AQUACULTURE

Campbell River | Sector Profile

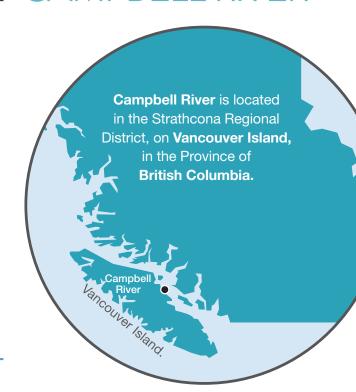
As a regional gateway to Northern Vancouver Island, Campbell River is ideally situated to support a thriving aquaculture industry. The city has attracted some of the largest global companies and serves as a premier location for corporate headquarters in the industry.

Campbell River is home to the head offices of three major salmon farming companies, a unique aquatic research facility, one of Canada's largest commercial diver training schools and numerous aquaculture service and supply companies.

With opportunities along the supply chain, aquaculture development continues to play an important role in the diversification and strengthening of the local and regional economy.

Aquaculture has been identified as one of the priority growth industries in the BC Provincial Jobs Plan.

CAMPBELL RIVER



Snapshot of Aquaculture in British Columbia

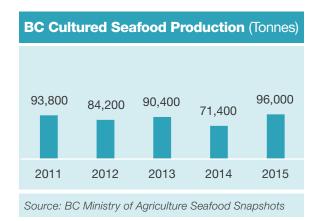
TOP COMMODITIES AND EXPORTS

In British Columbia (BC), the top three aquaculture commodities, in terms of production volume and dollar, are salmon, oysters, and clams¹. Cultured Atlantic salmon is BC's top agricultural export².

A GROWING MARKET

In 2015, cultured seafood production reached 96,000 tonnes, an increase of 31% from the previous year³.

The top five markets for seafood product exports include the United States (61%), China (18%), Japan (8%), Hong Kong (2%), and Vietnam (1%)⁴. Continued strength in the US economy is anticipated to benefit aquaculture employment⁵.





¹ Statistics Canada - Aquaculture, production and value - CANSIM Table 003-0001 available at: http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=30001

² Ministry of Agriculture – Agriculture, Seafood, and Agrifood Snapshots 2015 http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/statistics/industry-and-sector-profiles

Ministry of Agriculture – Seafood Snapshot 2015 available at: http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/statistics/industry-and-sector-profiles

⁵ BC Agrifood and Seafood Export Highlights http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/statistics/market-analysis-and-trade-statistics

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FINFISH

BC was the fourth largest producer of cultured Atlantic salmon in the world in 2014⁶. Approximately 70% of Canada's cultured salmon production, in both tonnes and dollars, is attributed to BC. In turn, approximately 40% of the annual GDP impacts generated by salmon farming in BC are attributed to activities that occur on northern Vancouver Island⁶, where Campbell River is located.

SH	IEL	.LF	ISH

The shellfish industry is a well-established economic driver in the Campbell River area. BC cultured clams, scallops, and oysters represent a high percentage of Canada's overall production. With continued growth of the industry expected, there are culturing and processing expansion opportunities within this area.

Leading Employers

Three of the world's leading aquaculture companies have their North American head offices located in Campbell River – Cermaq, Grieg Seafood, and Marine Harvest – and are major employers in the community.

Finfish Aquaculture Production (Tonnes)							
	ВС	Canada	BC Share of Canada (%)				
Salmon	54,971	78,979	70%				
Trout	44	6,698	1%				
Steelhead	790	790	100%				
Other finfish	471	1,209	39%				
Total finfish	56,276	93,656	60%				

Source: Source: 2014 DFO Aquaculture Values, Statistics Canada Catalogue no. 23-222-X

Shellfish Aquaculture Production (Tonnes)							
	ВС	Canada	BC Share of Canada (%)				
Clams	1,327	1,626	82%				
Oysters	8,108	12,604	64%				
Mussels	592	25,464	2%				
Scallops	100	114	88%				
Other shellfish	0	119	0%				
Total shellfish	10.127	39.927	25%				

Source: 2014 DFO Aquaculture Values, Statistics Canada Catalogue no. 23-222-X



Cermaq Canada (Cermaq) – has salmon farms on the west and east coasts of Vancouver Island. With 27 farms, three hatcheries, one land-based broodstock site and two processing plants Cermaq employs more than 250 people in the coastal communities of Vancouver Island⁸.



Grieg Seafood BC (Grieg) – is a salmon farming business with BC operations on the east and west coast of Vancouver Island as well as along the Sunshine Coast. The company has 105 employees with nearly half living in Campbell River. Grieg holds 22 farm licences, operates a hatchery, and uses services from more than 100 BC suppliers and contract service companies⁹.



Marine Harvest Canada (Marine Harvest) – operates salmon farms on the coast of BC and Vancouver Island. The company directly employs more than 500 people in BC, 200 are from the Campbell River area. Marine Harvest sources supplies and services from 255 companies based in Campbell River, spending \$32.5M among these vendors. Marine Harvest actively operates 22 of the 49 licences they hold and operates a processing plant in Port Hardy.



⁶ Ministry of Agriculture – Seafood Snapshot 2015 available at: http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/statistics/industry-and-sector-profiles

⁷ BC Salmon Farmers Association Economic Impact Study 2015 - bcsalmonfarmers.ca/wp-content/.../2015/01/1_BCSFA_2014_EconImpactStudy.pdf

⁸ Information gathered from Cermaq website at: https://www.cermaq.com/wps/wcm/connect/msca-content-en/mainstream-canada/about-us/

⁹ Information gathered from Marilyn Hutchinson - Director HR, Sustainability & Growth at Grieg Seafood.

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Opportunities to Grow the Supply Chain

The aquaculture sector contracts a wide range of support services. Campbell River is home to a variety of businesses along the supply chain, from technological support for resources management to preparation of value-added products.

Professionals and technical businesses located in Campbell River enjoy year-round contract opportunities. Some of the existing businesses that demonstrate the wide range of opportunities in the sector include:

TRANSPORTATION

Land and sea-based freight and transportation service operators, such as Az-Tec Freight, use specialty tankers and trailers for customized transporting of aquaculture products. Smaller companies, such as Discover Launch Water Taxi and Way West Water Taxi offer charter marine transport services.

TECHNICAL SUPPORT SERVICES

AKVA Group and Steinsvik are leading technology companies offering feeding and camera systems design to the aquaculture industry worldwide, and have located their North American head offices in Campbell River. New companies, like Poseidon Ocean Systems, provide technical solutions, project management and product development.

SCIENTIFIC AND MARINE SUPPORT SERVICES

Companies such as Ecofish Research and Mainstream Biological Consulting offer a comprehensive range of services including biological and environmental assessment, monitoring, mitigation, and offsetting. Commercial diving companies, such as Allpen Diving & Floatation, provide the industry with equipment installation and maintenance services, video inspection and mortality removal.

EQUIPMENT AND SUPPLIES

Equipment and supplies used all over Vancouver Island are produced in Campbell River with companies such as Pacific Marine Construction building custom docks, floats, feed storage buildings and aquaculture barges. Companies like Campbell River Netloft provide netting supplies and repair services for finfish and shellfish production.

PROCESSING

The region has large-scale companies specializing in the processing of farmed fresh salmon, such as Browns Bay Packaging Company, as well as smaller operations that offer custom and wholesale finfish and shellfish smoking, such as Flurer Smokey.

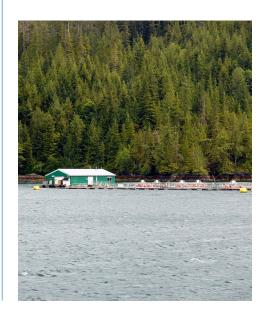
Why global companies choose Campbell River...

"Campbell River's central location offers us easy access to most of our salmon farming operations. The size of the town and its proximity to a broad range of services and contractors also provides us with the expertise needed to effectively run our business."

- Ian Roberts, Director of Public Affairs, Marine Harvest Canada

"The availability of direct, daily flights to Vancouver to bring consultants and professionals to our head office as well as the availability of floatplane companies to fly staff to our more remote fish farm locations is critical for the industry. Campbell River provides this accessibility and locating here has been important in managing both our time and cost efficiency."

- Marilyn Hutchinson, Director HR Sustainability & Growth Grieg Seafood





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Skilled and Educated Work Force

Aquaculture is a significant employer in Campbell River and within the Strathcona Regional District. With approximately 385 people employed in the community, almost one quarter of aquaculture employment in BC can be attributed to Campbell River. Direct employment in the aquaculture industry in Campbell River represents 2.3% of the total employed population in the community – more than 30 times the share aquaculture employment has in BC. In addition, the local aquaculture industry supports employment throughout the supply chain in processing, transportation, business services, and scientific and technical services.

Local Industry Support

Campbell River has strong sector support with a network of services to assist the growing aquaculture industry. In addition to promoting opportunities for aquaculture in the area, these organizations provide valuable research resources.

Aquaculture Employment							
	Direct Aquaculture Employment	Total Employment	Aquaculture Share of Employment				
Campbell River (Census Agglomeration)	385	16,575	2.32%				
Strathcona Regional District	505	19,825	2.55%				
British Columbia	1565	2,171,470	0.07%				

Source: Statistics Canada, 2011 National Household Survey, Table 99-012-X2011034





The BC Centre for Aquatic Health Sciences has a team of research scientists and technical staff and is the only aquatic research facility of its kind in the province. The organization located in Campbell River to serve both the wild and cultured marine species sectors.



The Aboriginal Aquaculture Association, headquartered in Campbell River assists, supports and facilitates meaningful participation of First Nations in sustainable aquaculture development.



The BC Salmon Farmers Association, with a head office in Campbell River, acts as a liaison between industry and government and as a forum for communication and cooperation within the salmon farming sector.



The BC Shellfish Grower's Association, located in nearby Comox Valley aims to advance the sustainable growth and prosperity of the BC shellfish industry in a global economy by providing leadership, communication and advocacy to members, government, the public and other stakeholders.



Vancouver Island University (VIU) is located in Nanaimo and provides academic research support for the aquaculture industry with the Centre for Shellfish Research, the International Centre for Sturgeon Studies and the Deep Bay Marine Field Station.

