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Sent: Tuesday, March 15, 2011 11:32 AM
To: 'livingwaresmart@gov.bc.ca'
Subject: Bc Water Act - Modernization

The industry review document has been re submitted and includes comment on the supporting document, The Technical Background Report.

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Feedback: Policy Proposal on British Columbia's new Water Sustainability Act

Murray Coell
Minister of Environment

A review with feedback of the Policy Proposal on British Columbia's new Water Sustainability Act by the BC Salmon Farmers Association and their members.

Review of policy by BCSFA

About BC Salmon Farmers Association

The BC Salmon Farmers Association represents the 6,000 people employed by the industry directly and indirectly. Among our members are all major salmon growers in the province, feed producers, shipping, value-added enterprises and more. Established in 1984, the association works to provide public education on salmon farming and to coordinate industry-wide activities such as research activities and various committees and community events.

GENERAL COMMENTS

As an economic driver in the province of British Columbia, a significant export for the entire country and an important player in building sustainable coastal communities, policy changes affecting BC Salmon Farming are deeply important for all residents in Canada.

BC's salmon farmers feel there needs to be further discussion about the BC's Water Act-Modernization, Policy Proposal for British Columbia's new Water Sustainability Act. While we understand that these regulations will likely include changes in user fees, industry representatives are concerned that significant increases in operational costs will seriously affect their competitiveness in the market and threaten their long-term viability. Considering the five-to-six year plans scheduled by most companies, it is important to discuss the future regulatory environment and articulate a longer term strategy.

The salmon farm industry has made significant investment in British Columbia to become B.C's largest agricultural export. A key to the success and development of our sector is based upon the access to a freshwater supply to produce the highest quality smolts for saltwater grow out. Considering the potential impact on our business, we hope that our industry will be engaged in the development of such processes moving forward.

Consultation regarding policy development will be particularly important, as our members expressed concerns about the public engagement strategy used to develop this proposal. Writing new policy is clearly a challenge, and the department has already taken significant positive steps. Thank you again for this opportunity to provide feedback on the Policy Proposal on British Columbia's new Water Sustainability Act. Please contact us if there any questions regarding this submission.

A new Water Sustainability Act: Policy Directions

1. Policy Direction – Protect Stream Health and Aquatic Environments

General Comments

BC Salmon farmers require the usage of freshwater from both surface water and groundwater supplies. Access to a good freshwater supply provided the basis for the establishment of the salmon aquaculture industry within British Columbia.

The rearing of juvenile salmonids and brood stock holding facilities requires the protection of stream health and the aquatic environments to produce a high quality farm stock. The industry may augment water supplies through oxygenation systems, heat transfer and sterilization systems and recirculating aquaculture systems. The industry has always strived for improvements, both biologically and economically to produce the highest quality smolts with diligent use of their freshwater source.

Instream flow requirements will be established through the development and application of guidelines. Once these requirements are incorporated into water licenses or approvals, the licensee will be required to meet the terms and conditions of the water licence. This approach provides protection of instream flows with enforceable terms and conditions in water licenses.

Industry freshwater facilities have complied with the current water licensing policy and require access to freshwater at the current levels to sustain production. Considering that the health and welfare of our fish is dependant upon current levels of use; restrictions in use would severely affect industry production plans and continuing investment into British Columbia.

Protecting in stream flows and water use reduction during times of scarcity may result in more frequent regulatory action – some senior licensees who have never been regulated may be periodically reduced or suspended.

For salmon farmer licensees, who utilizes water to maintain the health and welfare of their product – periodic reduction or suspension of water would have huge economic and fish health and welfare ramifications. Hatchery water use is determined by the biological load within the system, any reduction or suspension could increase physiologic stress to the point of mortality and would occur at any point during the production cycle. Industry production plans are calculated out 5 to 6 years and are dependant on the continuing supply from fresh water systems.

2. Policy Direction – Consider Water in Land- use Decisions

General Comments:

Freshwater aquaculture facilities are located within close proximity to the marine environment, surface water and to groundwater sources of freshwater. Our facilities are not consumptive, in that they return the freshwater to the marine environment or back to source, groundwater or surface water. The industry is diligent in their use of the land and water to maximize freshwater production. Ensuring secure access to healthy water (*good quality and adequate quantity*) is a priority for the continuing development of salmon aquaculture in British Columbia..

The Provincial Water Objectives is to be developed to guide statutory decision makers under the proposed WSA and other laws affecting land and resource use on crown land and private land. They are to be flexible to accommodate regional and local differences.

The establishment of Provincial Water Objectives (PWOs) is recognized as a means to address land use and water allocation. As the PWOs are developed, the salmon farming sector requires consultation, to determine the status of our farms within these objectives.

3. Policy Direction – Regulate Groundwater Use

General Comments:

Given the proposed changes the hatchery and brood stock holding facilities would become regulated as users of large groundwater withdrawals if determination is to be the range of 250-500 cubic metres per day.
Our facilities are non consumptive returning water back to ground through infiltration and return to surface water systems or the marine environment. Freshwater systems, although in the *large withdrawal* category, are flow through systems – as there is little actual water usage and will have less impact on local water tables as compared to other water users. Generally well sites remove water and return it back to ground within 100m of source and do not effect surrounding surface water. Surface water use is returned back to the natural drainage system, fresh or marine, within very close proximity to source. These factors must be taken into consideration when designing usage withdrawal schemes.

Licences will specify the maximum quantity of groundwater that can be extracted and used, and will set out other terms and conditions of pumping and use. Annual rentals for groundwater will be similar to those for surface water, and will vary according to the water use purpose and the volume allocated.

Industry requires this section to be clarified:

- *"used"* What is the definition as it applies to rearing of fish?

- *the other terms and condition of pumping and use* Need to explicitly know terms and conditions.
- *Water use purpose and the volume allocated* Need to identify different purposes and the volume determination of allocation for aquaculture facilities.
- *Annual rentals* What are the fee schedules? - in consideration of *water use purpose and the volume allocated?*

Aquaculture facilities use the best technology to maximize production and therefore water usage. The reuse of water in recirculation systems must be considered given the use of technology and the high capital investment required for these facilities. There should be recognition for the greater economic, ecological and social benefits of our water usage.

4. Policy Direction – Regulate During Scarcity

Industry would support the First- In- Time First- In –Right and a Priority of Use approach to managing water – including groundwater. As a food production sector, industry must be weighted as a key priority. Aquaculture facilities, like waterpower projects, are non-consumptive and utilize water resources differently than consumptive users.

5. Policy Direction –Improve Security, Water Use Efficiency, and Conservation

5.1 Economic Instruments

Water pricing is of concern within the salmon farming industry as pricing would impact industry viability and competiveness in the marketplace. The enabling of economic instruments needs to recognize sector improvements in water use efficiency in terms of food production, most specifically the advances in the re- use of water and water optimization for production – such as oxygenation systems.

5.2 Best Management Practices, Efficiency and Beneficial Use

Water use efficiency is an on – going process within our sector. We have made significant capital cost commitments to streamline all costs to remain competitive in the farmed salmon marketplace and optimize rearing conditions and production. The salmon farm industry operates under best management practices, codes of practice and international standards.

5.3 Agricultural Water Reserves

Farmed salmon is recognized as British Columbia's largest agricultural product but operates outside the Agricultural Land Reserves. The world expansion in farmed seafood production is required to provide a highly nutritional source of protein to an increasing world population and our industry is a key provider of salmon for the world marketplace.

Creating agricultural water reserves will potentially improve the long-term security of water supply for ALR lands. This will also support increased agricultural production and food security, and water use efficiency within the agriculture sector. The agriculture sector will have more flexibility to maximize economic benefits from the available water supply.

Industry would like to continue the discussion on agriculture water reserves as it provides security of water rights and the concept of transfers, extension of rights or other forms of collaborative sharing.

6. Policy Direction- Measure and Report

Industry recognizes the need for measuring and reporting water use to provide information to effectively manage water. The requirements to report, beginning with large surface and groundwater users, will include freshwater facilities within the sector. The reporting function will add operational costs. As the level of reporting increases as areas are identified (e.g. in problem areas); implies that the level of reporting will be determined on an individual basis. The reporting requirements need to be specified to determine costs and the level of reporting required by industry facilities.

7. Policy Direction –Enable a Range of Governance Approaches

The range of governance approaches, including the ability to delegate responsibilities for activities and decisions to local or regional agencies will make the policy unclear for the sector. The salmon farming sector recognizes the importance of local and regional agencies in water resources but the sector sees the Province as providing the oversight to maintain stability for operation of freshwater facilities. The compliance and enforcement framework, determined by the province, has to be made with stakeholder input so that all water users are fully aware of their responsibilities and applied equally across all the various stakeholders.

Industry recognizes the need to be engaged with First Nations and the other stakeholder groups to support collaborative structure and governance improvements. The industry is supportive in the collaboration but will need a period of time to identify all stakeholder groups in all areas of freshwater operations and to fully understand how to best engage the broader stakeholders in a constructive dialogue about governance improvements.

Comments on

British Columbia's
Water Act
Modernization
Technical Background Report

PART THREE
Introducing More Flexibility and Efficiency in the Water Allocation System

3.1 Water Allocation in British Columbia

Hatcheries are non consumptive in that they do not remove water from the system for any extended period of time.

3.4 How Are the Pressures Being Addressed?

Text Box 3a: Living Water Smart Actions Relating to Water Allocation
_ Government will require all users to cut back their water use in times of drought or where stream health is threatened.
_ Government will limit all new licences to 40-year terms in areas where there is high demand and pressure on water.
_ Government will support communities to do watershed management planning in priority areas.
_ By 2020, water use in British Columbia will be 33 percent more efficient.
_ By 2012, government will require all large water users to measure and report their water use.
_ Government will require more efficient water use in the agriculture sector.
_ Government will secure access to water for agricultural lands.
_ By 2012 new approaches to water management will address the impacts from a changing water
cycle, increased drought risk and other impacts on water caused by climate change.

The salmon farming industry produces BCs largest agricultural export. It requires the secure access to water to maintain the health and welfare of its stock and the economic viability of the industry. The industry has always been progressive in its efficient use of water and the capital costs to necessary to remain competitive with the global production of salmon.

3.5.1 The Water Allocation System Emphasizes And Encourages Efficiencies In Both Water Use And The Administration of Water As A Natural Resource

The salmon farming industry is the largest private employer on Northern Vancouver Island and is the fourth largest supplier of farmed salmon in the world. It utilizes the resource to maximize economic benefit, allocative efficiency, by maximizing water use efficiency.

4.5 Leading Thought and Practice

In May, 2009, the Council of Canadian Academies' Expert Panel on Groundwater released its report entitled The Sustainable Management of Groundwater in Canada. Therein, the Expert Panel proposes five sustainability goals (depicted in Figure 4e) for managing groundwater:
1. protection of ecosystem health;
2. protection of groundwater supplies from depletion;
3. protection of groundwater quality from contamination;
4. achievement of economic and social well-being; and,
5. application of good governance (Bruce et al. 2009).

The sustainability goals align with the present and long term requirements for the successful operation of freshwater facilities and the health and welfare of all British Columbians.

4.5.1 What is a "Large Groundwater Withdrawal"?

Aquaculture facilities, like waterpower projects, are non- consumptive and utilize water resources differently than consumptive users. Hatcheries return used water back to source by infiltration and surface water return and the duration of water use is relatively short. Hatcheries use many technologies to increase the biological capacity of the water they use. The reuse of water through re-circulating systems and augmentation of the water should be recognized as water use maximization and requires large capital investment.

4.5.3 How Would New Provisions Apply to Existing Wells?

If licensing of groundwater or other forms of regulation are considered necessary, existing groundwater users would need to be provided with transitional time to apply for protection similar to a water licence for their existing extraction and use.
There would be some incentive to make this application in that licence-like protection would provide increased security for their existing use. Any groundwater extraction legislation would need to be designed so that impacts on other water users and watershed health is considered before additional extraction is approved. So, for example, existing users under this new regime might be better protected than they currently are from potential impacts, such as problems that might occur from new well drilling on adjacent property.

The use of freshwater, surface and groundwater, within the hatchery systems dictates the health and welfare of the fish and therefore the productivity. Any reduction in water consumption reduces the output of the hatchery and puts all the livestock at risk. As historical users, the aquaculture sector requires the protection for existing extraction and use. This is a critical

requirement and necessary to support the economic viability and the present and future capital investment made into the industry.