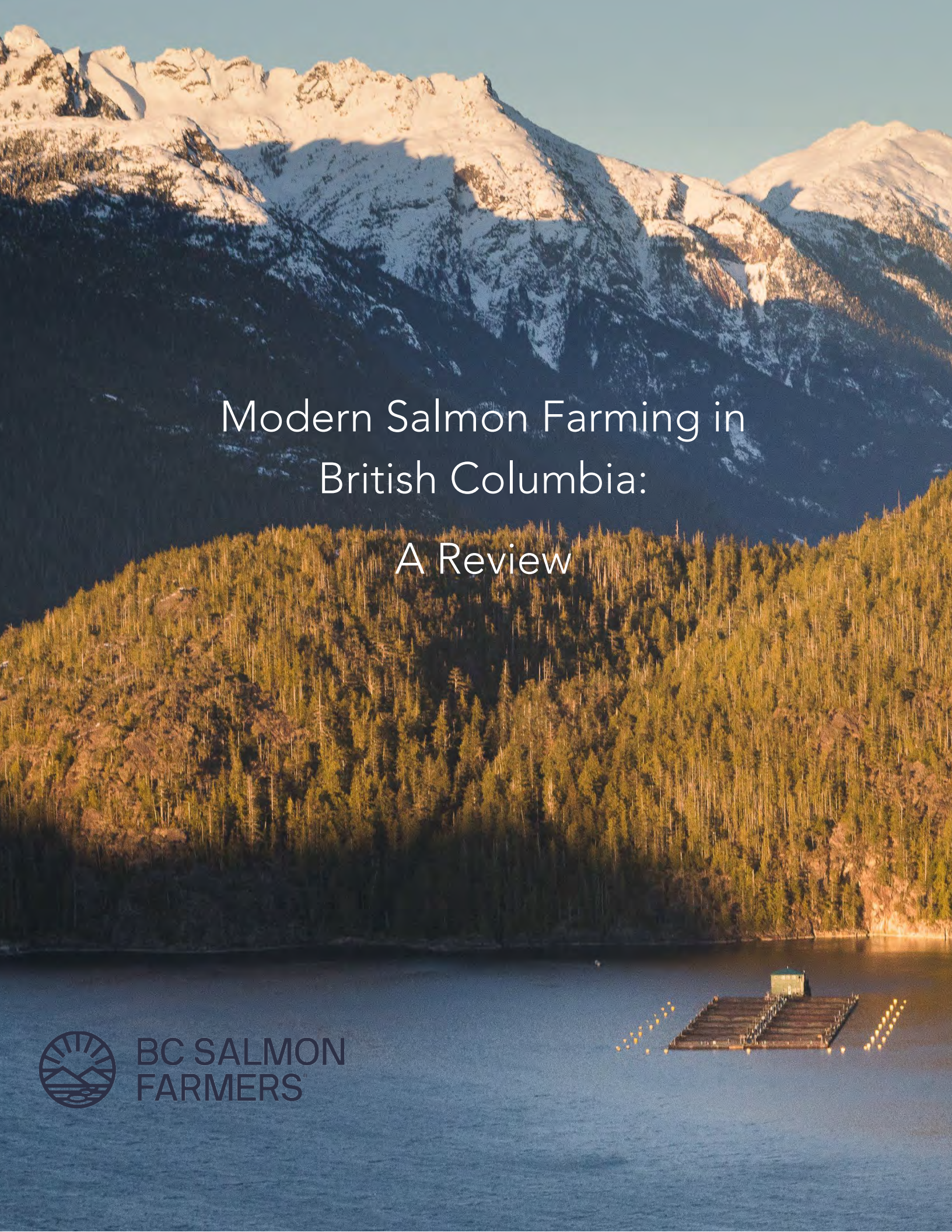




Modern Salmon Farming in British Columbia: A Review



BC SALMON
FARMERS



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Acknowledgements: This report is the culmination of input from researchers, veterinarians, and subject matter experts, both internal and external to the BC salmon farming sector. We are very grateful to the First Nations of the Coalition of First Nations for Finfish Stewardship who initiated this project and provided the chapter on Indigenous Stewardship, as well as reviewed and commented on materials in other chapters. Unless identified, photographs have been sourced from the files of producer companies. Photographs donated from personal collections have been credited to the individual.

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FORWARD BY DALLAS SMITH



When First Nations leaders are provided with fulsome and transparent information, they are positioned to make the best decisions for their communities, membership, and territories.

When they do not have that information, or that information is lacking, decisions based on misunderstood issues, like salmon farming, often lead to divided communities and quarrels within the membership. The concept for this publication, *Modern Salmon Farming in BC: A Review*, stemmed from this scenario.

What started as a request from First Nations leaders for better information on salmon farming to take back to their communities evolved into a 500+ page publication built by topic specialists. From wild Pacific salmon scientists, biologists, benthic experts, feed specialists, food safety experts, regulatory experts and veterinarians, this report has engaged with authorities across many fields to create the

most fulsome collection of information possible on the current state of wild salmon, their environment, and finfish aquaculture in BC.

Modern Salmon Farming has become a rich resource that we, First Nations leaders, can present to our communities, knowing that we can trust the detailed information it contains and, therefore, make better decisions for operations and conservation efforts in our waters. This report will help encourage more meaningful dialogue within our membership as we, as coastal communities, build and roll out our marine management plans.

It can also help other Nations better understand why some of our communities include finfish aquaculture in our marine management operations. As contentious and misunderstood as the topic is, we do not question why other First Nations might be upset by our decision to host finfish farms; instead, we question why they wouldn't be. There just has not been enough detailed and transparent information in one place for them to access and understand – until now.

To avoid appropriation, the Coalition developed and authored Chapter 4: Connecting with First Nations, the Original Stewards of the Coast. You will notice that, at this chapter, the voice of the document shifts from first to third person.

It is our hope that this document can answer some of those Nations' questions



and concerns and, therefore, enable us to have more constructive Nation-to-Nation dialogue in the future as the sector transitions in our territories under our watch and with our guidance.

As neighbours and communities that share access to wild salmon, we understand our role in protecting that precious resource and reiterate that, as salmon people, there is nothing more important to us than protecting the lifeblood of our coast. We also know that having access to the most detailed and current information on both salmon and the environment will arm us with more ways of revitalizing and protecting them.

We have been the stewards of our lands, waters, and elements since time immemorial on this coast. The traditional knowledge we hold and pass on to future generations is invaluable to us, but only now is its value being understood and acknowledged by others, like governments, scientists, and companies that operate in, or rely on, our territories.

By blending our traditional ecological knowledge with the Western science and methodology highlighted in this report, Indigenous peoples can paint the most fulsome picture of what is happening in our waters, including understanding and

monitoring the impacts of industries and better predicting and combatting climate change. Working together in this way, we can conserve and preserve our marine space while building up our ocean-based economies and economic autonomy. We strongly believe both can exist in the same space.

While there is so much more work to be done to understand our oceans and the operations that impact them, this report is a good start. We are grateful to the BC Salmon Farmers Association and all the contributors who went above and beyond to create this report for our communities.

Gilakasla,

Dallas Smith
Spokesperson, Coalition of First Nations for Finfish Stewardship



FORWARD BY BRIAN KINGZETT

Welcome to , *Modern Salmon Farming in BC: A Review*, a comprehensive report dedicated to shedding light on the world of salmon farming in the beautiful province of British Columbia. This report aims to provide clarity and transparency by utilizing data, research findings, and input from many researchers, scientists, and subject matter experts to address thirteen distinct topics related to salmon farming in BC.

Modern Salmon Farming started with the request from the First Nations, whose territories we operate in, to be provided transparent information about the sector so they can make the best decisions for their communities and territories. *Modern Salmon Farming* aims to be a valuable resource for all individuals seeking to understand the reality of salmon farming in British Columbia comprehensively. This report endeavours to foster transparency, encourage open dialogue, and contribute to the sustainable development of this important sector.

Salmon farming plays a crucial role in British Columbia's economy, environment, and food production. However, it has also been a subject of intense scrutiny, with various perspectives and concerns. With *Modern Salmon Farming*, we strive to delve into these topics with an informative approach, empowering readers with the knowledge needed to make well-informed decisions and foster constructive conversations surrounding this vital sector.



This project took over a year to complete, and I would personally like to thank the many researchers, subject matter experts both internal and external to the sector, as well as First Nations, who took the time to contribute and review *Modern Salmon Farming* and provide their expertise in order to build this project.

We will look forward to updating this document as new information becomes available. Thank you for your taking an interest in this sector.

Brian Kingzett, M.Sc., MBA
Executive Director
BC Salmon Farmers Association



**BC SALMON
FARMERS**

FORWARD BY DR. AHMED SIAH

Our goal at the BC Centre for Aquatic Health Sciences (CAHS) is not only to advance our understanding of aquatic sciences, but also to honour the Indigenous peoples who have lived in harmony with nature for generations. We aim to harness the strength of inclusion, collaboration, innovation, and above all, respect for the land and its people.

At CAHS, we strongly feel like this collaborative effort, *Modern Salmon Farming in BC: A Review*, aligns with many of our values, goals, and priorities at CAHS, and serves as an inspiring example of what happens when First Nations are given a leadership seat at the table of Western science, especially when it concerns their traditional territories.

Located in the territory of the Laich-kwiltach-speaking peoples and operating in the territories of the Wei Wai Kum and We Wai Kai First Nations, CAHS, now an Indigenous-governed organization, is dedicated to offering science-based insights, particularly exploring the relationship between wild salmon and Indigenous cultures in the context of climate shifts and aquaculture.



Moving forward, we aim to cultivate a grassroots Indigenous-led scientific capability, dedicated to fostering scientific knowledge and promoting understanding regarding the preservation of wild salmon, innovation in industry stewardship, and the critical monitoring of environmental and aquatic animal health in the context of shifting oceanic dynamics and climate variations. Through this approach, we endeavor to establish a robust framework for evaluating emerging marine-driven economic opportunities, while also prioritizing environmental conservation and meeting cultural needs for future generations.

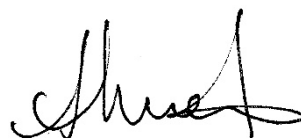
Central to this endeavor is the acknowledgment of the invaluable contributions of Indigenous knowledge and scientific insights to our comprehension of the aquatic ecosystem. Through collaborative and open research, hands-on learning, and active community engagement, CAHS aims to bridge the gap between traditional knowledge and contemporary scientific methodologies, fostering a holistic understanding of experiential.

Moreover, CAHS serves as a dynamic platform for dialogue and exchange, inviting individuals, corporations, organizations, Guardians and First Nation groups from diverse backgrounds to engage with Indigenous Elders, Chiefs, scientists, industry and community leaders in discussions about conservation, sustainability, industry prospects and preserving traditional cultures. Through these exchanges, we aspire to foster a greater sense of stewardship of our natural resources and an appreciation of the connectivity of all living beings in the contemporary era.

Modern Salmon Farming is a great step in this process of building trust, transparency, and collaboration between Indigenous communities, Western

Science, and industry. The future in this regard is an exciting one, as is the future of CAHS which is in its own transition into iCAHS, the Indigenous Centre for Aquatic Health Sciences & Stewardship.

I invite you to join iCAHS and the First Nations with whom we work on this extraordinary journey that will lead us all towards a more sustainable and harmonious future for generations to come.



Dr. Ahmed Siah
Managing Director,
BC Centre for Aquatic Health Sciences
<https://www.cahs-bc.ca/>

