

October 14, 2010

## **2011 BUDGET SUBMISSION**

Select Standing Committee on Finance and Government Services  
Room 224, Parliament Buildings, Victoria. V8V 1X4

A submission from The Coastal Alliance for Aquaculture Reform (CAAR)

The Coastal Alliance for Aquaculture Reform is a coalition of B.C. environmental groups including: the David Suzuki Foundation, Georgia Strait Alliance, Living Oceans Society, T. Buck Suzuki Environmental Foundation and Watershed Watch Salmon Society.

**Recommendation:** A Closed System Aquaculture Innovation Pilot Program requiring an allocation from the Government of British Columbia of \$10 million to be managed and implemented primarily by the Ministry of Agriculture and Lands and Ministry of Environment, with support from the Ministry of Economic Development and other relevant ministries as determined by government.

**Program Overview – How It Would Work:** The Closed System Aquaculture Innovation Pilot Program would underwrite and oversee implementation of 2-3 commercial scale, closed containment pilots to test the economic and environmental performance of new technology for the growing of farmed salmon. The pilots would be operated in coastal British Columbia and be jointly funded from public and private sources. The Pilot Program would provide for transparent environmental and economic monitoring and analysis of these projects and assist successful projects in marketing the new technologies to British Columbia and other jurisdictions.

**Benefits for British Columbians:**

- Protect wild salmon and the environment
- Develop a world class, environmentally superior aquaculture industry
- Develop technology for export to the world
- Reduce conflict within coastal communities
- Respect First Nations rights and title
- Support coastal economic development

Presented by:

Ruby Berry, Georgia Strait Alliance  
David Lane, T. Buck Suzuki Foundation  
Jay Ritchlin, David Suzuki Foundation  
Catherine Stewart, Living Oceans Society  
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Budget 2011: Closed System Aquaculture Pilot Program

Coastal Alliance for Aquaculture Reform

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Dear Honourable Members,

On behalf of the five member groups of the Coastal Alliance for Aquaculture Reform we would like to thank the Government and members of the Legislature for inviting input into the budget planning process designed to set the course for a greener future.

British Columbia is blessed with an abundance and diversity of species and natural beauty. We have an obligation to sustain and protect this natural wealth for future generations; indeed it is the natural capital upon which our economy and quality of life are based. A keystone species and the foundation of life on the coast of B.C. is the wild Pacific salmon and part of our natural capital is the cool, clean ocean water that graces so much of our coast.

As well as these natural resources, we have great human capital, which includes a well-trained, efficient workforce and salmon aquaculture research community. The salmon farming industry provides 2,900 direct, indirect and induced<sup>1</sup> jobs on our coast and supports the B.C. economy, bringing \$406.1 million in farmgate revenue during 2008, according to the B.C. government<sup>2</sup>.

Unfortunately, current production of salmon in open net cages creates significant challenges for wild salmon, risking the economic, cultural and ecological value they support.

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### Coastal Alliance for Aquaculture Reform

Our proposal for this budget is a plan that merges the best of these assets, while minimizing or eliminating many of the existing risks that put the growth of the aquaculture industry, in particular salmon aquaculture, at odds with the survival of our irreplaceable natural capital.

We respectfully recommend to the Select Standing Committee on Finance and Government Services and to the Government of British Columbia a closed system aquaculture development plan to help the B.C. salmon farming industry become a world leader in high quality, ecologically responsible salmon production.

#### **Background**

Wild salmon provide sustenance and livelihoods to coastal communities and sustain the rich and enduring culture and traditions of First Nations people. Salmon feed the grizzly and black bears, the coastal wolves, the orca whales, the eagles and even the ancient, towering riparian forests which derive seventy percent of the nitrogen that fuels their growth from the carcasses of wild salmon. They are also central to the commercial and sports fishing industries as well as the burgeoning wilderness tourism industry, which bring \$661 million to the BC yearly economy.<sup>3</sup>

As the government continues with a commendable plan to address the global issue of climate change, it is imperative that we also address the immediate, localized threats to salmon survival. In particular, we must focus on threats that are within our power to ameliorate quickly and effectively. One of the most critical of these is open net cage salmon farming. The weight of international scientific evidence cannot be ignored.<sup>4</sup> Our salmon populations are at risk from this industry's present practices, especially the attendant proliferation of sea-lice resulting in the fatal impact lice infestations have on out-migrating juvenile salmon.<sup>5</sup>

Trying to modify and improve 30 year old open net cage technology is not an effective path to addressing the numerous negative impacts of current salmon farming practices on ocean ecosystems.

CAAR urges the Province to take a more visionary and practical approach, by investing in the development of closed containment technology thus assuming an international leadership role in developing 21<sup>st</sup> century solutions.

We strongly encourage the Government of B.C. to set the course for a greener future and allocate significant funding in Budget 2011 to a Closed System Aquaculture Innovation Pilot Program that will facilitate competition and private investment in forward thinking, environmentally responsible development.

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#### **Alignment with Policy Goals and Economic Trends**

This investment is consistent with the Government's Five Great Goals for a Golden Decade; specifically to "Lead the world in sustainable environmental management" and to "Create more jobs, per capita, than anywhere else in Canada".

Investment in sustainable and innovative technology will create enormous potential for new industry in the development, licensing and export of innovative technologies to meet the growing marketplace demand for ecologically responsible seafood products.<sup>6</sup>

Consumers in California, Washington and Oregon are highly sensitive to ecological issues and have the disposable income to pay for environmentally preferable products. By combining our advantage of proximity to the market with a new production model more environmentally responsible than any in the world, we will secure greater market share and stabilize or increase the value of our exports while at the same time protecting our wild salmon and local environment.

A program to facilitate the development of closed containment aquaculture technology will also advance the stated objectives and strategies of the Ministry of Agriculture and Lands. The Ministry's 2007 Strategic Plan specifically outlines its intent to promote innovation, foster a competitive world class aquaculture industry, advance aquaculture systems that are environmentally sustainable, implement a science and innovation strategy that accelerates the adoption of new technologies and continue to build relationships with local governments, First Nations and key stakeholders across B.C. with an interest in aquaculture management.<sup>7</sup> A bold, inclusive and far-sighted program to foster new aquaculture technology will make an enormous contribution to advancing the stated goals of the Ministry of Agriculture and the Provincial Government as a whole.

#### **Budget 2010 Recommendation**

Given these conditions and opportunities, CAAR therefore recommends a Budget 2010 allocation of \$10 million towards the establishment of a Closed System Aquaculture Innovation Pilot Program to foster the development of sustainable, closed containment technology.

This program would require interested proponents to bring qualified engineering and husbandry plans for the construction of commercial-scale closed containment facilities, stocking and one grow-out cycle. Proponents must commit to an inclusive and transparent Pilot Program-operated due diligence assessment, ongoing environmental and economic monitoring and analysis. The projects would then be analyzed to determine their own economic viability and projects found to be economically successful will be provided with marketing and development support. This process must include a commitment to independent analysis and valuation of open net salmon farming costs that are currently external to the environment.

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The recommended amount of \$10 million is based on the evaluation of several closed system aquaculture pilot projects and proposed systems and monitoring programs currently being developed for salmon in B.C.<sup>8</sup>

The B.C. Ministry of Environment should also be funded and supported as part of the Pilot Program to engage in and oversee the requisite environmental monitoring.

An independent, multi-stakeholder oversight committee including representation from academia and the scientific community, environmental non-governmental organizations, First Nations government(s) and coastal community representatives should be established and funded through the Pilot Program to assess proponent proposals and monitor and oversee the data of projects and attendant research.

### **Conclusion**

The impacts of the open net cage aquaculture industry are cause for growing concern amongst B.C. citizens. Polling undertaken in March, 2007 found that 80.7 percent of British Columbians would support a transition from current open net cage practices to closed containment.<sup>9</sup> Moving forward with closed containment research would provide an opportunity for the B.C. government to address the many concerns with open net cage salmon farming that were raised with the Special Committee on Sustainable Aquaculture throughout their hearings on the coast of B.C.

In addition, there is growing awareness in business and financial circles that it is not efficient or sustainable for industries to remain profitable by allowing the negative costs of their operations to be borne by society or the environment. The World Bank published a document calling on the aquaculture industry to internalize these costs, to shift them to the businesses in question, rather than leaving them with society and the environment. The Bank calls on governments to enact regulations, fiscal policy and tax reforms that would enable this shift of the costs of doing business to the appropriate place, the company operating in public waters. This proposal would internalize the negative environmental costs of salmon farming.

The Closed System Aquaculture Innovation Pilot Program would enable private entrepreneurs to prove systems without carrying the full costs and forcing existing private business into an immediate, capital-intensive transition to technology with which they are not familiar.

A Budget 2011 allocation of \$10 million to the Closed System Aquaculture Innovation Pilot Program will be strongly supported by the vast majority of B.C. voters. As we prepare to welcome the world in 2010 it is imperative that the Government of B.C. take action to address the environmental issues facing the future of our province.

The Pilot Program will demonstrate to the world that the Government of British Columbia is advancing technological innovation, ensuring economic opportunity and

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accepting its responsibility for our natural heritage in working to secure the future for our children's children.

This is a great opportunity for the growth of an economically successful aquaculture industry that supports the survival of the wild Pacific Salmon, and the natural capital that is the basis of our economy and quality of life.

We would like to thank the Select Standing Committee on Finance and Government Services for the opportunity to present this proposal for Budget 2011. We trust the Closed System Aquaculture Innovation Pilot Program will meet the needs and priorities of the government and people of British Columbia.

Detailed information regarding closed containment technology is available from CAAR on request.

Sincerely,

Ruby Berry, Georgia Strait Alliance  
David Lane, T. Buck Suzuki Foundation  
Catherine Stewart, Living Oceans Society  
Jay Ritchlin, David Suzuki Foundation  
Stan Proboszcz, Watershed Watch Salmon Society  
For the Coastal Alliance for Aquaculture Reform

The Coastal Alliance for Aquaculture Reform is a group of organizations working together to promote salmon farming practices which are safe for the wild salmon, marine ecosystems, coastal communities and human health. The member groups are: David Suzuki Foundation, Georgia Strait Alliance, Living Oceans Society, T. Buck Suzuki Environmental Foundation and Watershed Watch Salmon Society

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<sup>1</sup> Economic Impacts and Prospects of the Salmon Farming and Wild Salmon Industries in British Columbia, MMK Consulting, submitted to the SCSA, May, 2007

<sup>2</sup> Government of BC website

<sup>3</sup> Special Committee on Sustainable Aquaculture, Final Report Volume 2; Government of BC Parliamentary Committee

<sup>4</sup> Routledge, R., P. Gallagher, and C. Orr. 2007. Summit of scientists on aquaculture and the protection of wild salmon: convener's report. 20 pp. Simon Fraser University, Continuing Studies in Science, Burnaby, B.C..

<sup>5</sup> Krkosek, M., M. A. Lewis, A. Morton, L. N. Frazer, and J. P. Volpe. 2006. Epizootics of wild fish induced by farm fish. Proceedings of the National Academy of Sciences. 103:15506-15510.

<sup>6</sup> A total of 72% surveyed indicated they would be more likely to purchase seafood with an environmentally friendly label - Marketplace for Sustainable Seafood, the Seafood Choices Alliance June 2003.

<sup>7</sup> British Columbia Ministry of Agriculture and Lands 2007/08 – 2009/10 Service Plan. February 2007, Ministry of Agriculture and Lands.

<sup>8</sup> Sustainable Technology Development Canada's grant to Middle Bay Sustainable Aquaculture Institute, Fall 2006

<sup>9</sup> Strategic Communications Omnibus Poll March 2007