Campbell River Public Forum Summaries

Date:	August 25, 2010
Time:	6:45 p.m. – 9:00 p.m. (approximately)
Venue:	Coast Discovery Inn & Marina (Quadra/Cortes Room)
Presentations:	11

Welcome
Sophia Hansen welcomed the commission to Campbell River.

Darren Blaney
Darren Blaney presented on the relationship between salmon and the Homalco people, and on the impact of aquaculture on wild salmon stocks. He illustrated the importance of salmon through the story of a Homalco boy who lost part of his face because he refused to follow the custom of returning salmon bones to the water. Mr. Blaney said that First Nations rights are largely based on salmon, noting that many reserve lands are former fishing stations. He discussed *Blaney et al v. British Columbia*, and emphasized the need for First Nations in the Salish Sea and the Fraser River watershed to be consulted on issues that may affect the health of wild salmon. He called for the Commissioner to recommend that the aquaculture industry transfer to closed containment technology to reduce impacts on wild stocks. He concluded by explaining that through collaboration, stakeholders have the potential to ensure the health of future salmon returns.

Chief Russell Kwakseestahla (Laich-Kwil-Tach Nation)
Chief Russell Kwakseestahla described his people's long relationship with salmon, as well as their more recent involvement in the commercial fishery. He criticized Canada's salmon habitat protection efforts for lagging behind those of Russia and the United States, both of which he said have banned logging and mining along important salmon rivers. He argued that corporate ownership of the commercial fishery as well as corporate influence over the federal government are among the major problems facing Fraser sockeye, and that fishing rights should be returned to fishing people. He explained that he has presented to numerous past commissions, most of which he said have been ignored by government.

Leona Adams (Campbell River Estuary Protection Group)
Leona Adams addressed two of the questions posed by the commission: 'What is your vision for the sustainability of Fraser sockeye?' and 'What are the major habitat issues for Fraser sockeye and how can these be mitigated?'. On the first question, Ms. Adams called on the Commissioner to recommend that DFO no longer be made responsible for both regulating and promoting open net fish farms. She argued that this position has created a conflict of interest for DFO, which she said has led it to ignore numerous scientific studies, reports, and letters calling for the industry to transition to land based closed containment systems.

On the second question, Ms. Adams said that Fraser sockeye habitat has been negatively affected by IHN outbreaks caused by high density open net fish farms and by DFO's refusal to require fish farms to move to closed containment systems, which she suggested violates the Canada *Fisheries Act*. She urged the Commissioner to make several findings to mitigate these issues, including that fish farms be moved off migration routes and into closed containment and that DFO be made strictly a regulatory body.

Kevin Onclin

Kevin Onclin presented on his findings and experiences as a fish farm operator and a fisheries biologist in the Yukon and northern British Columbia. He explained that since the 1970s, some sockeye populations in wilderness areas have experienced declines due to genetic and ecosystem changes, which he said indicates that sockeye may be impacted by variables other than human development and industrial activity. For example, he outlined how water flows, temperatures and levels; the IHN virus; Alaskan salmon ranching; politics and economics; and predation may be affecting Fraser sockeye.

Mr. Onclin argued that blaming salmon farms for the decline of wild salmon is counterproductive given the long history of oscillating annual salmon returns. He explained that Fraser sockeye, unlike pink salmon in the Broughton Archipelago, are likely not susceptible to sea lice due to their size when migrating past fish farms.

He also discussed the need for co-operation between the United States and Canada on fisheries management issues, noting that the decline of Atlantic salmon was caused by a lack of international co-operation between Canada and Europe. Mr. Onclin concluded by suggesting that a global survey of fisheries management techniques should be conducted to ensure Fraser sockeye are being managed according to the most effective methodologies, and that the commission's budget would have been better spent on improving Fraser sockeye monitoring practices.

Brad Boyce (Senior Fish Health Technician, Marine Harvest Canada)

Brad Boyce presented on his role as Senior Fish Health Technician with Marine Harvest Canada and the sea lice management techniques employed by the aquaculture industry. He explained that all salmon farms in British Columbia adhere to an industry-wide Sea Lice Management Strategy, which requires farmers to monitor, at a minimum, 60 fish for sea lice every month. Mr. Boyce said that data about the number, species and stages of sea lice is reported to a central database, from which the provincial Ministry of Agriculture and Lands generates publically-available reports. He said that if sea lice levels reach three motile lice per fish during the March to June salmon out-migration period, salmon farms are mandated to treat or harvest their fish immediately. He noted that while SLICE is the only available treatment option, its efficacy has remained constant over time and that Marine Harvest Canada farms average 1.6 SLICE treatments per saltwater lifecycle (about 24 months).

Mr. Boyce emphasized that the strength of the Marine Harvest Canada fish health program, of which sea lice management is only one part, lies with the expertise of its personnel. He also said that frequent site visits and sampling by fish health staff, the use of vaccines, and data reporting and auditing by

regulators ensure the strength of the industry's sea lice monitoring and fish health program, which helps both farmed and wild salmon.

Evan Loveless (Executive Director, Wilderness Tourism Association)
Evan Loveless explained the economic impact of British Columbia's nature-based tourism industry, which he said generates $1.5 billion dollars every year and supports 26,000 direct jobs. He emphasized that the industry is dependent on salmon resources, and that the annual salmon return provides exceptional opportunities for fishing, wildlife viewing, nature study, photography, and associated recreational activities. Mr. Loveless said that the Wilderness Tourism Association believes that, in addition to habitat destruction, overfishing, and pollution, Fraser sockeye are directly threatened by the provincial salmon farming industry. He argued that independent, published science indicates that sea lice and viruses from fish farms have a significant impact on wild salmon, and that by promoting aquaculture, DFO is failing in its mandate to protect wild fisheries. Mr. Loveless called on the Commissioner to consider the impacts of salmon farming on wild salmon and to include strong mitigation measures in his final recommendations.

Greg Gibson (Environmental Assessment Biologist, Marine Harvest Canada)
Greg Gibson presented on benthic management techniques employed by Marine Harvest Canada. He explained that all operating salmon farms are monitored for organic waste impacts, and that data is reported to and audited by regulators. Mr. Gibson said that each salmon farm is required to be monitored at the time it reaches peak biomass (the most amount of fish by weight), and that sites with hard bottoms are monitored with video while sites with soft bottoms are monitored by sediment collections. He said that if a farm is found to exceed biomass thresholds, it must remain fallow until it returns to acceptable levels. He also outlined various other monitoring tools and techniques, and displayed a chart illustrating the results of biomass sampling from 2008 to 2010, which he said shows that conditions beneath fish farms are similar to natural conditions. Mr. Gibson concluded by emphasizing that while salmon farms do impact the surrounding environment, these impacts are continually monitored and minimized by highly trained professionals.

Brian Gunn (President, Wilderness Tourism Association)
Brian Gunn discussed the potential impact of sea lice and the IHN virus on out-migrating Fraser sockeye in 2007. He said that an IHN epidemic occurred that year, but that the aquaculture industry and DFO refuse to release information about the epidemic's impact on wild stocks. He also argued that independent sampling needs to be done on the effect of sea lice on wild salmon, and called on the Commissioner to recommend the formation of a group capable of performing such sampling. In addition, Mr. Gunn said that the new proposed Pacific Aquaculture Regulations promote aquaculture rather than protect wild salmon.

Rod Naknakim (Chief Negotiator, Laich-Kwil-Tach Treaty Society)
Rod Naknakim addressed the following questions posed by the commission: 'What is your vision for the sustainability of Fraser sockeye?' and 'How can Fraser sockeye be effectively harvested?'.. He preceded his comments by introducing himself and explaining the history of the Laich-Kwil-Tach people and their

dependence on salmon, particularly Fraser sockeye. Regarding the commission's first question, Mr. Naknakim said that the Laich-Kwil-Tach people believe that conservation must be the primary concern when considering how to ensure the sustainability of Fraser sockeye. He explained that all sectors of the fishery must implement conservation principles, and that First Nations must be permitted to continue fishing for Fraser sockeye, which are integral to their culture. On the second question, he urged the Commissioner to consider Dr. Carl Walters' recent statement that DFO permits too few fish to be caught by the commercial fishery. Mr. Naknakim argued that 80% of the Fraser sockeye return, regardless of its size, should be fished every year to prevent over-spawning.

Dr. Barry Milligan (Fish Health Manager, Grieg Seafood BC)
Dr. Barry Milligan presented on fish disease and parasite transfer as a potential impact on sockeye salmon. He began his presentation by explaining how farmed salmon eggs are produced, noting that all eggs are extensively screened for disease. Dr. Milligan outlined the numerous techniques used to test and treat salmon in both fresh and saltwater, including vaccinations, pathogen testing, and health sampling of fresh mortalities. He discussed the industry's data reporting requirements, and its sea lice monitoring and treatment processes. In addition, Dr. Milligan displayed a chart of sea lice auditing results from 2003 to 2008, noting that there have been no reports of the IHN virus or exotic disease since 2003. He concluded by emphasizing his belief that fish health in the aquaculture industry is managed extremely well, but that there is room for improvement in certain areas, including the need to adopt an ecological perspective when studying the interaction between farmed and wild salmon, and the importance of identifying alternate sea lice treatments.

Fred Speck
Fred Speck described how wild salmon stocks, which were once a source of economic, social, and political prosperity for First Nations of the Broughton Archipelago, have been disrupted by the arrival of Norwegian salmon farms. He explained that Norwegian aquaculture corporations, which he said are not interested in enhancing wild salmon stocks, misunderstand coastal First Nations and the importance of salmon to their culture. He warned that by permitting Fraser sockeye to disappear, Canada would be adding to its poor legacy with First Nations. Mr. Speck called on the Commissioner to recommend that the provincial Legislative Assembly pass a *Wild Salmon Protection Act* to protect wild salmon habitat from forestry, mining, tourism, and accidental watershed damage from oil and gas transportation.