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c/o 18 Remington Court
Halifax, Nova Scotia
B3M 3Y6
May 3, 2013

The Honourable Keith Ashfield, P.C., M.P.
Minister of Fisheries and Oceans
House of Commons, Ottawa, Ontario
K1A 0A6

Dear Minister,

The Nova Scotian Institute of Science (NSIS) thanks you for your letter of 21 January 2013. That letter was in response to concerns we raised regarding Bill C-38 in a letter sent to the Prime Minister on 13 June 2012.

We find your letter very clear and straightforward. You point out that Bill C-38 focuses Fisheries and Oceans Canada (DFO) on protecting commercial, recreational and Aboriginal fisheries. The NSIS approves whole-heartedly of any measures that would better protect these fisheries. However, the concern we raised in our letter to the Prime Minister remains – how will we protect the environment generally when the *Fisheries Act* as amended only protects the habitat of exploited fish and not the habitats of all fish and other animals?

Federal agencies and departments should be working to maintain our natural wealth for future generations. The amended *Fisheries Act* may conserve some of this wealth, but what of presently unexploited species? Can we say that these animals have no commercial potential? Certainly not. How will the habitats of these animals be preserved? What of the intrinsic value of diverse and healthy ecosystems? How will DFO contribute to the preservation of natural beauty and pristine waters when DFO stands only for the protection of commercial, recreational and Aboriginal fisheries? What of species that are unexploited but which make important contributions to ecosystems? Who will protect the plants and animals of flood-mitigating wetlands? Who will protect the bivalve molluscs that filter-purify our freshwaters? What of species that are unexploited due to near-extinction? Who will argue for the improvements in watershed-management needed to return the Atlantic salmon to a semblance of its past glory? If DFO is responsible for our waters, marine and fresh, then DFO must act on behalf of Canadians to protect all such habitats. To do otherwise is an abdication of duty that will depreciate our natural heritage.

The amended *Fisheries Act* also takes a limited view of ecological interactions. Your letter claims that the Section 35 of the Act will vigorously protect fish habitat. This is commendable, but insufficient if this protection is only for the immediate habitat of exploited species. Ecological systems by their nature are interconnected. Failure to protect the habitats that interact with those that support a commercial, recreational or Aboriginal fishery will compromise the latter and ultimately defeat the purposes of the amended act.

We are concerned for commercial, recreational and Aboriginal fisheries insofar as the amended Act does not adequately consider degrees of harm. In your letter, you point out that Section 35 of the Act will manage threats that pose serious harm to fish. To quote your letter: "Serious harm is defined as the death of fish or any permanent alteration to, or destruction of, fish habitat." Section 35, as you describe it, does not appear to address how exploited species will be protected from conditions that have cumulative deleterious effects, effects that might not cause serious harm in the short-term and/or which harm only a fraction of a population or species. As an example, suppose that intermittent exposure of a population of fish to a chemical contaminant results in effects that kill very few fish but which incrementally reduce the fitness and productivity of the population. As time goes on, the health and economic value of the population declines. Alternatively, the contaminant might cause benign lesions that do not seriously harm the fish but which render its flesh unmarketable. The NSIS urges the government of Canada to address this oversight in the legislation and provide protection for commercial, recreational and Aboriginal fisheries against any type and degree of harm.

The NSIS applauds measures to enhance the protection of commercial, recreational and Aboriginal fisheries and some of the changes made to the *Fisheries Act* will no doubt contribute to this goal (for example, increasing the authorities of inspectors). However, we challenge the Government of Canada to explain how, in the context of sustainable economic development, all freshwater and marine species and their habitats will be protected and, if necessary, restored. Surely, in this age of mounting evidence for the costs of ecosystem degradation, the Canadian people expect their governments to act broadly to preserve the environment.

Yours sincerely,

Michelle Paon

President, Nova Scotian Institute of Science