Changes to Canada's Fisheries Act and what it means for freshwater biodiversity

by Eric B. (Rick) Taylor

THE CONSERVATIVE GOVERNMENT introduced several profound changes to Canada's environmental legislation in its "budget" bill (C-38) of June 2012. Amongst these were changes to the federal *Fisheries Act* (the Act), Canada's longest serving and much envied piece of environmental legislation (Brohua 1993). In this article I will outline the history of the Act, how it has been changed by the passage of Bill C-38, and what it means for Canada's freshwater fish biodiversity. I focus on freshwater fishes because the key change to the Act involves habitat protection, and habitat loss and degradation are much more serious threats to freshwater fishes than for marine fishes (Dextrase and Mandrak 2006; Quigley and Harper 2006). In addition, while there is often much focus on the diversity of marine fishes which is, undoubtedly, spectacular, consider that almost 40% of all fishes (some 33,000 species and counting) occur in fresh waters yet freshwater habitats make only 0.8% of the total surface area of the Earth! Per unit area, diversity of freshwater fishes is unmatched.

The Act originally received royal assent in 1868, and replaced statutes regulating fisheries in the former Province of Canada and in New Brunswick that were even older. Despite its age and claims by some politicians that the Act is static and ripe for change, it is a **living** document that has been amended 17 times.

The Act as it used to be

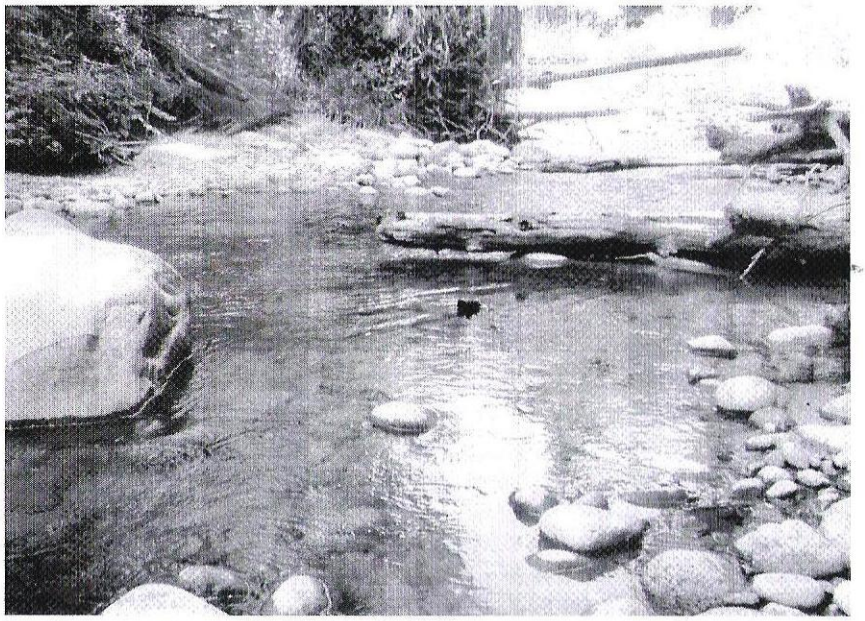
The purpose of the Act is not encapsulated in a succinct preamble, but can only be appreciated by reading the entire document. Suffice it to say that the Act was intended to regulate and thus protect fish, the habitats that sustain them, and the fisheries that depend on fishes and their habitats. The general goals of the Act were broad enough that they could even have implications for protection of human health. One of the amendments to the original Act was included in the *Constitution Act* of 1982 where the key role of the federal government in regulating inland fisheries was established. The key, but not the only, regulatory tool of the federal government to protect fish habitat was in section 35 of the Act, itself added in 1976. In particular, the original Act's subsection 35(1) stated that "*No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.*" This was known as HADD.

There are two key aspects to this wording. First, the prohibitions are general enough to provide a **broad-based** protection of habitat because to demonstrate "harm," "disruption," or "destruction" is reasonably straightforward. Second, "fish" are defined earlier in the Act as "parts of fish, or shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals." Again, the definition of fish is **broad-based** and clearly implies that all "fish" are of value and that this value includes aesthetic, cultural, commercial, recreational (including non-extractive use), and ecological aspects. These two key features of subsection 35(1) were its strengths from a biological and biodiversity conservation perspective – it recognized the **key role of habitat** in the persistence of fishes and the broad-based values of biodiversity that Canadians recognize (Haluza-Delay et al. 2009; Rudd 2009). Since 1976, subsection 35(1) has played a critical role in protecting fish habitat (and all the ecosystem services that it provides) and the fish and fisheries resources that depend on habitat.

Fisheries and Oceans Canada is the primary ministry that develops policies (e.g. the "no net loss" of habitat policy, Quigley and Harper 2006) and investigates alleged violations and generates charges under the Act. An indirect, but surely key benefit of the Act was that it motivated individuals and corporations involved in work in and around fish habitat to think about how their activities might negatively impact habitat **before** such work took place and to make them pay (in time, money, effort, and public relations) if during, or after, such work fish habitat was damaged. It made people broadly accountable for the costs to fishes and their habitat. Such specific protection of **habitat** (as opposed to protection of "lands" or "areas," terms that are much more general) is vital for all organisms, yet is exceptionally rare in Canadian legislation. Despite these positive aspects of the Act in habitat protection, right after subsection 35(1) came 35(2) which gave the Minister considerable discretionary power to "authorize" any potential violations of 35(1) although the reasons for any such authorization are not stated. Consequently, despite the provisions in 35(1), subsection 35(2) along with limitations on enforcement and prosecutions meant that there could be considerable doubt as to whether a violation of 35(1) would ever see a charge or a prosecution. In addition to 35(1), other subsections also acted to protect fish and their habitats and some of these also had discretionary "wriggle room" provided by subsections of each (e.g., under certain conditions deleterious substances can be "authorized"). Therefore, despite the claims made by some government ministers that the Act is too onerous, the actual number of convictions for fish habitat destruction is typically low (Favaro et al. 2012), and the Act is certainly not "watertight" to violations.

What the amended Act states

The amended Fisheries Act (passed in June 2012) has as its core a new subsection 35(1) that now reads: "No person shall carry on any work, undertaking or activity that results in **serious harm** to fish that are part of a **commercial, recreational or Aboriginal fishery**, or to fish that support



Small streams with complex habitats like this one in BC's lower Fraser Valley are critical for sustaining freshwater biodiversity.

such a fishery" (bold added). The key changes made by the Conservative government are that:

1. all explicit references to fish habitat have been removed,
2. "harmful alteration, disruption, or destruction of fish habitat" has been replaced by "serious harm to fish," and
3. general prohibitions against harm to fish habitat have been replaced by those that apply now only to fish that are important to a "commercial, recreational, or Aboriginal fishery" — in other words, only to fish that are of some economic or recreation value (which has its own considerable economic value) and/or of cultural value to a component of the Canadian population.

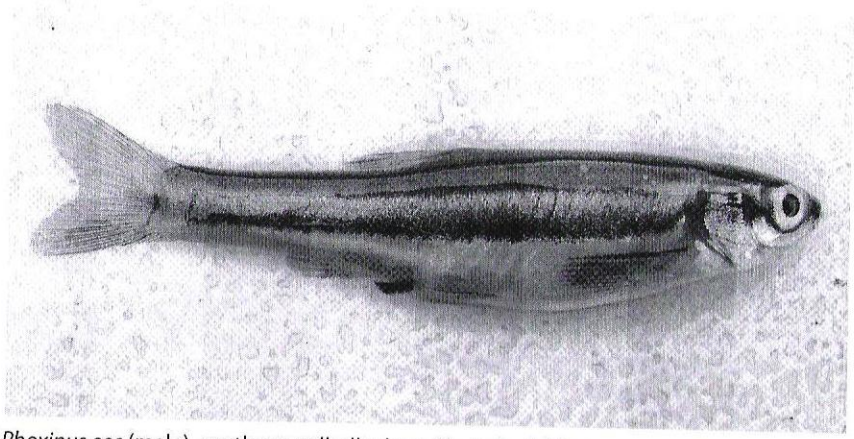
In the terrestrial world, this would be like making the *Canada Wildlife Act* (1973) applicable only to birds or other animals that are hunted or of some commercial value. Essentially, the new subsection 35(1) is much narrower in terms of defining harm. The HADD provision is replaced with "serious harm" which is defined as "**death** of fish or any **permanent** alteration or destruction of fish habitat" thus rejecting any sublethal or temporary effects on fishes. It abandons the inherent value of biodiversity, i.e. it protects only fishes that are of importance to a "fishery," and is biologically indefensible because it weakens recognition of the biological connection between the persistence of fish and the persistence of their habitats, as well as the interconnectedness of many waterbodies.

Why the amended Act is harmful

In addition to the vague and narrow aspects of the new subsection 35(1), the amended Act will now leave most freshwater fishes with a much lower level of habitat protection and has eliminated a demonstrably effective way to "make the polluter pay." To emphasize the implications of this, the reader is reminded that loss or degradation of habitat is **the most important factor** leading to at risk status for freshwater biodiversity, especially fishes, worldwide. Further, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has, since its inception in 1977, assessed 84 wildlife freshwater fish species at some level of risk in Canada (i.e., Extirpated, Endangered, Threatened, or of Special Concern) using internationally recognized assessment criteria (see http://www.cosewic.gc.ca/eng/sct0/index_e.cfm).

These assessments are forwarded to the relevant minister who makes the decision on whether or not to list endangered and threatened species under the *Species-at-Risk Act* (SARA) of 2004. Of these 84 species, at best only 33 (or 39%) could **potentially** qualify as the focus of a fishery and receive protection under the new section 35(1). The majority of Canadian freshwater fishes will now receive **no** habitat protection under the Act. I say potentially because the amended Act is also vague in terms of how the definition of "fishery" will be eventually interpreted. For instance, the rainbow trout is the most widely sought after recreational fish in BC and it would seem obvious that this species (but not necessarily its habitat) would be protected under the new section 35(1). Would, however, a remote lake that receives only five to ten visits by anglers over a year and whose habitat is threatened by destruction by mine tailings disposal automatically qualify as a "recreational" fishery and be protected? If the government feels that all fishes and waterways should not be treated the same (as motivation for making changes to the Act), it is entirely possible that they will not treat all "fisheries" the same and that some will be considered of expendable while others will receive protection. Adding to this vagueness the enhanced discretionary powers of the Minister of Fisheries to allow the destruction of fish habitat inspires even less confidence that Canada's freshwater biodiversity will be adequately protected.

While freshwater fishes and their habitats can be the focus of protective measures under SARA, it is important to recognize that habitat protection under SARA applies only to federally-owned land. It does not apply to privately-owned lands, activity on which can influence the physical and chemical characteristics of aquatic fish habitats. In addition, SARA prohibitions protecting fish and their habitat only come into effect **after** a species is in trouble (i.e. if they are already deemed Extirpated, Endangered or Threatened). Species that are assessed as "Special Concern" (i.e. vulnerable to becoming Endangered or Threatened in the near future) receive no legal protection under SARA. Consequently,



Phoxinus eos (male), northern redbelly dace. Photo by J. Mee.

changes to the Act may reduce motivation to **prevent** species from becoming at risk. It also seems counterproductive that while SARA recognizes *all* species as an "integral part of our national identity and history" and that "wildlife, in all its forms, has value **in and of itself** and is valued by Canadians for **aesthetic**, cultural, spiritual, recreational, educational, historical, economic, medical, ecological and scientific reasons." (emphasis added; Species at Risk Act. S.C. 2002), the amended Act restricts protection to fishes that are only of value to commercial, recreational, and/or Aboriginal fisheries.

Why we should care about these harmful changes to the Act

Finally, why should we care about changes to the Act and its implications for freshwater fishes and biodiversity in general? I can think of three basic reasons.

First, changes to the Act are at variance with our obligations agreed to under the Rio Convention on Biological Diversity of 1992 (Canada was the first country to ratify this agreement), i.e., the so-called "Agenda 21" (see http://publications.gc.ca/collections/Collection-R/LoPBdP/BP/bp317-e.htm). The Conservative Government has just changed the Act in a manner that directly counteracts several of Canada's commitments within this international obligation.

Second, the amended Act is an explicit rejection of the inherent value of biodiversity and replaces it with a purely utilitarian value. This rejection of the value of biodiversity, despite the claims by Conservative ministers of what "Canadians want," conflicts with surveys that demonstrate the value that Canadians place on all biodiversity — not just species we can make money from.

Finally, and perhaps most crucially, the passage of Bill C-38 and, more specifically, changes to the Act violate, if not the letter, then the spirit of democracy in Canada at least as far as I understand it. Yes, there was "debate" on the changes, limited to a brief period in the House of Commons, and many good comments were made by politicians of all stripes, but the outcome of these debates was never in doubt. What is truly disturbing was the complete lack of consultation by the Conservative government with **independent** scientists in assessing the Act and in proposing changes. No input or expertise was sought from the more than 2,500 Canadian academics who signed various letters to the Minister of Fisheries protesting the changes after they were leaked by a former Fisheries and Oceans biologist. None of the independent biologists with experience and expertise in assessing Canadian fish species at risk were consulted, and all indications are that the Conservative-government did not seek even advice from its own scientists before making changes to the Act. No one would deny that legislation can be improved, but a truly responsible and inclusive government should have engaged in a broader-based consultation process with independent scientists when the changes impact such fundamental principles like the dependence of biodiversity on habitat. How the Act was amended signals a sad chapter authored by the Conservative government in the development of policy of broad societal relevance. The changes to the Act are bad for freshwater biodiversity, and for the direct and indirect benefits that accrue to Canadians from this biodiversity, especially when combined with other actions by the Conservative government that lessen our protection and understanding of aquatic biodiversity, such as amendments to the Navigable Waters Protection Act in Bill C-45 and the impending closure of the Experimental Lakes Area.

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Eric Taylor is a professor of Zoology at UBC, Associate Director of the Biodiversity Research Centre, and the Curator of Fishes at the Beaty Biodiversity Museum. His research involves understanding the origins and persistence of biodiversity, principally in fishes, and its relevance to conservation.