

Cohen Commission Public Submission
Thursday, September 16, 2010

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From: Chris Marks

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Re: Cohen Commission inquiry into the decline of the Fraser River Sockeye Salmon stocks.

Presentation Topics:

My questions/presentation focuses on habitat issues along migration routes and sustainability of Fraser River sockeye in light of the precautionary principle as it applies to industrial open net pen aquaculture.

Thank You very much for taking the time and effort to accept public submissions on this very important local and timely issue.

I respectfully ask for a few minutes of your time to make a submission regarding my view of the sustainability of the Fraser River sockeye and ways they can be supported by the Department of Fisheries and Oceans, the government, and the public.

My involvement with the Fraser River sockeye has been lifelong. My family were both boat builders and fishermen along this coast, and some of my earliest memories are fishing for salmon on the central, north and south coasts. Later in life I worked with the Department of Fisheries and Oceans as a Pacific Region Fisheries Observer on all salmon openings for all gear types in area 12 and 13 (between Campbell River and Port McNeill) between 1999 and 2005. I was working as an observer on the salmon openings in the Broughton Archipelago that fateful year circa 2002 when the pinks never returned as predicted by Alexandra Morton's research. Later again I attended culinary school and in my short career, before a motor vehicle accident, I worked almost exclusively with seafood of which salmon constituted no small part.

The Fraser River sockeye are amazing resource; a national treasure. It follows that in the examination of possible contributors to the overall decline of the stocks that all possibly human caused factors get extra scrutiny. If a human cause can be shown for the decline of the stocks then that is positive, because something can possibly be done about it. If open net pen industrial aquaculture sites were found to be detrimental to the wild Pacific stocks in any way, then the greatest marginal benefit would be to move them to close containment as soon as possible to reduce negative effects. As an example, moving the industry to land could be done within five years, but it is doubtful that consensus and meaningful action on global warming could be reached on a worldwide scale within that same five years.

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Now that responsibility for fish farms in public waterways has been transferred to fisheries and oceans, I believe it is important to insist that the precautionary principle is applied to any decisions regarding siting and operation of open net pen aquaculture facilities along the wild Pacific salmon migration routes of the Fraser River sockeye. The precautionary principle states that "an action should not be taken if the consequences are uncertain and potentially dangerous". This would place the burden of proof upon the industry to show that none of their practices could cause any harm to migrating Fraser River sockeye Smoltz.

In discussions with John Volpe at the University of Victoria, it is quite clear that there is very credible science and research to show a connection between current open net pen aquaculture practices and detrimental effect upon wild salmon stocks, in BC and internationally. What is not clear is whether the political will exists to give priority to Pacific salmon over short-term corporate profits via unsustainable fish farming practices.

These fish are a national treasure and represent a contribution towards local food security, economic activity, cultural identity and sustainability. This year has shown the amazing resilience of nature but one strong strand does not fix a broken rope.

Logging practices along the Fraser River and its watersheds are better than they were historically, thereby reducing their negative impact upon the Fraser spawning grounds. Urban sprawl is not directly affecting the watersheds although the use of cosmetic pesticides and fertilizers almost certainly has to have a negative cumulative effect somewhere in the water column. The commercial salmon fishing fleet has been reduced by over half in the last 15-20 years. The usual suspects do not seem to be at play in this equation.

In my short life I have seen aquaculture sites clustered along the channels of the inside passage between Campbell River and Port Hardy. Some located in critical areas that leave young migrating Smoltz no other options but to be exposed to higher concentration of disease and pathogens than would otherwise exist in the natural environment. Friends and members of my family have worked in all aspects of aquaculture in processing plants to managing fish farm sites to diving site maintenance to captaining fish farm packing vessel's. The economic reality is it is easier to not see a problem when your income depends you not seen it. I will not burden the commission with any hair-raising tales of environmental damage and corporate malfeasance, but I can assure you, they exist.

Currently, the majority of open net pen aquaculture sites in BC are located in areas of extremely high tidal activity which serve to dilute and spread pollution or waste generated, thereby increasing the difficulty of directly linking pathogens and disease generated and amplified by current open net pen aquaculture practices. Externalizing wastes, diseases and pathogens, into the natural environment, especially if they have been shown to cause harm anywhere else, is unconscionable. It is an "out of sight, out of mind" type of mindset that can work for short term but ultimately is not sustainable, ethical or acceptable. As the number of fish farms along this sensitive migration route has grown over the years, the chances of juvenile Fraser River sockeye making it through on a good tide and avoiding lethal contamination from farm wastes, parasites or disease has diminished significantly. And now fish farms

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say they will not voluntarily report disease outbreaks anymore if they are made public? This is simply not ethical.

It is also imperative that disease reporting be made mandatory for these companies extracting a profit by using public waters.

So my vision for the sustainability of Fraser River sockeye, and ways the public can help is to reduce and minimize the negative impacts of identifiable or even probable human activity. Reducing or eliminating the use of cosmetic pesticides and fertilizers is one place to start.

At this time, it seems to be clear that current aquaculture practices in British Columbia do have negative effects upon migrating salmon smoltz. If the industry were to move to close containment on land, there would be:

- No more disease pathogen and parasite transfer from wild stocks to farmed and back to wild.
- The ability for salmon farming to happen anywhere. Alberta or Saskatchewan could conceivably be the farmed salmon capital! This can be an economic generator across the country.
- Not as expensive as the industry would have us believe. Yes there would be an additional expense via circulation pumps to move water etc. but there would be no Marine fleet infrastructure capital investment and maintenance. This could result in neutral costs over the long term for the industry.
- Still a problem with the input side of aquaculture, but at least in the output negatively affecting wild stocks could be eliminated