

September 25, 2011

Cohen Commission
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Ladies and Gentlemen:

Within the Fraser River estuary, Roberts and Sturgeon Banks boast the largest eelgrass beds in B.C., critical nursery areas for fish and crustaceans. Both the Western Hemispheric Shorebird Reserve Network and the Internationally Important Bird Areas Program recognize the estuary's importance for migratory birds. The entire world's population of Western Sandpipers feeds at Roberts Bank, as do three pods of endangered B.C. Orca whales. Yet urbanization is endangering the estuary, with less than 3300 hectares of inter-tidal marshes remaining. I feel there are three threats to the estuary's remnant habitat, which may be contributing to the decline of the salmon populations of the Fraser River:

1. lack of a master plan to protect remaining Fraser estuarine habitat
2. inadequate environmental assessment of development projects in the estuary, specifically DeltaPort
3. inadequate habitat mitigation and compensation programs.

1. **Lack of a master plan for the protection of the Fraser estuary.** The federal and provincial governments maintain the estuary is protected through a collection of designations and small refuges, but this is not sufficient:

- *Hemispheric Site Designation in the Western Hemispheric Shorebird Reserve Network* – non-binding designation.
- *Internationally Important Bird Area Designation* – non-binding.
- *Alaksen National Refuge/George C. Reifel Migratory Bird Sanctuary* – does not protect Roberts Bank and Boundary Bay.
- *GVRD Green Zone/Sustainable Region Initiative/Estuary Management Program/Livable Region Strategic Plan* – non-binding.

- *Agricultural Land Reserve (ALR)* – supposedly binding, but subject to government manipulation; land can be used for ‘industrial’ farming.
- *Roberts Bank Proposed Wildlife Management Area* – non-binding and not yet designated, threatened by the **transfer of 2850 acres of Crown water lots to Port jurisdiction.** Wildlife Area designations are only for twenty-five year terms.
- *Boundary Bay Wildlife Management Area* – does not protect Roberts Bank and area upland of the dyke around Boundary Bay.
- *Sturgeon Banks/South Marsh Wildlife Management Area* – no upland area protection.
- *Private conservation holdings* – unknown.
- *Delta Municipal Conservation Zoning* – non-binding designation.
- *Fraser River Estuary Management Plan (FREMP)* – non-binding zoning, can be ignored or appealed, does not protect area inside dykes.
- **Burns Bog** – good, but different habitat. South Fraser Perimeter Highway construction now damaging Bog.
- *Delta Farmland & Wildlife Trust* – non-binding.
- *Pacific Estuary Conservation Program* – figures not released.
- *Pacific Coast Joint Venture* – figures not released.

The only Canadian law routinely applied for conservation in the estuary is a riparian setback for creeks and rivers, with no provisions for wildlife habitat.

2. Inadequate Environmental Assessment Reviews for projects in the estuary that may affect salmon habitat, notably Deltaport Expansion.

The public’s frustration with the Environmental Assessment process for the recent expansion of DeltaPort was confirmed recently with the B.C. Auditor-General’s conclusion that the B.C. Environmental Assessment office is not properly overseeing projects. The Canadian Environmental Assessment Act (CEAA) requires that for a project such as Deltaport, a cumulative impact assessment must be done - that is, all the environmental changes occurring or proposed in an area must be considered together to determine total effect, and whether the ecosystem can withstand any more. Yet the agencies charged with enforcing the Act - Department of Fisheries (DFO), Environment Canada (EC), and the coordinating head, the Environmental Assessment Office (EAO) - permitted the Port to disregard two critical requirements of CEAA, despite repeated public requests for compliance:

i) Projects of certainty must be included in a study. An EC biologist warned that Terminal 2 “threatens the environmental integrity ... of the remaining half of Roberts Bank ... preliminary modeling ... indicates an alarming disruption of processes over the remaining part of Roberts Bank closest to the Fraser ...”. Yet DFO and CEAA permitted the Port to withdraw Terminal 2 halfway through the public review process, despite it having been discussed with DFO as early as three 2002 meetings, and being well underway in its planning. The proposal was thus split in two, the first an extra berth on the existing terminal (Third Berth) and the second, a new terminal with three berths (Terminal 2), which will triple the size of the current Port facility (122 more acres). This reduced the cumulative impact of the planned expansion.

ii.) Cumulative damage - overall losses to wildlife and fish habitat and populations from both past and future developments with certainty to proceed – must be considered. This was the third expansion for the Port, but EC took the position that since they could not measure past damage, it would be considered encapsulated in (at the time) current 2003 levels, from which further harm was to be gauged. But this decision short-changed the habitat, since hundreds of acres had been lost before 2003, and no compensatory habitat had ever been secured. Original construction covered highest value red-zone habitat and turned a tidal bay into a stagnant lagoon. A calculation *could* have been made of habitat acreages in the delta at 1958 pre-development levels: decline since 1958 included acreages lost to ferry, coal and port terminal constructions (a 1979 federal assessment review of Roberts Bank stated “further incursions should not be permitted.”).

Unbelievably, while the EAO process was taking place, **the provincial government, with no public notice, transferred 2850 acres of foreshore water lots from within the proposed Roberts Bank Wildlife Management Area to the Port’s jurisdiction, and rezoned them from conservation to industrial.** Yet this massive habitat loss was not included in cumulative damage. Despite three months of recent requests, the port has refused to disclose the current state of these lots.

This ‘cumulative review’ also did not consider declines in salmon numbers, despite historical catch records. The only mention of salmon in the **entire EAP** was a Port statement that “there is no quantitative information on night light impacts on juvenile salmon.” Such lack of meaningful consideration of cumulative effects means threats to the estuary are not adequately reviewed.

3. Inadequate Habitat Mitigation and Compensation Program

“The construction of this port facility has altered coastal geomorphology processes... These changes have altered the resources available ... reduction in shallow sub-tidal habitat and consequent changes to invertebrates, fish and birds. These changes are ongoing and the area surrounding the terminal has yet to reach equilibrium.” (page 11, Ch. 12 revision, Port study).

The CEAA requires that DFO and EC approve mitigation measures only if they can ensure such measures will not result in adverse environmental effects. EC stated that its understanding of the Roberts Bank ecosystem was not sufficient to allow the assertion that this proposed addition will not cause any environmental degradation, and issues of eutrophication were considered ‘significant’. They suggested an adaptive management strategy and mitigation through a monitoring system to permit the Third Berth to proceed, with a benchmark of a 20% decline - a significant number - being set for any change. But if the Port has been unable to achieve a cessation of habitat loss continuing from original development, why was more development allowed? Why is Terminal Two being considered now?

Moreover, the agencies approved the Port proposal to ‘restore’ previously degraded habitat - by removing logs and debris - as compensatory habitat for the ensuing habitat destruction; but if ‘new’ habitat does not replace lost habitat, a net loss ensues. If compensatory habitat is to be supplied, it must be new land, perhaps an attempt to create a ‘new’ marsh by buying land, moving a dike back and then breaching the old one. The Federal Panel who oversaw the Vancouver International Runway Expansion recommended three acres was set aside for conservation for every acre that was destroyed. Why is this standard not applied to the whole Fraser estuary? Why, despite almost a half century of development and habitat destruction, has the port never been required to provide even a square inch of compensatory habitat, despite staggering revenues? Annually, \$75 billion worth of goods moves through the Port of Vancouver (Vancouver Sun, July 16/11)

And as the Vancouver Sun of December 21/05 reported:

“A Federal Fisheries study released in 2004 revealed an 86% failure rate for developments allowed to damage wetlands on the condition they would improve fish habitat elsewhere. Developments that failed exceeded the

allowable level of damage to fish habitat – on average by a margin of 389 per cent – or came up short in terms of habitat compensation. In addition, the study recorded 26 incidents of additional Fisheries Act violations ...”

Recommendations

Canada has signed three international wetland habitat conservation treaties - the Ramsar convention, the North American Waterfowl Management Plan, and the Convention on Wetlands of International Importance. Because the industrialization of the estuary took priority, the federal and provincial governments have for twenty-five years resisted scientific and public calls for the creation of a Fraser River National Wildlife Area (FRNWA) in Delta to protect fish and bird habitat. The proposed Southern Strait of Georgia National Marine Conservation Area (SSGNMCA) Feasibility Study has not included the Fraser estuary in the Area’s parameters, nor does it consider the impact increased port traffic will have on the wildlife (notably Orcas) of the proposed NMCA.

As the only major Canadian staging area for five million birds travelling the Pacific Flyway, the FRNWA would help protect both bird and salmon habitat. The other two major North American feeding and resting areas on that flyway have been protected by the American government (32,000 acres in San Francisco Bay, 300,000 acres in Copper River Delta, Alaska). The late Dr. John Kelsall, an esteemed Canadian Wildlife Service biologist, suggested 4100 acres of inland habitat be preserved in the estuary through the transfer of Crown lands and the purchase of private lands; in concert, similar protection for fish habitat in the estuary should be formally joined to the NWA. A proposal by the B.C. Federation of Naturalists outlined the proposed NWA in detail.

The Province must rezone the 2850 acres back for fisheries and bird habitat; the government must stop stalling on the Roberts Bank Wildlife Management Area, and provide permanent and binding protection for the estuary and its uplands through a FRNWA in concert with the SSGNMCA.

There is a dangerous flaw in our national environmental assessment process when it can authorize the Port to expand its mammoth industrial footprint in the heart of one of the continents most important estuaries - mere yards from the river mouth where every Fraser salmon passes and three pods of endangered Orca feed - without a square inch of compensatory habitat ever

being set aside; and without the alternate economically sustaining value to Canada of the Fraser's natural bounty, and the negative costs of development, being considered in development decisions. When public participation in EAO processes gives government the opportunity to boast about consultation, while it chooses to ignore the comments such reviews garner, and smother public protest in a campaign of obfuscating advertising and stonewalling, the laws of the land are subverted. The EAO must be overhauled.

Thank you for your attention to my concerns.

A handwritten signature in cursive script, appearing to read "Gillian Anderson".

Gillian Anderson

Various attachments