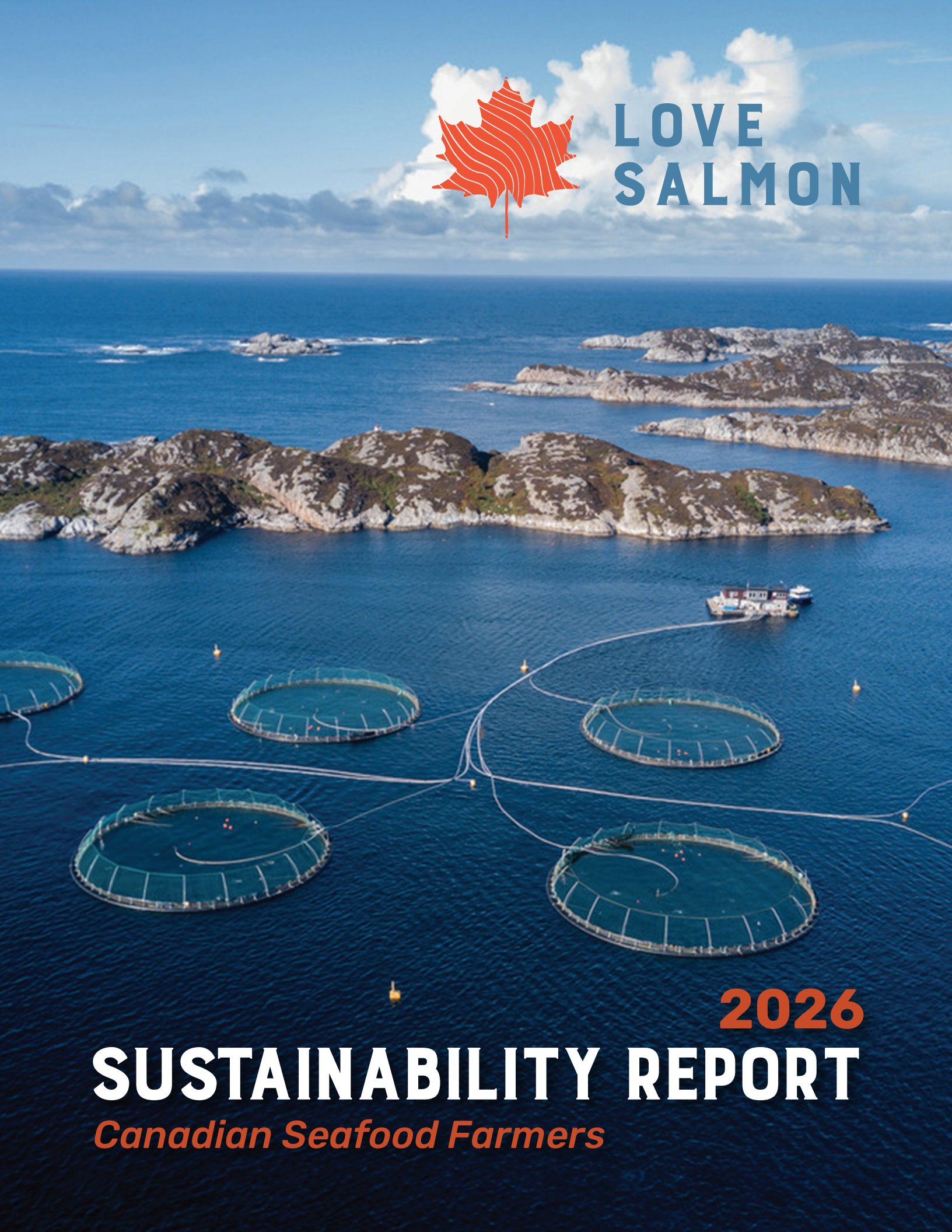


2026

SUSTAINABILITY REPORT

Canadian Seafood Farmers

OUR THIRD SUSTAINABILITY REPORT

This is the Canadian Seafood Farmers' (formerly Canadian Aquaculture Industry Alliance) third annual sustainability report for Canada's salmon farming sector and presents data for the 2024 and 2025 calendar years. It tracks performance against seven national, industry-wide commitments and their associated actions and targets. These commitments outline priority areas for continuous improvement in our operations.

ABOUT CANADIAN SEAFOOD FARMERS

Canadian Seafood Farmers (CSF) is the national voice for Canada's seafood farmers. With a membership that reaches coast to coast to coast, comprised of finfish, shellfish, and aquatic plant farmers, feed companies and suppliers, as well as regional aquaculture associations, CSF is a passionate advocate for the growth, quality and sustainability of farm-raised seafood.

In 2024 and 2025, the years covered by this Report, all seven of CSF's salmon farming members reported on their performance and are included in the performance metrics. CSF's salmon farmers operate 112 farms across five provinces, contributing to local economies, supporting supply chains and driving investment and innovation.

The Canadian salmon farming sector is a significant driver of economic growth in Canada. In 2024 the sector provided 13,242 full-time jobs, generated over $4.7 billion in economic output and contributed $1.7 billion to GDP.

HOW TO READ THIS REPORT

This report presents aggregated 2024 and 2025 sustainability performance data from CSF's salmon-farming members. Results are sector-level indicators and may not reflect the performance of any individual company. Participating companies were Cermaq Canada, Cooke Aquaculture Inc., Creative Salmon, Mowi Canada East, Mowi Canada West, Grieg Seafood British Columbia, and Grieg Seafood Newfoundland. Multi-year tables show trends over time; where performance was affected by external conditions or operational factors, context is provided in the relevant section.

Cermaq Canada
BC - Atlantic Salmon

Cooke Aquaculture Inc
NB, NL, PEI & NS - Atlantic Salmon

Grieg Seafood BC Ltd.
BC - Atlantic Salmon

Grieg NL Seafarms Ltd.
NL - Atlantic Salmon

Mowi Canada West
BC - Atlantic Salmon

Mowi Canada East
NB, PEI & NL - Atlantic Salmon

Creative Salmon Co. Ltd.
BC - Chinook Salmon

2022 - 2025 SUSTAINABILITY PERFORMANCE DATA

	2022	2023	2024	2025
FISH HEALTH				
Compliance with the Code of Practice	100%	100%	100%	100%
Fish survival	81.9%	84.9%	90.2%	85.0%
Antibiotic use (kg of API/MT of fish)	0.065	0.036	0.13	0.11
Number of farms that required remedial action for sea lice	34	17	11	14
Fish escape incidents (# of escaped fish)	13 (110)	8 (1,246)	10 (114)	2 (2)
Percent of sea lice treatments being non-medicinal	70%	48%	45%	44%
Reducing interactions with wild salmon (# of companies)	5	7	6	5
Wild salmon enhancement initiatives (# of companies)	5	6	6	5
CLIMATE CHANGE				
GHG Emissions (intensity, scope 1&2)	0.58	0.64	0.64*	0.74**
Mitigation and adaptation initiatives (# of companies)	5	4	6	7
SUSTAINABLE FEED				
Non-marine nutritional ingredients in Feed (% of total)	88%	82%	80%*	80%*
Certified sustainable fish meal and oil in feed (% of total)	92%	97%	94%	95%
FOOD SECURITY				
Utilization rate of the salmon	96%	89%	91%*	93%*
Number of salmon meals donated in Canada	153,000	49,173	28,333	21,787
Donations to non-profits and First Nations' supporting food security	$1,200,000	$261,156	$150,425	$310,461
OCEAN HEALTH				
Underwater feed systems (% share of farms)	99%	100%	100%	100%
Remediation of Farm Sites (% of total)	100%	100%	100%	100%
Restorative aquaculture practices (# of companies)	4	1	3	3
Packaging that is recyclable, or biodegradable (% primary processing)	86%	100%	100%***	100%***
PUBLIC REPORTING				
Annual public reporting	Yes	Yes	Yes	Yes

*6 OF 7 COMPANIES REPORTING;

**5 OF 7 COMPANIES REPORTING;

***4 OF 7 COMPANIES REPORTING

OUR COMMITMENTS

FISH HEALTH

The health and welfare of farm-raised and wild salmon is a top priority. We are committed to using best management practices and technologies that support the well-being of farm-raised salmon. We will also pursue a variety of partnerships, measures, and initiatives that support wild salmon recovery, habitat restoration, and enhancement efforts.

CODE OF PRACTICE

The Code of Practice for the Care and Handling of Farmed Salmonids, released in 2021, provides an important benchmark for animal health and welfare indicators. Limits on stocking density, fish handling requirements and predator control strategies are areas covered by the Code.

All CSF salmon farmers have implemented the Code of Practice into their farming operations. While companies have their own certification commitments with outside third-party organizations, such as Best Aquaculture Practices (BAP) which includes auditing of fish welfare practices, we are also looking at incremental improvements in the self-reporting protocols related to the Canadian Code of Practice.

FISH SURVIVAL

In the wild, fish survival rates are challenged by natural predators, disease and environmental factors all of which contribute to overall low survival rates. On the farms, where fish health and safety are a cornerstone of successful operations, survival rates are much higher. While both terrestrial and aquatic farmers strive for 100% of their animals to reach the marketplace, factors similar to those faced in the wild (i.e., predation, climate change, etc.), can result in mortalities. This is true of animal farming practices overall, where some mortality is anticipated.

Fish survival measures the proportion of stocked fish that survive during the reporting period. Sector-wide survival was over 90% in 2024 and 85% in 2025. The decline reflects algae blooms, low oxygen events, and challenging environmental conditions.

ANTIBIOTIC USE

The use of vaccines and improved health management practices have enabled a significant reduction in the use of antibiotics in salmon farming over the past decades. To prevent disease, salmon are reared in a healthy environment that limits stress and reduces susceptibility to pathogens and pests. If disease-causing bacteria are determined to be present on a farm, only veterinarian-prescribed antibiotics authorized by Health Canada may be administered. Farmers in Canada have very restricted access to medicines and treatments that are common in competitor nations. Better access to a diversity of treatment options will help minimize the need for antibiotics.

A variety of reasons led to an increase in this metric in 2024 and 2025. In some parts of the country, warmer water temperatures and elevated salinity associated with dry conditions impacted the grow-out phase in the marine environment; elsewhere, treatment of the fish at a larger size required higher dosage. All antibiotics used in Canadian salmon farming are strictly regulated, prescribed and overseen by licensed veterinarians, and fish cannot be harvested until mandatory withdrawal periods have passed to ensure no harmful antibiotic residues remain in the edible flesh.

REMEDIAL ACTION FOR SEA LICE

All types of farm animals are susceptible to naturally occurring parasites such as fleas and ticks. In the marine environment, salmon are susceptible to parasites which are found freely circulating with the ocean currents and on various species of wild fish. All salmon raised in ocean farms start their life in land-based hatcheries and enter the marine environment free of sea lice. Farmers use pest management plans that combine monitoring, prevention and treatment, if needed. Though all salmon farmers in Canada have such plans and measures in place, only British Columbia has a set treatment threshold which drives this metric, thus farms in Atlantic Canada are not captured in this metric.

Fewer farms required remedial action in 2024 and 2025 than in previous years, partly due to environmental conditions but also to new containment technologies and other measures.

NON-MEDICINAL SEA LICE TREATMENTS

CSF salmon-farming members routinely report on sea lice at active salmon farms and take mitigative action to reduce sea lice levels when deemed necessary (e.g. for fish health and welfare and/or exceedance of regulatory threshold in their jurisdiction). Non-medicinal treatments involve manual removal, using variations in water, temperature and pressure that use the biology of both the sea lice and salmon to control lice populations with minimal impact on the salmon and the environment. Access to specialized equipment and vessels is required for non-medicinal treatments.

Non-medicinal treatments accounted for 45% of sea lice treatments in 2024 and 44% in 2025. Veterinarians and farmers rely on a variety of treatments to protect efficacy and maximize animal health and welfare, while working with the specialized equipment, vessels and registered products available.

FISH ESCAPES

Achieving zero escapes annually is the sector's goal. Continuous improvements in technology and new safeguards have helped reduce escapes over the past decade. Rare events, such as torn nets or human error, have resulted in salmon escaping into the ocean.

In 2025, two fish escaped from two separate incidents attributable to human error during handling. In 2024, 114 fish escaped in 10 separate incidents, primarily due to seals damaging nets and weather-related human error during handling.

MINIMIZE INTERACTIONS

While numerous scientific reviews show that the impact of farms on wild salmon populations is low, a better understanding of marine ecosystem dynamics will contribute to solutions that further reduce the possibility of virus and pest transmission, flowing from either wild to farmed or farmed to wild salmon.

To minimize interactions between farm-raised and wild salmon and maintain ecosystem health, CSF salmon farmers are researching, developing, and testing new separation technologies. Semi-closed containment systems, sea lice skirts and bubble curtains are used on farms. The development of post-smolt facilities to reduce the time spent in the marine environment, reducing potential interactions, is also underway.

WILD SALMON ENHANCEMENT INITIATIVES

Salmon farming was, in part, a response to the decline in wild salmon populations which began in the 1950s. Several key drivers have been identified as contributors to the decline, primarily related to overfishing, urbanization, destruction of critical habitats, predation and climate change. There are numerous actions that can meaningfully contribute to the support of wild salmon, many of which benefit from the contribution of expertise and experience that are shared by salmon farmers.

Cooke Aquaculture's Kelly Cove Salmon is helping restore wild salmon in the Inner Bay of Fundy through the multi-partner Fundy Salmon Recovery project. Cermaq is supporting Ahousaht First Nation-led wild salmon rebuilding on a project that builds local hatchery skills and creates opportunities for training and youth involvement, with the long-term goal of restoring culturally important wild salmon and strengthening access to traditional food. Grieg NL has worked with DFO each year from May to Sept to install two salmon counting fences where aquaculture staff monitor wild salmon returns and conduct biological and health assessments of the fish.

"Canada's salmon-farming sector continued to improve in several areas in 2024 and 2025, including fish escapes, sustainable feed sourcing, and packaging, while facing increased environmental pressures that affected fish survival, sea lice management, and antibiotic use."

CLIMATE CHANGE

Farm-raised salmon has one of the lowest carbon footprints among large-scale farmed animal protein. CSF's salmon farming members are committed to reducing carbon emissions and are equally committed to becoming more resilient amid a changing climate.

GREENHOUSE GAS (GHG) EMISSIONS

Energy use for the sector is primarily in the form of electricity to land-based hatcheries, fuel for generators that contribute to energy requirements at ocean facilities as well as fuel for site vessels, support vessels and crew vessels to transport employees. Despite farm-raised salmon's low carbon footprint, we are targeting further reductions in greenhouse gas (GHG) emissions through technology advancement in areas such as renewable energy, the incorporation of electric equipment and sustainable shore-based power solutions.

GHG emissions per kilogram of production increased slightly in 2025, reflecting the higher energy requirements of semi-closed and closed containment systems and marine sites in more remote areas (without access to land-based power). The sector continues to pursue renewable energy, electrified equipment, and shore-based power solutions to reduce emissions over time.

CLIMATE CHANGE IMPACTS

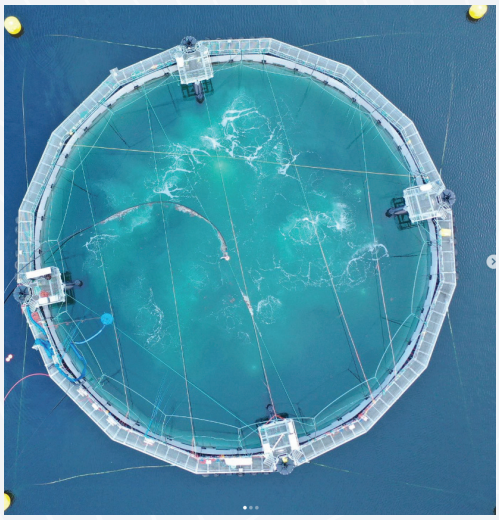
Changing climate conditions are impacting agricultural sectors across the country, and salmon farming is no exception. Warming waters, increasing storm and weather event intensity and changing water chemistry all contribute to changes in the surrounding ecology and the abundance of many resident species including potential pests and predators. Marine aquaculture operations are well positioned to increase monitoring of the surrounding environments where farms are located and thus contribute to a better understanding and more effective mitigation efforts in dealing with changes. This monitoring can also have important benefits for public understanding of ocean changes.

All CSF salmon farmers are investing in initiatives to mitigate and adapt to the impacts of climate change on farming operations. Examples include semi-closed containment systems, real time environmental data logging and trialing new oxygenation technology at sea sites.

SPOTLIGHT STORY

PREVENTION-FIRST CARE REDUCES THE NEED FOR SEA-LICE TREATMENTS

Cermaq and Ahousaht are advancing preventive sea-lice management through shared expectations, frequent monitoring and site-specific farming practices. Guided by the Ahousaht Protocol Agreement, the approach combines Indigenous oversight and traditional knowledge with fish-health expertise and technology. Cermaq completed a full 22-month production cycle without mechanical delousing. Across its farms in Ahousaht Territory, average motile lice levels were 0.30 per fish during the 12-month reporting period, compared with 1.93 in 2022. Avoiding mechanical treatments reduced fish handling and associated welfare risks, demonstrating the value of collaboration, prevention and early action.



SUSTAINABLE FEED

We support innovation in aquaculture feeds and are committed to the sourcing of environmentally sustainable ingredients that provide high-quality nutrition for our fish.

FISH MEAL AND FISH OIL

Fish meal and fish oil are important nutritional ingredients in most commercial fish feeds, providing a balanced amount of essential amino acids, phospholipids and fatty acids. Ensuring that the fish meal and fish oil is being harvested and processed in a sustainable way is critical in ensuring the sustainability of the sector.

Almost all the fish meal and oil used in salmon feed is from certified sustainably managed/FAO-compliant fisheries. These certifications, including standards such as MarinTrust and the Marine Stewardship Council (MSC), provide independent verification that marine ingredients are sourced from responsibly managed fisheries. Requirements addressing legal harvesting, sustainable stock management, ecosystem impacts, traceability and alignment with internationally recognized fisheries-management principles, including the FAO Code of Conduct for Responsible Fisheries. The remaining gap is a supply-chain (i.e. availability) and certification challenge rather than an intentional use of unsustainable sources. The sector is committed to reaching 100%.

NON-MARINE INGREDIENTS

While fish meal is the most natural diet for farm-raised salmon, significant research and development is going into developing non-ocean-based protein alternatives for fish. Given the pressure on certain wild fish stocks (traditionally used for fish meal) finding a viable suite of alternatives that maintain a well-balanced diet and continue to produce a nutritious final product, will contribute to the overall sustainability of the sector.

Only 20% of feed is marine ingredients, with the balance of 80% comprised of non-marine ingredients, including grains and other plant-based and alternative ingredients, which has been steadily increasing over the past decades. New innovations in feed – for example in omega-3 rich algae oils, single-cell protein fermentation, and insect proteins– are being developed and tested. In 2024, over $250 million in grains, seeds, oils and other proteins from Canada's farmers was used in feed on Canadian salmon farms.

SPOTLIGHT STORY

FARMING EXPERTISE SUPPORTING WILD SALMON RECOVERY

Cooke Aquaculture's Kelly Cove Salmon is helping restore wild salmon in the Inner Bay of Fundy through the multi-partner Fundy Salmon Recovery project. At its Dark Harbour Conservation Farm, the company provides marine infrastructure, staff and transport support to raise salmon to maturity before returning them to rivers to spawn. Over the past decade, the project has released more than 13,230 mature adults and confirmed over 700 returning salmon. Beginning in 2026, Cooke is also working with Fort Folly First Nation to provide hatchery space for overwintering young salmon, helping address a gap in the conservation program.



FOOD SECURITY

Farm-raised salmon has an important role to play in feeding Canada and the world as demand for nutritious food grows. CFS's salmon-farming members are committed to providing a reliable, healthy source of protein while supporting food security in the communities where they operate and throughout Canada.

UTILIZATION RATE

A circular economy retains and recovers as much value as possible from resources to reduce or eliminate waste. In the food system, this involves reducing food spoilage and waste through utilization of by-products and food waste and nutrient recycling. One example is fish by-products being used in pet food and fertilizers.

The utilization rate remains high and has been generally stable over the past few years. Over 93% of the salmon is utilized; the majority of by-products from processing is rendered into salmon oil used for other products, including nutritional supplements for both humans and animals. Pet food and fertilizers make up the balance.

DONATIONS - SALMON MEALS

According to Statistics Canada, nearly 1 in 4 Canadians polled said they experienced food insecurity in their household because of financial constraints. Household food insecurity is a well-established determinant of health and is highly linked with financial hardship.

CSF salmon farmers donated nearly 1,634 kg of salmon to food banks and other non-profit organizations that redistribute food to Canadians in need. According to the Canada Food Guide definition of one serving of salmon (1 meal = 75 g of salmon), this equates to 21,787 meals donated in 2025. This metric has unfortunately been trending sharply downwards, due to declining production in BC because of government-imposed farm closures.

DONATIONS – MONETARY SUPPORT FOR FOOD SECURITY

CSF salmon farmers continue to support food security in their local communities with significant monetary donations, including to local food banks.



SPOTLIGHT STORY

A SMALL HATCHERY WITH A BIG PURPOSE

Cermaq is supporting Ahousaht First Nation-led wild salmon rebuilding through a "hatchery in a box" in Maaqutusiis, British Columbia. Developed by the Okanagan Nation Alliance, the compact facility can incubate up to 100,000 chum salmon eggs. Cermaq provided funding and project support, working alongside Ahousaht organizations and partners. The project builds local hatchery skills and creates opportunities for training and youth involvement, with the long-term goal of restoring culturally important wild salmon and strengthening access to traditional food.



OCEAN HEALTH

Healthy oceans are essential to healthy salmon farming. We are committed to continuous improvements to farm practices that further protect the marine ecosystem, including the health of the ocean floor (benthic) ecosystems beneath our farms, and to the prevention of plastic waste and debris from entering the oceans from our operations.

UNDERWATER MONITORING

Camera sensor units have software that enables real-time analysis of fish biomass and welfare. Overfeeding can contribute to environmental impacts including: a larger carbon footprint , slower growth and performance of the fish, and additional nutrients on the benthic environment. Feed optimization and maximizing feed conversion ratios are of critical importance on farms.

All CSF salmon farmers have underwater cameras installed at farm sites to monitor feeding behaviour and fish health. CSF's salmon-farming members are exploring further improvements, including the potential use of artificial intelligence to enhance feeding efficiency and fish-health monitoring.

SITE REMEDIATION

In all aquaculture operations, organic waste (i.e. fish feces) is released into the surrounding waters and could accumulate on the seafloor. Science-based government regulations are in place to ensure the impact of organic waste is well managed to ensure the ecosystems remain healthy.

Most farm sites remain below regulatory thresholds for benthic impact even at peak biomass (i.e. when the farms are fully stocked with mature fish). In any instance when a farm exceeds the regulatory limit at peak, no fish can be restocked until the benthic conditions meet regulatory requirements. All farms in Canada are able to meet regulatory requirements prior to fish being stocked, either through subsequent monitoring or fallow, continuing the 100% achievement of farms remediated before restocking.

RESTORATIVE AQUACULTURE

In a report released in November 2021, an expert working group led by the Nature Conservancy defined restorative aquaculture as follows: "Restorative aquaculture occurs when commercial or subsistence aquaculture provides direct ecological benefits to the environment, with the potential to generate net positive environmental outcomes." The potential for restorative, multi-trophic, and/or co-production operations is immense in Canada.

CSF salmon farmers have made efforts to pursue restorative aquaculture, multi-species aquaculture, and/or co-production. Companies have worked with First Nations, researchers and Fisheries and Oceans Canada (DFO) to investigate the feasibility of co-culture, for example shellfish and kelp. However, there are barriers to scaling these and other potential initiatives, including regulations for new products, regulatory uncertainty, and timelines. We are working to develop the right performance measure for this commitment.

PACKAGING

Packaging plays an important role in maintaining product quality, freshness, and food safety throughout the supply chain. Canada's salmon farmers are committed to working with suppliers, processors, and other partners to increase the use of reusable, recyclable, and biodegradable packaging materials, while ensuring products continue to meet the highest standards for food quality and safe transport.

Based on primary processing operations, where members have direct control, 100% of packaging used across the industry is reusable, recyclable, or biodegradable. Members continue to assess packaging across the broader supply chain, where material recover and end-of-life options can be more complex.



PUBLIC REPORTING

Transparency builds trust, strengthens accountability, and improves performance. We are committed to working with rightsholders, stakeholders and government bodies to provide information about our salmon farming operations to Canadians in a way that is easily accessible and understandable.

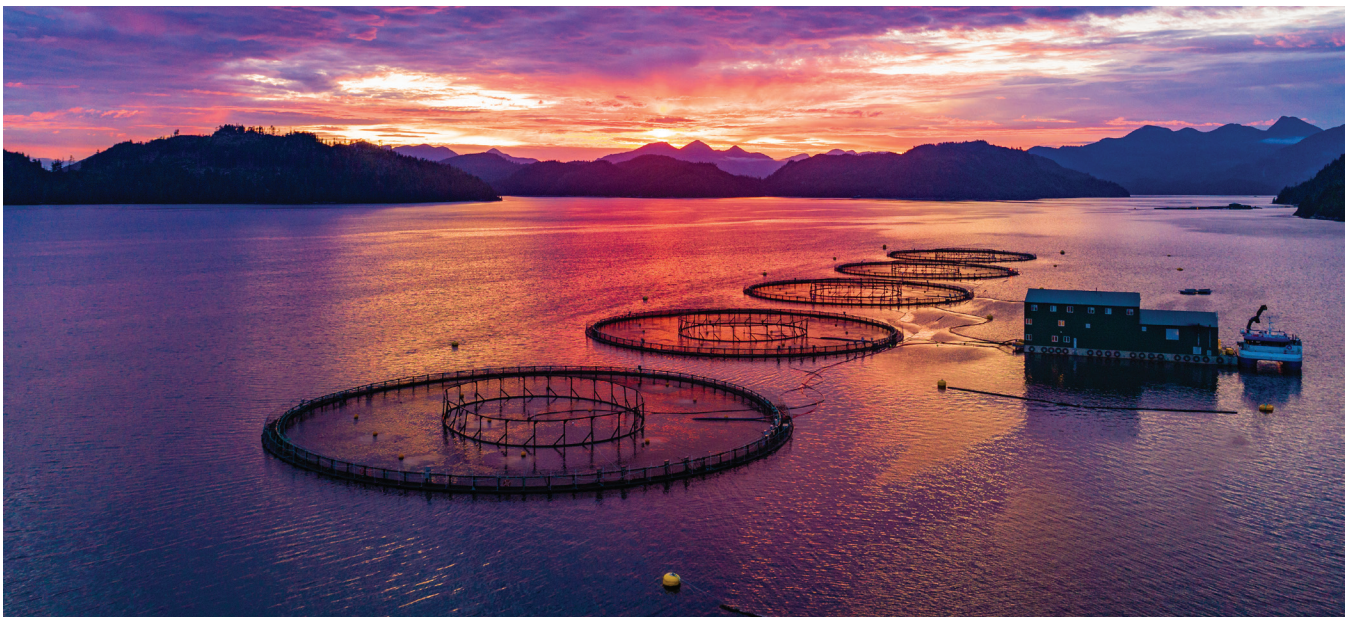
The Canadian farm-raised salmon sector has extensive public reporting in place, via company-level annual reports (including ESG reports), third-party certifications and federal and provincial regulations. This is the sector's third annual report on performance aggregated at the national level, for a total of four years of historical data now published, demonstrating the sector's commitment to transparency and building public trust.



LOOKING AHEAD

Our sustainability journey is a work in progress. We are proud of what we have accomplished together as a sector in Canada over the past four years as detailed in this performance report.

We know there is more work to be done –to identify the right indicators for all commitment areas, and, for some indicators, setting targets. Where targets have been achieved, companies are looking at what comes next for continuous improvement.
We are excited about the future; a future where Canada realizes its potential to be a global leader in sustainable farm-raised salmon, fueling economic growth, raising the bar for quality and sustainability practices and feeding Canada and the world with a delicious, nutritious, high-quality product.



LOVE SALMON

Have questions? We look forward to hearing from you. Please contact us at info@aquaculture.ca or feedback on our report and the initiatives. Visit lovesalmon.ca for more information about Canadian Seafood Farmers and our sustainability commitments.

