into shrimp oil. I have gathered some relevant information about a new shrimp oil byproduct, and I would like SHC to include a quantitative analysis in their report. After gathering this information, I will do further research on qualitative considerations.

Finally, I am interested in what it would take to get the shrimp processing plant MSC Chain of Custody certified. I would like to ask SHC to include what this would entail for the shrimp processing plant in their report. Specifically, I would like to understand the certification requirements, implications for NPF to satisfy these requirements, and what procedures the certification auditor would use to test and verify if these requirements are met. I think that the MSC and resources available on its website will be helpful in this analysis.¹¹⁴

Yvonne: I have one final addition request for their report. Although Colan and I are not thinking of retiring until we are at least 65, we would like to better understand how RRIFs, lump sum payments, and annuities work for withdrawing funds from our RRSP and the advantages and disadvantages of each. We each have RRSPs in our own names with similar market values.

Colan: I will contact SHC and ask them to get started and also to let them know about these additional issues that we need addressed in their report.

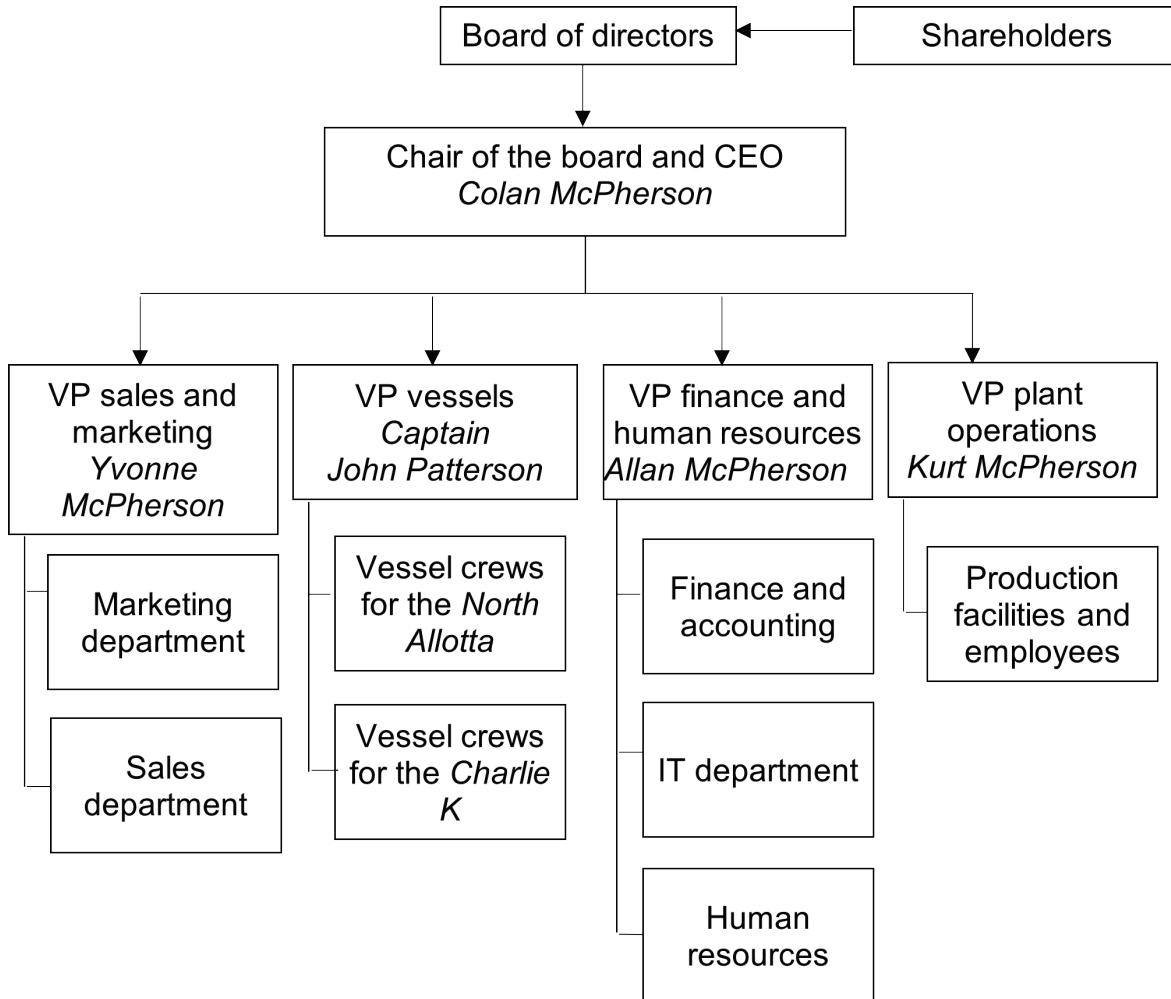
¹¹⁴ Marine Stewardship Council, "Fishery Certification Guide," accessed April 5, 2023, <https://www.msc.org/en-us/for-business/fisheries/fishery-certification-guide>

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Appendix I Organizational chart

Prepared by Allan McPherson



Appendix II
NPF financial statements

Prepared by Allan McPherson

Neptune Point Fisheries Inc.
Statement of profit or loss and comprehensive income
For the years ended December 31
(under IFRS)
(in C\$'000s)

	AUDITED 2023 \$	AUDITED 2022 \$	AUDITED 2021 \$
Revenues			
Frozen-at-sea Greenland halibut	5,505	6,438	6,413
Frozen-at-sea shrimp	5,474	6,654	9,228
Processed shrimp	21,586	25,380	21,250
Total revenue	32,565	38,472	36,891
Expenses			
Harvesting and procurement	9,332	11,129	13,295
Processing costs	11,649	12,792	11,269
Warehousing and shipping costs	2,600	3,150	2,940
Depreciation	2,428	1,994	1,795
Selling and administration	3,520	3,610	3,420
Foreign exchange gain (loss)	478	(178)	378
Total expenses	30,007	32,497	33,097
Operating income	2,558	5,975	3,794
Interest expense — line of credit	(32)	(29)	(24)
Interest expense — term loan	(198)	(228)	(258)
Income before taxes	2,328	5,718	3,512
Income taxes	(797)	(2,038)	(1,263)
Net profit and comprehensive income for the year	1,531	3,680	2,249

Appendix II (continued)
NPF financial statements
 Prepared by Allan McPherson

Neptune Point Fisheries Inc.
Partial statement of changes in equity
 For the years ended December 31
 (under IFRS)
 (in C\$'000s)

	AUDITED	AUDITED	AUDITED
	2023	2022	2021
	\$	\$	\$
Balance — beginning of year	10,978	7,298	5,049
Comprehensive income	1,531	3,680	2,249
Balance — end of year	12,509	10,978	7,298

Appendix II (continued)
NPF financial statements
 Prepared by Allan McPherson

Neptune Point Fisheries Inc.
Statement of financial position
 As at December 31
 (under IFRS)
 (in C\$'000s)

	AUDITED 2023 \$	AUDITED 2022 \$	AUDITED 2021 \$
Assets			
Current assets			
Cash and cash equivalents	302	549	459
Accounts receivable	902	1,076	1,286
Inventories — seafood	486	650	574
Inventories — supplies	325	335	309
Prepaid expenses	495	450	410
Total current assets	2,510	3,060	3,038
Property, plant, and equipment — net	21,389	18,980	13,899
Intangible assets — fishing rights	540	540	540
Total assets	24,439	22,580	17,477
Liabilities			
Current liabilities			
Line of credit	1,025	787	848
Trade payables and accrued liabilities	2,742	2,239	1,993
Income tax payable	95	536	9
Current portion — term loan payable	500	500	500
Total current liabilities	4,362	4,062	3,350
Long-term debt — term loan	2,500	3,000	3,500
Deferred income taxes	4,568	4,040	2,829
Total liabilities	11,430	11,102	9,679
Shareholders' equity			
Share capital — 20,000 common shares outstanding	500	500	500
Retained earnings	12,509	10,978	7,298
Total shareholders' equity	13,009	11,478	7,798
Total liabilities and shareholders' equity	24,439	22,580	17,477

Appendix II (continued)
NPF financial statements
 Prepared by Allan McPherson

Neptune Point Fisheries Inc.
Statement of cash flows
 For the years ended December 31
 (under IFRS)
 (in C\$'000s)

	AUDITED 2023 \$	AUDITED 2022 \$
Operating activities		
Net profit	1,531	3,680
Depreciation	2,428	1,994
Interest expense	230	257
Income tax expense	797	2,038
Change in working capital balances		
Accounts receivable	174	210
Inventories	174	(102)
Prepaid supplies and expenses	(45)	(40)
Trade payables and accrued liabilities	503	246
Interest paid	(230)	(257)
Income taxes paid	(710)	(300)
Total cash flow from operating activities	4,852	7,726
Investing activities		
Investment in property, plant, and equipment	(4,837)	(7,075)
Financing activities		
Line of credit proceeds	238	(61)
Repayment of term loan	(500)	(500)
Total cash flow from financing activities	(262)	(561)
Change in cash	(247)	90
Opening cash and cash equivalents	549	459
Closing cash and cash equivalents	302	549

Appendix III Industry benchmarks

Prepared by Allan McPherson

Industry benchmarks	2023 Industry average
Annual revenue growth rate	4.1%
Current ratio	2.50
Total debt to assets	60.0%
Return on assets	7.4%
Return on equity	28.2%
EBITDA margin	18.1%
Operating margin	15.8%
Cost of goods sold (includes harvesting and procurement + processing costs + depreciation + warehousing and shipping) as percentage of revenues	76.0%
Selling and administration costs as percentage of revenues	9.3%
Net profit margin	8.6%

Appendix IV Financing alternatives

Prepared by Allan McPherson

Merit Credit Union term loan

Merit Credit Union has offered to loan up to \$8 million, with the *Charlie K*, the processing plant, and any new property, plant, and equipment as security for the loan. The loan will bear interest at 8%, payable monthly. The principal is all due in 10 years.

Preferred share investment by Michelle Patterson

Michelle Patterson, Yvonne's sister, is interested in investing up to \$5 million in preferred shares. The preferred shares will pay a cumulative dividend of 6% annually. She recently sold her business and is interested in being involved in another business. As part of this investment, NPF would agree to hire her as part of the executive management team and give her a managing role in one of the new strategic investments. She would be a voting director on the board. Michelle is a lawyer who specializes in regulatory compliance in the fishing and seafood industry and worked for a large global seafood processor whose operations include fish processing and aquaculture.

Michelle wants to move back to Newfoundland to be closer to her sister and parents. Michelle is two years older than Yvonne, and they have always gotten along well. Everyone in the family likes Michelle, although they have never worked with her. She is well respected in her professional roles and prides herself on making things happen. She is a visionary who can see the bigger picture and get people to adopt her vision. She believes right now that NPF needs help and feels her experience and drive will make the company more successful. She wants to ensure that NPF is sustainable and provides good retirement income for her sister and Colan.

Appendix V

Investment in Tillyton Salmon Farms Ltd. (TSF)

Prepared by Kurt McPherson

Tillyton Salmon Farms Ltd. (TSF) incorporated in 2021 and is currently owned by three investors. Jerod and Lydia Jenkins, siblings, are both biologists with PhDs in marine biology and they each own 35%. Irene Waterford, Lydia's friend, owns the remaining 30%. Jerod and Lydia both worked at different salmon farms in British Columbia for many years, prior to starting this new company. At the time of initial investment, Irene had indicated that she would invest only for a few years until Jerod and Lydia found another partner. For this reason, Jerod approached me about NPF making an equity investment, with July 1, 2024, as the transaction date.

TSF's farming operation is located in Newfoundland. TSF has been granted the right to use the ocean sites for its cages for a period of 12 years (there are nine years remaining) with an option for another six years. The company's goal is to grow and harvest high-quality and tasty salmon. Jerod and Lydia are committed to being at the forefront of ethical and sustainable practices for aquaculture, given their science backgrounds and main objective of protecting the health and welfare of the salmon.

The company has one freshwater and one seawater recirculating aquaculture system that is used to hatch and grow salmon to the smolt stage. Smolt are the young salmon that are ready to leave their freshwater home and migrate to seawater. Once ready, the smolt are transferred to ocean cages located in environmental areas at a depth and temperature favourable to salmon. Salmon are left to mature in these sea cages until ready for harvest and sale. Once harvested, salmon will be sold to a nearby plant to be processed into fillets for sale.

Because the production cycle is three years from time of hatch to full harvestable salmon (about 4 to 5 kilograms), 2024 will be the first year of harvest and sales. Jerod and Lydia's primary concern is to ensure the health and welfare of the stock and ensure that wild salmon populations are not impacted by the farming operations. Accordingly, they are adamant about implementing state-of-the-art technology that will allow them to constantly monitor these factors.

Salmon is a commodity, and the selling price received is dependent on spot market prices, quality, and sales contracts with the processing plant. Currently, the company is negotiating a sales contract with a local processor that will purchase all the salmon as it is harvested. Projections for the volume of production are based on the amount of smolt the company has available. Jerod and Lydia have decided to build up the stocks slowly to perfect the farming and technical procedures over a period of years, ensuring the highest yields while maintaining welfare of the stock. Therefore, they believe that these production yields are conservative until the normal sustainable amounts of 30 million kilograms per year are achieved.

Appendix V (continued)
Investment in Tillyton Salmon Farms Ltd. (TSF)
 Prepared by Kurt McPherson

	2024	2025	2026	2027	2028	2029	2030
Annual production volume in kilograms (in millions)	10	15	18	22	25	30	30

The average selling price per kilogram and average farming costs per kilogram are expected to be \$8.09 and \$6.75, respectively. These provided production volumes are based on a survival rate of 90%. Farming costs are for the year of the sale of the salmon, and these are the costs to produce and harvest the salmon including all consumables (for example, feed and antibiotics), and wages and salaries.

Other expenses will be \$11 million for 2024 and will increase each year by \$1 million until \$15 million annually is reached and remain at this amount for the foreseeable future. Included in other operating costs are administrative and selling expenses and all data analytical collection, monitoring, and analysis costs. The company uses state-of-the-art technology to monitor the environment and health of stock, as this is a key to success in this segment of the industry. Constant environmental monitoring includes water temperature, oxygen levels, level of algae, and any other disruptions in the cages that might impact the health and welfare of the salmon. Health data tracked relates to diseases, sea lice infestations, and the use of antibiotics. Depreciation expense is forecast to be \$2.5 million annually and approximates capital cost allowance (CCA). The annual cash flow requirements to support agricultural inventory growth represent approximately 10% of incremental farming costs for the next period, and will be required until annual production hits the maximum volume of 30,000,000 kilograms. Annual investments in capital assets, net of tax shield, will be \$2 million for 2024, 2025, and 2026, and then increase to \$3 million annually thereafter.

Allan suggested that the appropriate discount rate is 15% due to the higher risk with this investment, and the income tax rate is 30%. He has also determined that NPF must use the equity method of accounting for this investment if the shares are purchased. TSF uses ASPE for reporting purposes. The fair market value of the net assets is equal to the net book value of the assets as at March 31, 2024, and is as follows:

Fair market value of net assets

Cash and cash equivalents	\$ 995,410
Agricultural inventories	12,620,000
Property, plant, and equipment	20,748,000
Licences	14,770,000
Exclusivity rights to use the ocean sites	1,250,000
Current liabilities	(2,035,000)
Long-term debt	<u>(15,000,000)</u>
	<u>\$ 33,348,410</u>

Appendix VI Cold storage facility expansion

Prepared by Allan McPherson

My idea is for NPF to offer cold storage and warehousing services to local fish harvesters and processors and other food manufacturers. Expansion of the storage facilities will allow NPF to capitalize on its knowledge and expertise in refrigerated and freezing storage of its product and use some of the available excess storage capacity. The contracts would initially be for one year, with renewal options, and provide for guaranteed cold storage and warehouse servicing, but be cancellable with three months' notice. Warehouse services could also be provided on an as-needed basis.

The warehouse will be built and equipment purchased during the remainder of 2024. The new facility will open January 1, 2025.

We will use existing land that is currently vacant but has a current market price of \$500,000, and selling costs would be 6% on the gross proceeds. We originally purchased all the property for \$30,000, and this portion of the land to be used for the expansion represents about 25%. Additional expenditures for the building expansion would be \$6,000,000, and for new robotic process automation equipment would be \$2,000,000. The building will qualify for CCA at 6% declining balance, and equipment will qualify for CCA at 20% declining balance. The equipment will last eight years and have no salvage value. At the end of eight years, it is assumed that the building could be sold for net proceeds of \$1,000,000 and the land for \$750,000. There will be an initial investment in net working capital related to accounts receivable of \$250,000.

The following additional assumptions relate to this proposal:

- In 2025, storage revenues will be \$1,862,000 and then increase by \$350,000 annually until a maximum of \$3,612,000 is reached and sustained for the subsequent years. I have assumed average capacity of 75%.
- Warehouse services revenues will be 125% of the annual storage revenues.
- Power expenses will be 12% of the annual storage revenues.
- Other facilities costs will be \$450,000 in 2025 and then increase annually at 5%.
- Labour costs will be 40% of total annual revenues.
- Other service costs will be \$550,000 in 2025, and then increase 3% annually.
- Two new employees will be required for administrative functions. The average salary for these employees will be \$50,000 each, and benefits are 25% of the annual salaries. These costs will increase 3% annually.
- Accounts receivable will be 30-day terms (based on 365 days a year).
- The appropriate discount rate is 10%, and the income tax rate is 30%.

Appendix VI (continued)
Cold storage facility expansion
 Prepared by Allan McPherson

In preparing this proposal, I did some research on the industry and found the following:¹¹⁵

- The demand for cold storage and warehousing servicing is increasing, as the demand for “fresh” food requiring refrigeration has gained popularity.
- Food safety and freshness is an ongoing concern for consumers, and temperature monitoring in refrigerated and freezing storage is key to storing food safely.
- As the technology for monitoring temperatures in storage facilities improves, companies will continue to invest in the technologies required to track and monitor these inventories. This monitoring technology and the increase in automation requires significant upfront capital for state-of-the-art cold storage and warehousing facilities.

To help understand the trends and risks in the cold storage industry, I have found two other sources that I recommend the other directors review:

- Martha Roberts, “Commercial Cold Storage Outlook: Demand Hard to Predict Amid COVID Volatility,” *FCC*, February 23, 2022, <https://www.fcc-fac.ca/en/knowledge/economics/2022-cold-storage-outlook.html>
- Sanjay Sharma, “5 Risks in Cold Chain Management and How to Ensure it Won’t Happen to You,” *Food Logistics*, June 13, 2018, <https://www.foodlogistics.com/transportation/cold-chain/blog/21008563/5-risks-in-cold-chain-management-and-how-to-ensure-it-wont-happen-to-you#:~:text=Negligent%20staff%2C%20insufficient%20training%2C%20non,containers%20due%20to%20haphazard%20handling>.

¹¹⁵ Jullian Guirguis, “Refrigerated Storage in the US, Kept fresh: increased outsourcing of warehouse services will boost industry revenue,” IBIS World Industry Report 49312, June 2022.

Appendix VII Seafood retail locations

Prepared by Yvonne McPherson

Recently, Larina Fetcher, the owner of the local fisheries retailer in town, announced she would be retiring and closing at the end of April. After hearing this, I decided to speak to Larina about what the operations entailed and see if this might represent an opportunity for NPF. Based on these discussions, I looked at the current retail space and spoke to the landlord about leasing the storefront to NPF. The landlord has agreed to a lease for an initial five years, ending in 2029, with a potential option to renew. He also agreed to paint the inside premises and remove the old, outdated equipment.

With Larina's assistance and discussions with equipment suppliers, I estimated that we would need to spend \$1 million for new refrigeration and freezer storage and refrigerated display cabinets for each store. The equipment is considered Class 8 for CCA. The equipment will have a useful life of five years due to excessive wear and tear and no salvage value. I estimate we would need to spend \$750,000 on leasehold improvements for each store. I expect we could open in July 2024, and revenues are estimated to be as follows:

	6 months 2024	12 months 2025	12 months 2026	12 months 2027
Revenues	\$1,600,000	\$3,800,000	\$5,000,000	\$5,500,000

Revenues will increase 5% annually after 2027.

Expenses are assumed as follows:

- Purchases are 59% of revenues.
- Wages are \$270,000 for the six months of 2024, \$456,000 for 2025, and \$550,000 for 2026 and thereafter.
- Marketing costs will be \$120,000 in the initial period of opening, and then \$100,000 annually thereafter.
- The rent will be \$90,000 annually starting July 1, 2024.
- Utilities are \$108,000 annually.
- Other expenses will be \$45,000 for the first six months and then \$75,000 annually.
- One-time expenditures to open the first location will be \$100,000.
- Income taxes are payable at 30%.

A 12% required rate of return is appropriate.

Appendix VII (continued)
Seafood retail locations
Prepared by Yvonne McPherson

My idea is that we would open a second location in July 2025 and a third location in July 2026, and that we would sign five-year lease agreements for these locations too. Each of the locations will be in a different town, which can be decided at a later date, after some additional market research is completed. I would expect similar assumptions, but annual rent will be \$100,000 for Location #2 and \$110,000 for Location #3. All other estimates for revenue and expenses will be the same as for the initial location.

Appendix VIII Acquisition of Cabot Bay Fisheries Inc.

Prepared by Colan McPherson

I recently met with my old friend, David Capriola, the sole shareholder of Cabot Bay Fisheries Inc. (CBF), operating in Newfoundland about 200 kilometres from our current location. David has owned CBF for many years and now wants to move to British Columbia to be with his family and grandchildren. He has been approached by a foreign investor, Larsen Skaldyr Co. (Larsen), a Danish company that has other investments in seafood processing plants in Eastern Canada, Greenland, and Denmark. However, David wants control of his company to remain with a lifelong resident of Eastern Canada. Therefore, David has suggested that he would sell 40% of the outstanding shares to Larsen and 60% to NPF, for \$5 million and \$7.5 million, respectively. David also stated that Larsen would require one seat on the four-member board of directors.

However, David also indicated that if NPF would be willing to purchase 100% of the shares to avoid selling to the foreign investor, he would be willing to take \$7.5 million up front and take the remaining \$5 million as a note payable. The note would bear interest at 8%, payable annually, along with annual principal payments of \$1 million for the next five years.

On my tour of the processing facilities, the premises looked well maintained and the equipment was relatively new, although not state-of-the-art, and similar to our processing and refrigeration equipment. If we purchase CBF, I will want to upgrade with more state-of-the-art equipment, as the equipment requires replacement. The snow crab products are sold under the CBF brand name, which is known to be of high quality and tasty.

David has provided me with a summary of his operating income for the past three years, as follows:

	2023	2022	2021
Revenue from snow crab			
Pounds of finished product	1,860,000	1,680,000	1,440,000
Average selling price per processed pound	\$24.89	\$22.65	\$16.65
Purchase of snow crabs from other fisheries			
Pounds received for processing	3,100,000	2,800,000	2,400,000
Landed price per pound	\$7.75	\$7.21	\$3.45
Total revenues	\$46,295,400	\$38,052,000	\$23,976,000

Appendix VIII (continued)
Acquisition of Cabot Bay Fisheries Inc.
 Prepared by Colan McPherson

Expenses	2023	2022	2021
Purchase of landed snow crabs	(24,025,000)	(20,188,000)	(8,280,000)
Processing costs — wages	(5,146,000)	(4,648,000)	(3,984,000)
Processing costs — other	(4,092,000)	(3,696,000)	(3,168,000)
Depreciation	(1,780,000)	(1,630,000)	(1,540,000)
Shipping costs	(1,388,862)	(1,141,560)	(719,280)
Selling and administration	(4,648,100)	(4,545,100)	(4,391,100)
Interest expenses	<u>(195,000)</u>	<u>(206,000)</u>	<u>(212,000)</u>
Income before taxes	\$5,020,438	\$1,997,340	\$1,681,620

David has contracts with a number of snow crab fishing enterprises to purchase their annual catch. These agreements mature in the next five to eight years, and he believes he can convince them all to stay with NPF if we become the new majority owners. Some of the fishing enterprises that supply snow crab to CBF also harvest inshore shrimp. David believes that at least 10, if not more, of his current suppliers would switch to NPF for their shrimp processing if NPF were also the owner of the snow crab processing plant.

CBF has current quota licences required to process snow crabs that should be easily renewed each year as long as the company remains compliant with all regulatory requirements. I do not think this should be an issue, since we would follow similar protocols as we do in our existing shrimp plant. The snow crab fishing season employs about 70 employees and operates during the harvest period of April to October. The snow crab are alive when they land. CBF then cuts the crab into sections, and cleans, cooks, and freezes them in a process that takes one hour from time of receiving the live seafood. The frozen product is immediately packed and ready to be stored or shipped. Every container is tested for quality prior to being shipped. The plant is also BRCGS certified and MSC certified for Chain of Custody.

In discussing the summary of operational results, David also provided the following information:

- In 2023, the company had some abnormal wastage, which caused costs to be \$250,000 higher than normal.
- Although David and his wife manage the operations, they did not take any management salaries during 2021 to 2023.
- In 2021, David paid a bonus to his employees of \$80,000 to compensate for lower wages being paid in 2020.
- Included in the selling costs are charitable donations that were \$10,000 in 2021, \$20,000 in 2022, and \$30,000 in 2023.

Appendix VIII (continued)
Acquisition of Cabot Bay Fisheries Inc.
Prepared by Colan McPherson

- The company has a long-term loan with the bank that is secured by the property. The current balance owing on the loan is \$2,500,000, which represents its current fair value, and it matures in 2030.
- On average, capital investments net of any applicable tax shields are \$1,200,000 annually. David's accountant has determined that the present value of the undepreciated capital cost (UCC) tax shield on the existing assets is \$670,000.
- CBF's tax rate is 30%.

Based on what we currently pay our managers, I estimate that the management salaries for David and his wife should be \$325,000 for 2021 and then increase \$25,000 each year thereafter.

Based on some research and discussions with some of my peers who have recently purchased seafood processing plants, a multiple of 6.7 times free cash flow should be used to value the shares of CBF. The free cash flow is the simple average for the past three years.

NPF could achieve savings of \$1,500,000 annually in the administration costs by combining our offices and people. We can also save \$400,000 annually on the shipping costs by using our own distribution trucks. These savings can be achieved for at least the next five years.

I recently read an interesting article on the snow crab segment that indicates a favourable outlook:

- Barb Dean-Simmons, "Snow Crabbers Set for a Billion Dollar Haul in Newfoundland and Labrador," *Saltwire*, April 4, 2022, <https://www.saltwire.com/atlantic-canada/business/snow-crabbers-set-for-a-billion-dollar-haul-in-newfoundland-and-labrador-100714456/>

Appendix IX New shrimp oil byproduct

Prepared by Kurt McPherson

New shrimp oil byproduct

I have been researching a low-cost and efficient process that can be used to extract an oil from the shells and head of shrimp that is rich in polyunsaturated fatty acids and astaxanthin (Astx), an effective antioxidant. This byproduct can be added to food to provide additional nutritional content. I would like some assistance in analyzing if the company should adopt this new process or continue to sell the waste to the fertilizing companies.

In addition, I think it would be useful to know what volume of raw material is required to have the same net profit from the sale of waste as NPF currently has. Finally, what are other issues that should be considered prior to making this decision?

I have estimated the following costs:

- New equipment costing \$640,000 will be required, which will be depreciated on a straight-line basis over four years.
- Weight of oil extracted from the shells and head waste is 2% of the raw material.
- Bulk selling price of the shrimp oil is \$132.00 per kilogram.
- Direct labour costs to process the oil are \$35.00 per kilogram of oil.
- Direct material costs are \$5.20 per kilogram of oil.
- Variable manufacturing costs are \$24.20 per kilogram of oil.
- On an annual basis:
 - Fixed manufacturing costs total \$75,000.
 - Other fixed overhead costs total \$120,000.
 - Depreciation is not included in these fixed costs.

Lease versus buy for the new oil processing equipment

I don't know if the new oil processing equipment should be purchased outright or leased. If purchased, the company would borrow at a rate of 8.0%, compounded monthly, for a period of four years. Alternatively, the supplier has offered to lease the equipment at a monthly lease payment of \$14,850, due at the first of the month for 48 months. At the end of the lease, there is a guaranteed residual value of \$30,000. Delivery costs of \$15,000 are required to be paid by NPF regardless of whether the machine is leased or purchased. The machine qualifies for Class 53 and 50% declining balance for CCA. At the end of four years, the salvage value of the machine is expected to be \$20,000.