

From “Badly Wrong” to Worse: An Empirical Analysis of Canada’s New Approach to Fish Habitat Protection Laws

Martin Z.P. Olszynski*

It has been three years since Canada’s Conservative government fundamentally altered some of Canada’s most important environmental laws, including the habitat protection provisions of the federal Fisheries Act. Whereas the previous regime technically applied to all fish habitat in Canada and offered a broad level of protection against most types of impacts, the new regime purports to focus on the habitat of fish that are part of, or support, commercial, recreational or Aboriginal fisheries. The new regime also reduces the level of protection for such habitat. In order to gain some insight into the difference between these two regimes, this paper contains an analysis of the primary permitting vehicle in this context, the Fisheries Act section 35 authorization. One hundred and eighty-four authorizations issued by the Department of Fisheries and Oceans’ two largest regions over a six month period for the years 2012, 2013, and 2014 were analyzed. In order to help frame the analysis and provide additional baseline information, twelve statutorily-required annual reports to Parliament on the administration and enforcement of the habitat/fisheries protection provisions were also analyzed (2001/02 — 2013/14). With an almost sixty percent reduction in authorization activity from 2012 to 2014, the results suggest the further erosion of an already deeply flawed regulatory regime and the federal government’s near-total abdication of responsibility for the protection of fish habitat over the past decade. The results also shed light on several challenges in modern environmental law, including slippage and risk-based regulation.

Cela fait maintenant trois ans que le gouvernement canadien formé par le parti conservateur a modifié certaines des plus importantes lois canadiennes en matière d’environnement, y compris les dispositions de la Loi sur les pêches visant la protection de l’habitat. Alors que le régime précédent s’appliquait techniquement à tous les habitats du poisson au Canada et offrait une grande protection à l’encontre de la plupart des types d’impacts, le nouveau régime se concentre en principe sur les

* Assistant Professor, University of Calgary Faculty of Law. I am very grateful to Alex Grigg, (J.D. Candidate, 2017) for outstanding research assistance on this project, as well as to the participants of the Journal of Environmental Law and Practice’s 5th biennial conference, “Après le Deluge: Future Direction for Canadian Environmental Law and Policy,” especially Deborah Curran, Arlene Kwasniak, David Poulton, Jason Unger and Rod Northey, for helpful comments and suggestions. I also benefitted from comments and suggestions from James Coleman, Michael Rennie, Stephen J. Cooke and Lorne Fitch. Samuel Robinson provided the statistical analysis. Part of the title for this paper comes from a passage in an article by Stepan Wood, Georgia Tanner and Benjamin Richardson on the-then (2010) state of Canadian environmental law; see *infra* note 164.

habitats du poisson où s'exerce la pêche commerciale, sportive ou celle des Autochtones. Le nouveau régime réduit également le niveau de protection pour de tels habitats. Afin de mieux comprendre la différence entre les deux régimes, l'auteur, dans cet article, procède à une analyse de la principale source d'autorisation dans ce domaine, soit l'article 35 de la Loi sur les pêches. On y analyse les cent quatre-vingt quatre autorisations qui ont été émises par les deux plus importantes régions du ministère des pêches et des océans au cours d'une période de six mois pour les années 2012, 2013 et 2014. Afin de permettre un meilleur encadrement de l'analyse et de fournir des renseignements de base additionnels, douze rapports annuels qui, telle que la loi l'exige, ont été soumis au Parlement au sujet de l'administration et de l'application des dispositions visant la protection des habitats et des pêches sont également analysés (2001/2002 – 2013/2014). Les résultats démontrent que le rythme des autorisations a diminué de près de soixante pour cent entre 2012 et 2014, ce qui laisse croire que l'érosion d'un régime réglementaire déjà profondément vicié va s'accroître et que l'on ne remédiera pas au quasi-total abandon de responsabilité du gouvernement fédéral au sujet de la protection de l'habitat du poisson au cours de la dernière décennie. Ces résultats révèlent également les nombreux défis du droit moderne de l'environnement, y compris le décalage normatif et la réglementation fondée sur le risque.

TABLE OF CONTENTS

I. INTRODUCTION

II. THE NEW FISHERIES PROTECTION REGIME

- A. The *Fisheries Act* Before and After
- B. Implementation Before and After
- C. Primary Changes and Competing Interpretations
 - 1. Works, Undertakings and Activities
 - 2. HADD v. DPAD
 - 3. The Fisheries Requirement
 - 4. Section 6 Factors and Purpose Clause
 - 5. The Fog of Uncertainty

III. METHODOLOGY AND RESULTS

- A. Methodology
- B. General Trends and Observations
 - 1. National Trends
 - 2. Regional Trends
 - 3. Sectoral Trends
 - 4. Summary
- C. Habitat Protection v. Fisheries Protection
 - 1. General Observations
 - 2. Works, Undertakings and Activities
 - 3. HADD v. DPAD
 - 4. The Fisheries Requirement

5. Size of Impact
6. Section 6 Factors and Purpose Clause

IV. DISCUSSION

- A. Addressing Slippage
- B. Lessons for Risk-based Regulation

V. CONCLUSION

I. INTRODUCTION

On the morning of March 12, 2012, Otto Langer, a former biologist with the Department of Fisheries and Oceans (DFO), alerted Canadians to the fact that Canada’s Conservative government was contemplating modifying one of Canada’s most important — if also imperfect — federal environmental laws: the *Fisheries Act* section 35 prohibition against works and undertakings resulting in “the harmful alteration, disruption or destruction” (HADD) of fish habitat.¹ Mr. Langer had apparently been leaked a copy of proposed changes to what were then referred to as the “habitat protection” provisions of the Act.² In Mr. Langer’s copy, all reference to habitat had been removed from section 35; the prohibition was instead directed at “adverse effects on fish of economic, cultural or ecological value.”³

Confronted with the issue in the House of Commons, the federal government did not deny its intention to modify section 35; rather, it began mounting its campaign for reform by referring to an incident in Saskatchewan where a popular outdoor music festival was temporarily delayed following some flooding. The DFO officials had suspended the pumping of water so that several hundreds of thousands of juvenile fish, including Northern pike and Walleye — two of Canada’s most popular recreational fishes — could be salvaged.⁴ Keith Ashfield, then the Minister of Fisheries and Oceans, suggested

¹ R.S.C. 1985 c. F-14 [*Fisheries Act*] s. 35. Gloria Galloway, “Ottawa wants to bow out of regulating fish habitat, documents show”, *The Globe and Mail* (13 March 2012), online: < www.theglobeandmail.com > . Mr. Langer also described all of these events himself; see Otto Langer, “Harper Government Waters Down the Fisheries Act” (12 March 2012), *The Common Sense Canadian* (blog), online: <http://commonsensecanadian.ca/harper-government-water-down-fisheries-act-omnibus-bill-otto-langer/>. As further set out in Part II of this paper, there was always some dissatisfaction — from environmental groups, academics, and industry — with how the habitat protection provisions of the *Fisheries Act* were administered and enforced.

² Langer, *ibid.* These were found in sections 34–43 of the *Fisheries Act* under the heading “Habitat Protection and Pollution Prevention”, although DFO had also long considered sections 20–22 (fish passage) and section 32 (the prohibition against the destruction of fish, since repealed and merged with the new section 35) as part of the habitat protection regime.

³ Langer, *supra* note 1.

⁴ Mark Hume, “Ottawa Defends Proposed *Fisheries Act* Changes” *The Globe and Mail* (16 March 2012), online: < www.theglobeandmail.com > . Regarding Walleye and Northern pike’s status as amongst the most popular recreational fish in Canada, see Fisheries

that “current fisheries policies go well beyond what is required to protect fish and fish habitat.”⁵

All speculation ended on April 26, 2012, when the late Jim Flaherty, then the Finance Minister, introduced Bill C-38, *An Act to implement certain provisions of the budget tabled in Parliament on March 29, 2012 and other measures*,⁶ also referred to as the *Jobs, Growth and Long-term Prosperity Act*, in the House of Commons. Dubbed the “Environmental Destruction Act” by Green Party Leader Elizabeth May,⁷ Canadians soon discovered that this 450-page document proposed to amend not just the *Fisheries Act* but rather represented a wholesale transformation of the federal environmental and regulatory regime. The *Canadian Environmental Assessment Act*⁸ would be repealed and replaced with a narrower and more discretionary *Canadian Environmental Assessment Act, 2012*.⁹ The *Navigable Waters Protection Act* would similarly be reduced in scope and renamed the *Navigation Protection Act*.¹⁰ The *Species at Risk Act* would also be weakened.¹¹

As for the *Fisheries Act*, it turned out that habitat protection would not be entirely removed. Once all of Bill C-38’s amendments to the *Fisheries Act* were brought into force (something that only happened a year and a half later),¹² section 35 would prohibit the carrying on of “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 such a fishery*.”¹³ Accompanying this

and Oceans Canada, *Survey of Recreational Fishing in Canada (2010)* (Ottawa, 2012) online: <http://www.dfo-mpo.gc.ca/stats/rec/can/2010/section4-eng.htm>.

⁵ House of Commons Debates, 41st Parl, 1st Sess, No 136 (15 March 2012) at 1450 (Hon. Keith Ashfield).

⁶ S.C. 2012, c. 19 [*JEGA* or Bill C-38].

⁷ Elizabeth May, “The Environmental Destruction Act,” *The Tyee* (10 May 2012), online: < www.thetyee.ca >

⁸ S.C. 1992 c-37 [*CEAA, 1992*].

⁹ S.C. 2012 c-19 [*CEAA, 2012*]. For critical commentary at the time, see e.g. Meinhard Doelle, “*CEAA 2012: The End of Federal EA As We Know It?*” (2012) 24 J. Env. L. & Prac. 1. For a more recent assessment (and criticism), see the *Fall 2014 Report of the Commissioner of Environment and Sustainable Development*, online: http://www.oag-bvg.gc.ca/internet/English/att_e_39879.html (finding that, overall, the “Agency’s rationale for . . . making its recommendations to designate projects that may require an assessment, its process for supporting case-by-case designation of projects, and its screening process for determining which projects will undergo an assessment” is unclear).

¹⁰ R.S.C., 1985, c. N-22 [*NPA*]. Under its previous iteration, the Act applied to all waters deemed navigable at common law. The amended Act applies to 162 water bodies (oceans, lakes, rivers) listed in a schedule to the Act.

¹¹ S.C., 2002 c. 29 [*SARA*]. Prior to Bill C-38, permits for incidental take of a listed species (s 73) were statutorily limited to three years; Bill C-38 removed this limitation and gave the Minister the discretion to determine the duration of a permit.

¹² Order in Council No. 2013-1107, 2013-10-24.

¹³ *Fisheries Act*, s 35, as amended by *JEGA*, s. 142 [emphasis added].

change to section 35’s wording was a slew of new definitions, including a definition for “serious harm to fish”: “the death of fish or any permanent alteration to, or destruction of, fish habitat.”¹⁴ Thus, some habitat protection remained; it had simply been tucked away in another part of the Act. Other notable changes included expanded regulatory powers to authorize “serious harm of fish,”¹⁵ modernization of the fish passage provisions,¹⁶ a higher fine regime,¹⁷ and a new “factors” and “purpose” section to guide all decision-making in what are now referred to as the fisheries protection provisions of the Act.¹⁸

The Canadian environmental law community’s reaction to Bill C-38 generally and the *Fisheries Act* changes specifically was both swift and critical. For Ecojustice, Canada’s national public-interest environmental litigation firm, it was clear that Bill C-38 would “narrow and reduce the protection of fish habitat.”¹⁹ In British Columbia, West Coast Environmental Law (WCEL) suggested that the prohibition against serious harm failed to recognize that “fish and their habitat can suffer a ‘death by a thousand cuts.’”²⁰ Alberta’s

¹⁴ *Ibid.* at ss. 2(2).

¹⁵ *Ibid.* at ss. 35(2) (a) — (d). As further discussed in Part II, the authorization of impacts to habitat has long been routine, making section 35 Canada’s functional equivalent to the regulatory scheme under section 404 of the United States’ *Clean Water Act* 33 U.S.C. §1251 et seq. (1972) [*CWA*]. Section 404 authorizes the U.S. government to “issue permits . . . for the discharge of dredged or fill material into the navigable waters at specified disposal sites.” As explained on the Environmental Protection Agency’s (EPA) website, “[a]ctivities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects” (<http://water.epa.gov/lawsregs/guidance/cwa/dredgdis/>). As it turns out, the jurisdictional reach of both statutes has been contentious in their respective countries, although Canada’s judiciary has generally been more receptive to an expansive interpretation than the United States’ (compare *R. v. Northwest Falling Contractors Ltd.*, [1980] 2 S.C.R. 292 and *Rapanos v. U.S.*, 547 U.S. 715 (2006)). In either case, it seems clear that the departments responsible for their implementation tend to favour broad interpretations. For the *Fisheries Act*, see Part II.C of this paper. For the *CWA*, see Claudia Copeland, “EPA and the Army Corps’ Proposed Rule to Define ‘Waters of the United States’” Congressional Research Office (20 March 2015), online: <https://www.fas.org/sgp/crs/misc/R43455.pdf>.

¹⁶ *Fisheries Act*, s. 20, as amended by *JEGA* s. 136. These provisions are generally overlooked but in reality are amongst the most powerful in the Act. See *e.g. British Columbia Hydro & Power Authority v. Canada (Attorney General)*, 1998 CarswellNat 4502 (Fed. T.D.) (considering the previous section 22 (now merged with section 20 through *JEGA*) which gives the Minister the power to order sufficient flows from any obstruction or other thing, *e.g.* a hydro dam, for the safety of fish).

¹⁷ *Fisheries Act*, *ibid.* at s. 42, as amended by *JEGA*, s. 147.

¹⁸ *Ibid.* at s. 6 and 6.1, as amended by *JEGA* s. 135.

¹⁹ Ecojustice, “Legal Backgrounder: *The Fisheries Act*,” *Ecojustice* (blog) online: <http://www.ecojustice.ca/wp-content/uploads/2015/03/Ecojustice-Fisheries-Act-Feb-2013.pdf>

Environmental Law Centre (ELC) noted that the focus on specific fisheries goes against the dominant grain of Canadian jurisprudence,²¹ which has recognized the federal government's jurisdiction over fisheries as over a "public resource"²² that extends to "all parts of the system which constitute [that] resource."²³ Canadian academics also weighed in. Professors Chris Tollefson and Meinhard Doelle suggested that under the new prohibition "only the most dramatic impacts on fish will be caught."²⁴ In a letter to Prime Minister Stephen Harper, over 600 Canadian scientists, including Canada's foremost freshwater ecologist, Dr. David Schindler, warned that the changes "jeopardize many important fish stocks and the lakes, estuaries, and rivers that support them."²⁵

The proposed changes drew criticism from other segments of Canadian society as well. No fewer than four former Ministers of Fisheries and Oceans publicly challenged the government to reverse course.²⁶ Justice Bruce Cohen, who had been appointed in 2009 to lead an inquiry into the decline of the Fraser River Salmon fishery, expressed disappointment that Bill C-38, and the changes to the *Fisheries Act* in particular, had been tabled before he was able to submit his report.²⁷ Perhaps the most significant response came from Canada's Aboriginal peoples, whose opposition to Bill C-38 gave rise to the "Idle No

²⁰ West Coast Environmental Law, "Limiting fish protection to 'serious harm' is a serious problem," *West Coast Environmental Law* (blog) online: <http://wcel.org/resources/environmental-law-alert/limiting-fish-protection-%E2%80%9Cserious-harm%E2%80%9D-serious-problem>

²¹ Jason Unger, "Fish out of Water: *Fisheries Act* Changes Reflect Divergence of Science and Law" ELC News Brief - Vol. 27 No. 3, 2012 (online: http://www.elc.ab.ca/Content_Files/Files/FishOutOfWater.pdf)

²² *Interprovincial Co-operative Ltd. v. R.* (1975), [1976] 1 S.C.R. 477 at p. 495.

²³ *R. v. Northwest Falling Contractors Ltd.*, [1980] 2 S.C.R. 292 at p. 300.

²⁴ Meinhard Doelle and Chris Tollefson, *Environmental Law: Cases and Materials*, 2nd ed (Toronto: Carswell, 2013) at 318.

²⁵ Letter to the Right Hon. Stephen Joseph Harper, P.C., M.P., Prime Minister of Canada regarding potential amendments to section 35 of the *Fisheries Act*, (22 March 2012) from Canadian Scientists (online: http://www.thetyee.ca/Documents/2012/03/23/Letter_from_Canadian_Scientists_to_Prime_Minister_Harper%5B1%5D.pdf)

²⁶ Mark Hume, "Four Former Ministers 'Protest the Gutting' of the *Fisheries Act*" *The Globe and Mail*, (28 June 2012), online: < www.theglobeandmail.com >

²⁷ Canada, Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River: *The Uncertain Future of Fraser River Sockeye* (Ottawa: Public Works and Government Services Canada, 2012) [*Cohen Commission*] vol 1 at 82: "The complexity of Fraser River sockeye salmon management illustrates the difficult policy questions arising from this fishery. Indeed, this complexity appears to be one of the reasons behind DFO's past significant efforts to obtain First Nations and stakeholder input into draft policies before introducing a change in its management regime. . . . *In light of this approach, the federal government's tabling of Bill C-38 is disappointing.* The bill was introduced very late in this Commission's life — five months after completion of the evidentiary hearings, and when my Final Report was in the late stages of drafting." [emphasis added] (online: <http://publications.gc.ca/site/eng/432516/publication.html>)

More” movement²⁸ and included an ultimately successful challenge to the legislation on the basis that the federal government had failed to fulfill its constitutional duty to consult First Nations on legislative changes that had the potential to negatively impact their constitutionally protected Aboriginal and treaty rights.²⁹

The Federal government, however, remained undeterred. Bill C-38 passed third reading and received royal assent on June 29, 2012. During the limited (by design) Parliamentary debates, government Ministers argued that the proposed changes were intended to simply “focus” the Act³⁰ and that it actually might provide a higher level of environmental protection than before.³¹ Such a view was further supported in October 2013, one month before the fisheries protection regime was brought into force, when the current Minister of Fisheries and

²⁸ See Renata D’Aliesio, “With Events Worldwide, #Idlenomore Movement Grows Too Big to Track” *The Globe and Mail*, (31 Dec 2012); Gloria Galloway and Oliver Moore, “Idle No More Protests, Blockades Spread Across Country” (16 Jan 2013), both online: < www.theglobeandmail.com > . This movement is described as follows on the “Idle No More” website (<http://www.idlenomore.ca/story>): “Idle No More has quickly become one of the largest Indigenous mass movements in Canadian history — sparking hundreds of teach-ins, rallies, and protests across Turtle Island and beyond. What began as a series of teach-ins throughout Saskatchewan to protest impending parliamentary bills that will erode Indigenous sovereignty and environmental protections [C-38 and C-45], has now changed the social and political landscape of Canada. . . The National Day of Action on Dec. 10th [2012], inspired thousands of people to action. . . In a few short months, Idle No More has become the center of media attention, drawing millions of people to our websites, twitter account and face book pages every day.”

²⁹ *Mikisew Cree First Nation v. Canada (Minister of Aboriginal Affairs and Northern Development)*, 2014 FC 1244, notice of appeal filed in the Federal Court of Appeal on 19 January 2015 (File No. A-29-15). Although the applicants were successful in their challenge, the Federal Court did not strike down the legislation but rather issued a declaration that the federal government had breached its constitutional duty to consult.

³⁰ House of Commons Debates, 41st Parl, 1st Sess, No 132 (1 June 2012) at 1115 (Hon. John Baird): “We are introducing changes that will focus our fish and fish habitat protection rules on fisheries, not on farmers. The current rules do not distinguish between vital waterways, lakes and rivers that support local fisheries, and drainage ditches, man-made reservoirs and irrigation channels that are not even home to fish. What we are doing is trying to focus fisheries protection on fish habitat, not on farmers’ fields.” As further discussed in Part III, however, recent fisheries research suggests that irrigation channels and agricultural ditches do, in fact, support various fisheries.

³¹ House of Commons Debates, 41st Parl, 1st Sess, No 129 (29 May 2012) at 1445 (Hon. Keith Ashfield): “The opposition likes to ignore the many massive improvements we are making to the act, such as identifying ecological sensitive areas, making the *Fisheries Act* conditions enforceable and allowing higher maximum penalties, as well as allowing regulations around invasive species.” Similarly, before the Federal Court in *Courteorville*, *supra* note 29, Canada suggested that the changes to the Act “may, in some respects, be beneficial” (at para 92). Mr. Ashfield was correct that such provisions were included in Bill C-38, but the reality is that the provisions with respect to “ecologically sensitive areas” (s 37(2)) are discretionary and have yet to be used, while enforcement of the habitat/fisheries protection provisions appears to be virtually non-existent (as further set out in Part III).

Oceans, Gail Shea, released her *Fisheries Protection Policy Statement*, which replaced the previous 1986 *Policy for the Management of Fish Habitat*.³² With respect to the fisheries requirement, for example, the *Fisheries Protection Policy Statement* states that “[in] Canada, most water bodies contain fish, or their habitat, that are part of or support commercial, recreational or Aboriginal fisheries and are therefore subject to the prohibition.”³³ This and other elements of the statement have led some members of the private bar to suggest that the government “does not view serious harm to fish as being significantly different from [the prior] HADD [regime].”³⁴

Of course, the DFO’s interpretation is not determinative and may well be the subject of litigation in the near future. This article, however, is less concerned with how the DFO purports to interpret the fisheries protection provisions than how it is actually implementing them. The reality is that even where a law is broadly worded (as was the case with the previous version of section 35),³⁵ there can be — and usually is — considerable “slippage” (*i.e.* non-compliance) in terms of its implementation and enforcement.³⁶

In order to gain some insight into how the DFO is actually implementing the new fisheries protection provisions, and the extent to which this differs from the previous habitat protection regime in particular, this paper contains an analysis of the primary regulatory instrument in this context — the subsection 35(2) authorization for impacts to fish habitat. One hundred and eighty-four authorizations issued by the DFO’s two largest regions (the Pacific Region and the Central and Arctic Region) over a six month period (May 1 — October 1) for the years 2012, 2013, and 2014 were analyzed (2014 being the first full year under the new regime) were analyzed.³⁷ In order to help frame the analysis and

³² Canada, Department of Fisheries and Oceans, *Policy for the Management of Fish Habitat* (Ottawa: Communications Directorate, 1986), online: http://www.gov.pe.ca/photos/original/elj_appendixd.pdf

³³ Fisheries and Oceans Canada, *Fisheries Protection Policy Statement*, (2013) online: <http://www.dfo-mpo.gc.ca/pnw-ppe/pol/PolicyStatement-EnoncePolitique-eng.pdf>

³⁴ See Janice Walton, “*Fisheries Act* Changes Effective November 25, 2013” *Blakes Bulletin* (12 November 2013), online: www.blakes.com/English/Resources/Bulletins/Pages/Details.aspx?BulletinID=1832#page=1.

³⁵ See *e.g. R. v. BHP Diamonds Inc.*, 2002 NWTSC 74 at paras. 71–72: “It has been held that the word ‘harmful’ in s 35(1) only modifies ‘alteration’ and not ‘disruption’ or ‘destruction’ . . . It has also been held that the Crown need only prove that one element of fish habitat as defined in s 34(1) has been harmfully altered, disrupted or destroyed in order to establish the offence. . . Also, the Crown need not prove actual harm to fish in order to establish an offence under s 35(1)” [citations omitted].

³⁶ Daniel A. Farber, “Taking Slippage Seriously: Noncompliance and Creative Compliance in Environmental Law,” (1999) 23 Harv. Envtl. L. Rev. 297: “In all areas of law, there are gaps between the ‘law on the books’ and the ‘law in action,’ but in environmental law the gap is sometimes a chasm” (at 297).

³⁷ Because DFO does not have a public registry where it posts authorizations, these were obtained using federal access to information legislation; see Part III.A.

provide additional baseline information, data from twelve statutorily-required annual reports to Parliament on the administration and enforcement of the habitat/fisheries protection provisions of the Act (2001/02 – 2013/14) was also compiled and analyzed.

The paper proceeds as follows. Part II sets out in greater detail the relevant changes to the *Fisheries Act* and also canvasses their primary (and often conflicting) interpretations. Part III sets out the methodology and results of the analysis. The results indicate that the federal government has over the course of the past decade all but abdicated its responsibility for fish habitat protection. With respect to the new fisheries protection regime specifically and notwithstanding its seemingly generous interpretation of that regime, the DFO’s two largest regions went from issuing 86 authorizations over a six month period in 2012 (under the prior regime) to 36 over the same period in 2014, a 58% reduction in authorization activity. As further discussed below, only a small percentage of this reduction appears attributable to the actual legislative changes to section 35; approximately 40% of it can be attributed to the DFO’s apparent adoption of an extra-legislative size threshold for impacts requiring authorization. Part IV considers these results in the context of two common challenges facing modern environmental law: slippage and risk-based regulation. Part V concludes and offers some suggestions for future *Fisheries Act* reform.

II. THE NEW FISHERIES PROTECTION REGIME

A. The *Fisheries Act* Before and After

Prior to Bill C-38, section 35 was relatively straightforward, with only one defined term (fish habitat):

35. (1) No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.

(2) No person contravenes subsection (1) by causing the alteration, disruption or destruction of fish habitat by any means or under any conditions authorized by the Minister or under regulations made by the Governor in Council under this Act.³⁸

The term “fish habitat” was defined in subsection 34(1) as “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.”³⁹

As of November 25, 2013, section 35 is as follows, with several new defined terms (*italics indicate new wording*):

35. (1) 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 such a fishery.*

³⁸ *Fisheries Act*, at s. 35 (as in force prior to *JEGA*).

³⁹ *Ibid.* at s. 34(1) (as in force prior to *JEGA*).

(2) A person may carry on a work, undertaking or activity without contravening subsection (1) if

- (a) *the work, undertaking or activity is a prescribed work, undertaking or activity, or is carried on in or around prescribed Canadian fisheries waters, and the work, undertaking or activity is carried on in accordance with the prescribed conditions;*
- (b) *the carrying on of the work, undertaking or activity is authorized by the Minister and the work, undertaking or activity is carried on in accordance with the conditions established by the Minister;*
- (c) *the carrying on of the work, undertaking or activity is authorized by a prescribed person or entity and the work, undertaking or activity is carried on in accordance with the prescribed conditions;*
- (d) *the serious harm is produced as a result of doing anything that is authorized, otherwise permitted or required under this Act; or*
- (e) *the work, undertaking or activity is carried on in accordance with the regulations.*⁴⁰

Thus, in addition to works and undertakings, the prohibition now also applies to activities. As noted in the introduction, the term “serious harm to fish” is defined in subsection 2(2) of the Act as “the death of fish or any permanent alteration to, or destruction of, fish habitat.” In addition to capturing impacts to fish habitat, therefore, section 35 now also prohibits the killing of fish, which used to be prohibited by section 32 (repealed by Bill C-38).⁴¹

The term “fish” has long been defined — rather broadly — as including “(a) parts of fish, (b) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and (c) the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.”⁴² “Fish habitat” continues to be defined but the definition appears to have been simplified: “spawning grounds *and any other areas*, including nursery, rearing, food supply and migration areas, *on which fish depend directly or indirectly* in order to carry out their life processes.”⁴³

The new terms “commercial,” “recreational,” and “Aboriginal,” when used in relation to a fishery — itself a long defined term⁴⁴ — are also defined:

⁴⁰ *Supra* note 13.

⁴¹ *Fisheries Act* s 32 (as in force prior to *JEGA*): “No person shall destroy fish by any means other than fishing except as authorized by the Minister or under regulations made by the Governor in Council under this Act.”

⁴² *Fisheries Act* ss. 2(1) (unchanged).

⁴³ *Fisheries Act*, ss. 2(1) as amended by *JEGA*, s. 133 [emphasis added].

⁴⁴ *Fisheries Act*, ss. 2(1) (unchanged): *fishery* “includes the area, locality, place or station in or on which a pound, seine, net, weir or other fishing appliance is used, set, placed or located, and the area, tract or stretch of water in or from which fish may be taken by the

“*Aboriginal*”, in relation to a fishery, means that fish is harvested by an Aboriginal organization or any of its members for the purpose of using the fish as food, for social or ceremonial purposes or for purposes set out in a land claims agreement entered into with the Aboriginal organization;

“*commercial*”, in relation to a fishery, means that fish is harvested under the authority of a licence for the purpose of sale, trade or barter;

“*recreational*”, in relation to a fishery, means that fish is harvested under the authority of a licence for personal use of the fish or for sport;⁴⁵

As further discussed below, this “fisheries requirement” is amongst the most contentious in the new fisheries protection regime.

When exercising his or her authority pursuant to subsection 35(2), the Minister must now consider a list of factors contained in a new section 6, as well as a purpose clause in section 6.1:

6. Before . . . exercising any power under subsection . . . 35(2). . . the Minister shall consider the following factors:

- (a) the contribution of the relevant fish to the ongoing productivity of commercial, recreational or Aboriginal fisheries;
- (b) fisheries management objectives;
- (c) whether there are measures and standards to avoid, mitigate or offset serious harm to fish that are part of a commercial, recreational or Aboriginal fishery, or that support such a fishery; and
- (d) the public interest.

6.1 The purpose of section 6, and of the provisions set out in that section, is to provide for the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries.⁴⁶

There are also numerous new regulatory powers associated with this regime. In addition to the expanded regulatory authorities in subsection 35(2) itself, the Governor in Council (GiC) may now pass regulations excluding fisheries from the definitions “*Aboriginal*”, “*commercial*” and “*recreational*”,⁴⁷ respecting applications for an authorization,⁴⁸ respecting time limits for issuing authorizations,⁴⁹ and to exempt any Canadian fisheries waters from the

said pound, seine, net, weir or other fishing appliance, and also the pound, seine, net, weir, or other fishing appliance used in connection therewith.”

⁴⁵ *Fisheries Act*, ss. 2(1) as amended by *JEGA*, s. 133 and Bill C-45, *infra* note 52, at s. 175 (the latter amending Bill C-38’s definition of “Aboriginal fishery”).

⁴⁶ *Fisheries Act* s 6, 6.1.

⁴⁷ *Ibid.* at para 43(1)(i.01).

⁴⁸ *Ibid.* at para 43(1)(i.2).

⁴⁹ *Ibid.* at para 43(1)(i.3).

application of section 35 outright.⁵⁰ Of these powers, two have already been exercised: the GiC passed regulations setting out a new application form for section 35 authorizations and setting out the time limits applicable to the DFO for issuing such authorizations.⁵¹

Finally, in what may be an unprecedented bit of drafting, Bill C-45⁵² — the fall companion budget bill to C-38 — introduced transitional provisions to allow current holders of valid authorizations to remit those authorizations back to the DFO and have these amended with a view towards the requirements of the new regime.⁵³

B. Implementation Before and After

Prior to Bill C-38, the harmful alteration, disruption or destruction (commonly referred to as HADD) of fish habitat was prohibited unless authorized by the Minister or by regulations. In reality, there never were any regulations for this purpose such that Ministerial authorizations were the rule, which until 2012 also triggered an environmental assessment under *CEAA, 1992*.⁵⁴ As further discussed below, the DFO relied on two extra-regulatory instruments, Letters of Advice and Operational Statements, to divert what it deemed to be “low risk” projects from the authorization (and *CEAA, 1992*) regime.⁵⁵ Briefly, a Letter of Advice was simply a letter that contained advice from a DFO official to a proponent on steps (*e.g.* mitigation measures) that could be taken to avoid causing a HADD and, consequently, the need for an authorization and — perhaps more importantly — a federal environmental

⁵⁰ *Ibid.* ss. 43(5).

⁵¹ See *Applications for Authorization under Paragraph 35(2)(b) of the Fisheries Act Regulations* (SOR/2013-191).

⁵² *A second Act to implement certain provisions of the budget tabled in Parliament on March 29, 2012 and other measures, 2012*, c. 31 [*JEGA II*]. Legislation is often drafted to preserve, or ‘grandfather,’ pre-existing rights to pollute when a stricter regulatory regime is being introduced (see *e.g.* Alberta’s *Water Act* RSA 2000 c. W-3 s 18 (preserving water rights acquired under previous regime)) but the author is not aware of any other instance where provisions are included to allow existing regulatees to opt-in to a presumably looser regulatory regime.

⁵³ *JEGA II, ibid.* ss. 177. (2): “On the request of the holder of an authorization. . .that is made within 90 days after the day on which. . .the [fisheries protection regime] comes into force, the Minister must examine the authorization, and the Minister may, within 210 days. . .confirm or amend the authorization or, if the Minister is of the opinion that the holder no longer needs an authorization, cancel it.”

⁵⁴ Section 35’s role in triggering the federal environmental assessment regime was one of the main irritants cited by industry in the brief review of that regime. See House of Commons, Standing Committee on Environment and Sustainable Development, *Statutory Review of the Canadian Environmental Assessment Act: Protecting The Environment, Managing Our Resources: Report of the Standing Committee on Environment and Sustainable Development* (March 2012).

⁵⁵ See also Jason Unger, “Lamenting What We HADD?” (2015) 29 J. Env. L. & Prac. (forthcoming).

assessment. An Operational Statement was essentially a generic Letter of Advice available through the DFO’s various regional websites for various kinds of projects (*e.g.* culvert repair, stream crossings, beaver dam removal, *etc.* . . .) but which also provided for voluntary notification of use to the DFO. As further discussed in Part III, in the five years preceding Bill C-38, the DFO received an average of 7,000 project referrals/year, wrote 5000 Letters of Advice/year, received 4000 Operational Statement notifications/year, and issued approximately 275 authorizations/year.

All stakeholders tended to view the prior regime as unsatisfactory. Environmental groups and academics expressed concern that the DFO was relying on Letters of Advice and Operational Statements to circumvent its environmental assessment duties pursuant to *CEAA, 1992*.⁵⁶ Industry complained that compliance with section 35 was overly burdensome.⁵⁷ Fisheries biologists observed that monitoring and enforcement were inadequate,⁵⁸ a problem confirmed by the Commissioner of Environment and Sustainable Development (CESD) in his 2009 Annual Report to Parliament,⁵⁹ and then again by Justice Bruce Cohen in his Final Report into the fate of the Fraser River Salmon fishery.⁶⁰

Perhaps not surprisingly, then, the passage and coming into force of the fisheries protection provisions also came with changes with respect to implementation. Operational Statements have been replaced with a “self-assessment” feature on the DFO’s primary fisheries protection website.⁶¹ Here, potential authorization seekers are provided information and advice about the kinds of waters and works that the DFO has determined do not require an authorization. Proponents are also encouraged to seek advice from a Qualified

⁵⁶ Arlene Kwasniak, “Slow on the Trigger: The Department of Fisheries and Ocean, the *Fisheries Act* and the *Canadian Environmental Assessment Act*,” (2004) 27:2 *Dal. L. J.* 349.

⁵⁷ Gloria Galloway, “Controversial changes to *Fisheries Act* guided by industry demands” *The Globe and Mail* (6 August 2013) online: <www.theglobeandmail.com>. See also Meinhard Doelle & Chris Tollefson, *Environmental Law: Cases and Materials*, 2nd ed (Toronto: Carswell, 2013) at 318 (discussing the BC Business Council’s 2006 position paper with respect to section 35).

⁵⁸ J. T. Quigley, D. J. Harper, “Effectiveness of Fish Habitat Compensation in Canada in Achieving No Net Loss” (2006) *Environ. Manage.* 37 at 351.

⁵⁹ Office of the Auditor General of Canada, *Report of the Commissioner of the Environment and Sustainable Development*, ch 1 (Ottawa: Office of the Auditor General of Canada, 2009) at 23-24.

⁶⁰ *Cohen Commission*, *supra* note 27 at 269: “I accept the documentary and testimonial evidence that DFO is not achieving No Net Loss of fish habitat, which is a guiding principle of the 1986 Habitat Policy. On the evidence, it is also apparent that DFO does not measure habitat loss or gain. . . Like [several] previous reviews, I conclude that the 1986 Habitat Policy has not been fully implemented. Moreover, DFO has not developed a plan to fully implement it.”

⁶¹ See Fisheries and Oceans Canada website, “Self-assessment: Does my project require review?” online: <http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>

Environmental Professional (QEP), which suggests that Letters of Advice may also be less frequent. While these changes may or may not reflect dissatisfaction with the previous regime, they are undoubtedly linked to the DFO's new fiscal reality: the department's budget was reduced by \$80 million in 2012, with a further \$100 million reduction planned over three years beginning in 2015.⁶²

C. Primary Changes and Competing Interpretations

While all of the above is relevant to a proper understanding of the new fisheries protection regime, for the purposes of this paper the primary changes can be summarized as follows:

Table 1: Primary Differences between the Habitat and Fisheries Protection Regimes

Habitat Protection Regime	Fisheries Protection Regime
Applied to works and undertakings	Applies to works, undertakings and activities
Prohibited the harmful alteration, disruption or destruction of fish habitat (HADD)	Prohibits the death of fish and the permanent alteration or destruction of fish habitat (DPAD)
Applied to all fish habitat as defined in the Act	Applies to fish — and their habitat — that are part of, or support, commercial, recreational or Aboriginal fisheries
Minister had broad discretion to issue authorizations	Minister must consider certain factors (section 6) and provide for the sustainability and ongoing productivity of fisheries (6.1)

In addition to these specific differences, some observers have suggested that the changes to the *Fisheries Act* were inherently negative in that they swept away decades of settled jurisprudence, resulting in a fog of uncertainty that would drive its own consequences for fish habitat in Canada.⁶³ Still others suggested that just as detrimental (if not more) were the concurrent and significant reductions to the DFO's budget.⁶⁴ These effects are also considered in this paper.

1. Works, Undertakings and Activities

The broadening of section 35 to apply to activities in addition to works and undertakings has not received much attention. The change may be simply a reflection of the incorporation into section 35 of the previous stand-alone section 32 prohibition against the destruction of fish by “*any means other than fishing*”

⁶² “Conservative MPs argue DFO cuts won't hurt research” *CBC News* (22 May 2012) online: < www.cbc.ca/news/canada/new-brunswick > ; Peter O'Neil and Gordon Hoekstra, “Federal budget cuts \$100 million from fisheries and oceans over three years” *Vancouver Sun* (21 March 2013) online: < www.vancouversun.com/news > .

⁶³ See *infra* note 103.

⁶⁴ *Supra* note 62.

unless authorized by the Minister or by regulations (since repealed).⁶⁵ It is also arguable, however, that the previous section 35 prohibition could not have been enforced against recreational or other activities that do not fall within the scope of “works and undertakings,” such as all-terrain-vehicle (ATV) use in wilderness areas, which are of increasing concern.⁶⁶ Whatever the case, the result appears to be the comprehensive application of section 35 to all human activity that results in serious harm to fish, *i.e.*, the death of fish (including eggs and juvenile stages of fish) or the permanent alteration or destruction of fish habitat.

2. HADD v. DPAD

Comparing the prohibition against “harmful alteration, disruption or destruction” of fish habitat with the “death of fish or permanent alteration or destruction” of fish habitat, some members of the private bar have suggested that “many situations prohibited under the [previous regime] will no longer be,” especially temporary impacts, which were ostensibly caught by the term “disruption.”⁶⁷ This interpretation is shared by some environmental groups.⁶⁸

The *Fisheries Protection Policy Statement* appears to take a slightly more nuanced approach. Permanent alteration is defined as being “of a spatial scale, duration or intensity that *limits or diminishes* the ability of fish to use such habitats,” while destruction is defined as being “of a spatial scale, duration, or intensity that fish *can no longer* rely upon such habitats for use.”⁶⁹

Beginning with the term “destruction,” all other things being equal the DFO’s interpretation under the new regime should be the same as under the previous one. This appears to be the case; previous guidance to the DFO habitat practitioners defined “destruction” as “any permanent change of fish habitat

⁶⁵ *Supra* note 41.

⁶⁶ See *e.g.* Canadian Press, “Mountie Says More Enforcement Needed of ATVs in Alberta Backcountry” *Global News* (7 May 2015) online: <http://globalnews.ca/news/1986682/mountie-says-more-enforcement-needed-of-atvs-in-alberta-backcountry/>; see also CBC News, “Data shows Alberta off-road vehicle use unsustainable, environmental group says” *CBC News* (7 July 2015) online: <http://www.cbc.ca/news/canada/edmonton/data-shows-alberta-off-road-vehicle-use-unsustainable-environmental-group-says-1.3139097>.

⁶⁷ Tony Crossman, Daniel I. Kiselbach, and Amanda Baron, Miller Thomson LLP, “Bill C-38 Amendments to the *Fisheries Act*: A New Environmental Era in Canada?” Presentation for the special session of the Environmental Managers Association of British Columbia (Simon Fraser University, Harbour Centre, September 13, 2012), citing *R. v. High*, 2003 BCSC 1723: “Dredges affected the creek as a result of their intake and discharge of water. The creek bed was also disrupted as a result of activities necessary in order to prepare for the operation of the dredges. Expert testimony established that the fish could frequent the creek but that the dredges negatively impacted fish habitat. The accused was found guilty of a *Fisheries Act* offence, namely, the disruption of fish habitat. This decision was upheld on appeal.” The authors suggest that this case would not likely be brought under the new regime.

⁶⁸ Ecojustice, *supra* note 19 at 7, WCEL, *supra* note 20.

⁶⁹ *Fisheries Protection Policy Statement*, *supra* note 33.

which completely eliminates its capacity to support one or more life processes of fish.”⁷⁰ Where a difference should be found is between previous approaches to “harmful alteration and disruption,” on the one hand, and “permanent alteration” on the other. Previous DFO guidance defined “harmful alteration” as “any change to fish habitat that indefinitely reduces its capacity to support. . . fish but does not completely eliminate the habitat”⁷¹ and “disruption” as “any change to fish habitat occurring for a limited period which reduces its capacity to support one or more life processes of fish.”⁷² Thus, it appears that “permanent alteration” is being interpreted more or less like “harmful alteration”: an alteration that limits or diminishes the usefulness of fish habitat, without eliminating it altogether. This is largely consistent with the private bar commentary referred to above, which focuses on the removal of temporary “disruptions”. It is also consistent with prior judicial interpretation that any harmful alteration had to be “somewhat permanent” in order to attract penal consequences.⁷³ The nuance lies in the duration of the impact: “harmful alteration” was defined as an indefinite change, whereas “permanent alteration” appears to be bound to actual use of habitat by fish.

3. The Fisheries Requirement

As noted above, the requirement that fish be a part of, or support, commercial, recreational or Aboriginal fishery in order for their habitat to be protected was amongst the most contentious changes to the Act. Many suggested that the terms were vague and ill-defined. Two approaches in particular represent opposite ends on the spectrum of possible interpretations. In a paper written by two of Canada’s leading fisheries scientists,⁷⁴ Professors Jeffrey Hutchings and John Post argue that “the vast majority of Canada’s freshwater fishes will be deemed to not warrant habitat protection”:

Under the revised [*Fisheries Act*], fish that inhabit lakes, rivers, and streams that are not regularly visited by humans do not warrant protection (Figure 2). Humans are necessary to render a fish part of a fishery. No humans, no fishery, and no fish habitat protection. This can only be interpreted as meaning that the vast majority of Canada’s freshwater fishes will be deemed to not warrant habitat protection

⁷⁰ Department of Fisheries and Oceans, Habitat Management and Environmental Science, Habitat Management Branch, *Decision Framework for the Determination and Authorization of Harmful Alteration, Disruption or Destruction of Fish Habitat* (1998) online: <http://www.dfo-mpo.gc.ca/Library/231028.pdf>. [emphasis added]

⁷¹ *Ibid.* [emphasis added]

⁷² *Ibid.* [emphasis added]

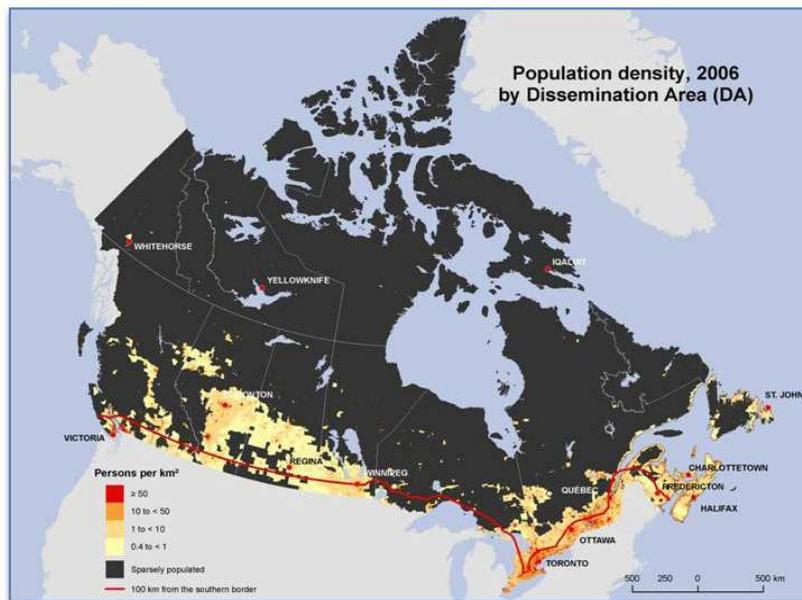
⁷³ *R. v. Leveque*, 2001 CarswellOnt 4057, [2001] O.J. No. 4437 (S.C.J.) at para. 50: “[w]hat appears to emerge from many of the judicial decisions is that the harmful alteration or disruption of fish habitat must be of a somewhat permanent nature.”

⁷⁴ Jeffrey A. Hutchings & John R. Post, “Gutting Canada’s *Fisheries Act*: No Fishery, No Fish Habitat Protection,” (2013) 38:11 *Fisheries* 497–501.

under the revised [Fisheries Act], even if those species are considered part of a fishery elsewhere in their range.⁷⁵

To further illustrate the consequences of such an interpretation, Professors Hutchings and Post included the following map of the population density of Canada:

Figure 1: Population Density in Canada⁷⁶



The *Fisheries Protection Policy Statement* takes a different approach. Fish that are “part of” a commercial or recreational fishery are interpreted as those that may be fished within the scope of applicable federal or provincial fisheries regulations, for example “fishing regulations made under the *Fisheries Act* (Canada), *National Parks of Canada Fishing Regulations*, and relevant provincial Acts and regulations.”⁷⁷ Fish that are “part of” an Aboriginal fishery are those that can be fished by Aboriginal organizations or their members for food, social or ceremonial purposes or for purposes set out in a land Claims agreement.⁷⁸ It is

⁷⁵ *Ibid.* [emphasis added]

⁷⁶ This map is available online at: <http://www12.statcan.gc.ca/census-recensement/2006/as-sa/97-550/vignettes/img/map-2006-pop-density-canada-sz01-en.gif>

⁷⁷ *Fisheries Protection Policy Statement*, *supra* note 33.

⁷⁸ *Ibid.*

not surprising, then, that the DFO concludes that most Canadian water bodies “contain fish, or their habitat, that are part of or support commercial, recreational or Aboriginal fisheries.”⁷⁹

With respect to Canada’s Pacific and Atlantic coastal waters, the question appears entirely academic, as under any interpretation these waters contain fish that are part of, or support, a commercial, recreational or Aboriginal fishery, and are therefore subject to the prohibition.⁸⁰ As noted by Professors Hutchings and Post, however, the question has very real consequences with respect to freshwater fisheries. Although their interpretation presumes a certain threshold of fishing activity (“regularly visited”) for which the legislative basis is unclear,⁸¹ with or without a threshold the difficulty with this approach is the same: ascertainment. The reality is that there is simply no way to determine whether a particular water body, whether a lake, river or stream, has been fished any given day — let alone any given week, month or season. In fact, successful fishermen and women are usually very secretive about their best “fishing holes.”⁸² Simply put, such an approach could be said to lead to an absurdity, which courts are instructed to avoid.⁸³

The DFO’s interpretation approaches this difficulty from the opposite direction. It considers all fish regulated under federal and/or provincial fisheries regulations as “part of” a commercial or recreational fishery. Because of how recreational fisheries regulation work, this means that all water bodies in the

⁷⁹ *Ibid.*

⁸⁰ Under the Hutchings and Post interpretation, such waters are regularly frequented by fish-harvesters and, for those that areas that are not, it would seem impossible to say that at any given moment they do not contain a fish that is part of, or supports, a commercial, recreational or Aboriginal fishery. Under DFO’s interpretation, all coastal waters are divided into fishing zones for the purposes of commercial fisheries regulation.

⁸¹ Such a drastic retreat would also seem inconsistent with the *Hansard*, wherein government MPs stressed that the goal was simply to “focus fisheries protection on fish habitat, not on farmers’ fields”: *supra* note 30.

⁸² For one recent example, see Kevin Hampson, “Record-breaking Walleye caught in Pembina River near Sangudo,” *The Mayorthorpe Freelancer* (17 May 2015) online: <http://www.mayorthorpefreelancer.com/2015/05/11/record-breaking-walleye-caught-in-pembina-river-near-sangudo> (describing the catching of a sixteen pound walleye in the Pembina River, Alberta, and the successful fisherman’s recalcitrance to divulge the location: “Don’t bother asking him how to get there, though. The most detail he’ll give is that it’s a mile from Sangudo — and some beavers live nearby.”)

⁸³ *Rizzo & Rizzo Shoes Ltd., Re*, [1998] 1 S.C.R. 27 at para. 27: “It is a well-established principle of statutory interpretation that the legislature does not intend to produce absurd consequences. According to Côté, *supra*, an interpretation can be considered absurd if it leads to ridiculous or frivolous consequences, if it is extremely unreasonable or inequitable, if it is illogical or incoherent, or if it is incompatible with other provisions or with the object of the legislative enactment (at pp. 378-80). Sullivan echoes these comments noting that a label of absurdity can be attached to interpretations which defeat the purpose of a statute or render some aspect of it pointless or futile (Sullivan, *Construction of Statutes, supra*, at p. 88).”

inland provinces that contain such fish are subject to the prohibition. A recreational angler in the inland provinces buys a single license for the season. There are usually several classes of such licenses to suit the particular angler’s needs (e.g. a conservation license or a sport license). Fishery open and close times, as well as the applicable catch limits for various species (e.g. salmon, northern pike, walleye, bass, trout, whitefish), then depend on the particular area (variously referred to as zones, regions or divisions) that the angler is fishing in. These areas cover entire provinces. There are eight regions in British Columbia,⁸⁴ ten zones in Alberta,⁸⁵ three zones in Saskatchewan,⁸⁶ four divisions in Manitoba,⁸⁷ eighteen zones in Ontario,⁸⁸ and twenty-nine zones in Quebec.⁸⁹

Thus, pursuant to the DFO’s interpretation, a water body containing northern pike in British Columbia’s region 7B, or Alberta’s zone NB3, is subject to the prohibition against serious harm. In addition, a water body connected to such a water body that contains fish (or their habitat) that support such fisheries, “often, but not exclusively, as prey species,” is also protected, whether or not it contains fisheries fish (e.g. northern pike).⁹⁰

4. Section 6 Factors and Purpose Clause

There are now four factors that the Minister must consider before issuing an authorization: (a) the contribution of the relevant fish to a commercial, recreational or Aboriginal fishery, (b) fisheries management objectives, (c) measures available to avoid, mitigate or offset serious harm to fish, and (d) the public interest.⁹¹ The purpose for considering these factors is to “provide for the

⁸⁴ See British Columbia, Ministry of Forests, Lands and Natural Resources Operations, “Freshwater Fishing Regulations” (2015) online: <http://www.env.gov.bc.ca/fw/fish/regulations/>

⁸⁵ See Alberta, Ministry of Environment and Sustainable Resource Development, Alberta Guide to Sportfishing Regulations (2015), online: < <http://albertaregulations.ca/2015-Alberta-Fishing-Regs.pdf> >

⁸⁶ See Saskatchewan, Ministry of Environment, Saskatchewan Angler’s Guide (2015), online: < <http://www.environment.gov.sk.ca/adx/asp/adxGetMedia.aspx?DocID=29e62432-d7db-481c-8a1d-ea08eafb1f89&MediaID=5b45bba5-ddb9-4cd5-83d3-ad6f1184a411&Filename=2015+Anglers+Guide.pdf&l=English> >

⁸⁷ See Manitoba, Ministry of Conservation and Water Stewardship, Manitoba Anglers’ Guide (2015), online: < <http://www.gov.mb.ca/conservation/waterstewardship/fish/pdf/2015AnglersGuide.pdf> >

⁸⁸ See Ontario, Ministry of Natural Resources and Forestry, Recreational Fishing Regulations Summary (2015), online: < <http://www.ontario.ca/document/2015-ontario-fishing-regulations-summary> >

⁸⁹ See Quebec, Ministry of Environment, Wildlife and Parks, Sport Fishing in Quebec 2014-2016, online: < <http://www.mffp.gouv.qc.ca/english/publications/online/wildlife/fishing-regulations/pdf/fishing-rules.pdf> >

⁹⁰ *Fisheries Protection Policy Statement*, *supra* note 33.

⁹¹ *Fisheries Act*, s. 6.

sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries.”⁹²

Environmental groups have pointed out the absence of any modern environmental law principles, such as the precautionary principle, in this list of factors, bearing in mind especially that they were included in previous (and more comprehensive) attempts to modernize the *Fisheries Act*.⁹³ In reality, section 6 appears to be primarily a codification of factors already considered by the DFO when issuing authorizations for some time. Fisheries management objectives, which the *Fisheries Protection Policy Statement* defines as “the stated socio-economic, biological, and ecological goals for a fishery. . . established by federal, provincial or territorial fishery managers,”⁹⁴ were discussed in the 1986 *Policy for the Management of Fish Habitat*.⁹⁵ Offsetting has also long been the linchpin of that policy.⁹⁶ Canadian courts have also long held that the Minister manages Canadian fisheries “in the public interest.”⁹⁷ Finally, although the 1986 Policy was focused on fish habitat and the new fisheries protection regime purports to be concerned with fisheries productivity directly,⁹⁸ functional habitat was then — and still is now — recognized as the primary limiting factor of such productivity.⁹⁹

⁹² *Fisheries Act*, s. 6.1.

⁹³ Ecojustice, *supra* note 19 at 11.

⁹⁴ *Fisheries Protection Policy Statement*, *supra* note 33.

⁹⁵ *Policy for the Management of Fish Habitat*, *supra* note 32 at 10–11: “The essential step of integrating various fish habitat requirements with the fisheries resources they support, must be undertaken and made available in a form that is understood by officials within Fisheries and Oceans, as well as by other agencies and non-government groups. The Department has explored the conceptual basis for this integration and has concluded that fish habitat management area plans or fish habitat/stock production plans, or the equivalent, should be developed to guide the implementation of this policy.” As noted by Justice Cohen, the problem is that such integration never took place; Cohen Commission, *supra* note 27 at 269.

⁹⁶ *Policy for the Management of Fish Habitat*, *ibid.* at 7: “The no net loss principle is fundamental to the habitat conservation goal. Under this principle, the Department will strive to balance unavoidable habitat losses with habitat replacement on a project-by-project basis so that further reductions to Canada’s fisheries resources due to habitat loss or damage may be prevented.”

⁹⁷ *Comeau’s Sea Foods Ltd. v. Canada (Minister of Fisheries & Oceans)*, [1997] 1 S.C.R. 12: “Under the *Fisheries Act*, it is the Minister’s duty to manage, conserve and develop the fishery on behalf of Canadians in the public interest (s. 43). Licensing is a tool in the arsenal of powers available to the Minister under the *Fisheries Act* to manage fisheries... Under the *Fisheries Act*, the Minister has the additional authority to open and close fisheries (s. 43(a)), identify and prosecute those who damage or destroy fishery habitat (ss. 35–40), order the construction of fish-passes over fish-producing streams (ss. 20–22), or act to enhance fish-producing streams (s. 43(h) and (i)).” [emphasis added]

⁹⁸ *Policy for the Management of Fish Habitat*, *supra* note 33, defining productivity as “the potential sustained yield of all fish populations. . . that are part of or support commercial, recreational and Aboriginal fisheries.”

Thus, for the DFO, these factors simply “establish a clear structure for the regulatory review process”¹⁰⁰ — the term ‘establish’ being perhaps the key one here: the factors are no longer a matter of policy but rather of law. Predictably, then, they have informed the information requirements associated with the new section 35 authorization request form.¹⁰¹ What remains to be seen is whether they have had an appreciable impact on the content of section 35 authorizations.

5. The Fog of Uncertainty

In addition to the specific differences between the previous and current section 35 regime, many observers expressed concern that the mere fact of the changes would create uncertainty, which in turn would foster non-compliance. Concern for such an effect was heightened by the provisions’ ambiguity and their coupling with the aforementioned reductions in the DFO’s budget, which has been reduced by 19.4% since 2012 (from \$1,922 million CAD to \$1,605 million).¹⁰² In a June 2014 story in the Vancouver Sun, for example, the Chair of the Fraser Valley Watersheds Coalition observed that “[t]he level of disturbance has clearly increased in recent years,” and suggested that “people got the memo that now is the time, no one is watching, the rules are vague, your chances of being prosecuted are virtually none.”¹⁰³

III. METHODOLOGY AND RESULTS

A. Methodology

Federal access to information legislation¹⁰⁴ was used to request all subsection 35(2) authorizations issued by the DFO’s two largest regions, the Pacific region

⁹⁹ See Randall, R.G., Bradford, M.J., Clarke, K.D., and Rice, J.C. 2013. A science-based interpretation of ongoing productivity of commercial, recreational or Aboriginal fisheries. DFO Can. Sci. Advis. Sec. Res. Doc. 2012/112 iv + 26 p at 5: “The sustainability and ongoing productivity of fish populations depends on the amount and quality of the habitats. . .required for each life stage, interactions with other species, and the appropriate management of fisheries and anthropogenic threats.” See also Nicolas W.R. Lapointe, Steven J. Cooke, Jack G. Imhof et al., “Principles for ensuring healthy and productive freshwater ecosystems that support sustainable fisheries” (2014) 22 *Environmental Reviews* 110 at 112 (“Habitat degradation and loss is the major threat to the survival of freshwater fish populations”).

¹⁰⁰ *Fisheries Protection Policy Statement*, *supra* note 33.

¹⁰¹ *Supra* note 51, see ss. 9–11 (for measures to avoid or mitigate serious harm to fish) and 13 (for requirements related to offsetting).

¹⁰² These figures were taken from DFO’s annual Departmental Performance Reports; see Fisheries and Oceans Canada, “Reports and Publications,” online: <http://dfo-mpo.gc.ca/reports-rapports-eng.htm>

¹⁰³ Larry Pynn, “Minding the Farm: Agriculture Practices Clash with Protection of Streams and Fish Habitat” *The Vancouver Sun* (5 June 2014) online: < www.vancouversun.com > .

¹⁰⁴ *Access to Information Act* R.S.C., 1985, c. A-1.

and the Central and Arctic region (Figure 2, below), over a six month period (May 1 to October 1) for the years 2012, 2013 and 2014, with 2014 being the first year under the new fisheries protection regime. One hundred and eighty-four authorizations were then analyzed to determine whether there was a difference in the kinds of activities that the DFO was granting authorizations for, whether there was a noticeable change in the HADD v. DPAD regime in terms of the kinds of impacts to fish habitat that were being authorized, whether the fisheries requirement had reduced the scope of the prohibition, whether the introduction of the section 6 factors had any appreciable effect on the content of the authorizations, and finally whether the uncertainty created by the amendments resulted in any noticeable change in proponent activity.

In order to help frame the analysis and provide additional baseline information, data from twelve annual reports written by the DFO for Parliament (2001/02 — 2013/14, which includes four months under the new regime (the period between November 25, 2013 and March 31, 2014)) was also compiled and analyzed.¹⁰⁵ These reports are statutorily required by section 42.1 of the *Fisheries Act* and must include information on “the administration and enforcement of the provisions of the Act relating to [habitat/fisheries] protection . . . for that year,” as well as a statistical summary of convictions under the *Act*.¹⁰⁶ They contain information regarding the number of referrals that the DFO received in a given year and the number of authorizations issued — all broken down by project type and region, as well as the DFO’s enforcement activities (*e.g.* the number of warnings issued, charges laid, as well as convictions reported).

¹⁰⁵ Fisheries and Oceans Canada. 2014. Annual Report to Parliament on the Administration and Enforcement of the Fish Habitat/Fisheries Protection and Pollution Prevention Provisions of the *Fisheries Act*. April 1, 2013 to March 31, 2014: v + 44 p. (for the years 2001/02 — 2013/14).

¹⁰⁶ *Fisheries Act*, s. 42.1 as amended by *JEGA*, s. 148.

Figure 2: The DFO’s Six Regions¹⁰⁷

The discussion begins with some general observations about the habitat/fisheries protection regime based primarily on the analysis of the DFO’s twelve annual reports. This is followed by several sections that set out to determine whether and how the changes to section 35 are affecting the authorization regime. One limitation of the analysis is that, except for that information contained in the annual reports, it deals with authorizations only, which as will be seen capture only a fraction of habitat-related activity. Access to both authorization and referrals would be ideal; in fact, an analysis of referrals, and especially those made since November 25, 2013 and deemed to not require an authorization, would be more informative in some respects. The current realities of Canada’s access to information regime, however, made gaining access to actual referrals extremely difficult.¹⁰⁸ Another complicating factor is that the changes may be antagonistic or synergistic in their effects. For example, the

¹⁰⁷ See <http://www.dfo-mpo.gc.ca/regions/index-eng.htm>. As is clear from the map, the Central and Arctic region is by far the largest, spanning four provinces and two territories, followed by the Pacific and Quebec regions.

¹⁰⁸ “Canada’s outdated access to information system has been transformed into a ‘shield against transparency,’ according to the federal information watchdog, who is calling for urgent reform to open up government for Canadians”: Alex Boutilier, “Overhaul needed for to stop erosion of Access to Information Act, watchdog says” *The Star* (31 March 2015), online: < www.thestar.com > . An earlier request by the author for all referrals and supporting documents between September 1, 2013 and May 1, 2014 has been met

inclusion of activities should arguably broaden the scope of the regime, but the elimination of disruptions works in the opposite direction, as would the fisheries requirement (presumably at least). To the extent possible, considerable effort was made to isolate the effects of the various changes.

B. General Trends and Observations

1. National Trends

Figure 3 (below) demonstrates that the total number of referrals (left axis, in thousands) and authorizations (right axis, in hundreds) has declined since 2001/02. A change-point detection algorithm (Pruned Exact Linear Time) identified four periods in the number of referrals per year, with distinct periods of decline occurring from 2004–2007 and from 2012–2014.¹⁰⁹ The same algorithm identified only two distinct periods in the number of authorizations per year (before and after 2006/07). The slight lag between the first drop in referrals (2004/05) and authorizations (2005/06) makes sense when one considers that referrals usually took about a year to process (thus, the decline in authorizations in 2006 is a reflection of the decline in referrals in the preceding year).¹¹⁰ Similarly, the drop in actual referrals for 2012/13 is more pronounced than for authorizations, with both tracking more closely in the subsequent year.

Bearing in mind that the changes to the *Fisheries Act* were not brought into force until a full year and a half later (November 25, 2013), the significant decline in referrals from 2012 to 2014 is consistent with the above-noted concerns regarding a fog of uncertainty: many proponents apparently took the view that their projects simply no longer required review or authorization, irrespective of the law “on the books.” As for those four months under the new regime (November 25, 2013 — March 31, 2014), DFO issued 17 authorizations in that time. Pro-rated to a yearly average, that would be 51 authorizations per year, or an 84% decline from an average of 275 authorizations/year in the relatively stable period (five years) prior to Bill C-38’s passage.

The significant decline in referrals between 2004 and 2006 coincides with the DFO’s launching of the “Environmental Process Modernization Program” (EPMP), which is widely referred to in its annual reports for those years. The goal of the EPMP was to “contribute to more efficient and effective delivery of its regulatory responsibilities and to support the federal smart regulation

with a two-year delay and is expected to generate over 16,000 pages. Letter on file with author.

¹⁰⁹ Killick, R., Fearnhead, P., & Eckley, I. A. “Optimal detection of changepoints with a linear computational cost” (2012) *Journal of the American Statistical Association*, 107(500), 1590-1598. The authors describe changepoint analysis as “the identification of points within a data set where the statistical properties change.”

¹¹⁰ Derrick Tupper de Kerckhove, Charles Kenneth Minns, and Brian John Shuter, “The length of environmental review in Canada under the Fisheries Act” *Can. J. Fish. Aquat. Sci.* 70: 517–521 (2013).

agenda.”¹¹¹ Probably the most tangible result of that program was the development of the DFO’s “risk management matrix” (Figure 4, below), pursuant to which risks to fish habitat were classified as high, medium, and low, with high-risk projects receiving site-specific review and authorization, medium risk projects being subjected to streamlined authorization processes (including class authorizations),¹¹² and low risk projects being subject to advice and Operational Statements.

As I have noted elsewhere, risk-based approaches to regulation have both strengths and weaknesses.¹¹³ With respect to the former, the 2005 Hampton Report from the United Kingdom suggested that “[p]roper analysis of risk directs regulators’ efforts at areas where it is most needed, and should enable them to reduce the administrative burden of regulation, while maintaining or even improving regulatory outcomes.”¹¹⁴ With respect to weaknesses, however, risk-based approaches “give rise to a number of particular challenges and difficulties,” including a tendency to “neglect lower levels of risk, which, if numerous and broadly spread, may involve considerable cumulative dangers.”¹¹⁵ As further discussed below, the DFO appears to have been relatively successful at reducing regulatory burden but not at improving regulatory outcomes.

Returning to Figure 4, readers may have noted the upward and seemingly arbitrary placement of the low-risk threshold, which results in this category taking up roughly 60% of the available matrix space. This is remarkably

¹¹¹ Fisheries and Oceans Canada, 2005. Annual Report to Parliament on the Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act*, April 1, 2003 to March 31, 2004 at 7. The goals of the “smart regulation” paradigm have been described by Stepan Wood and Lynn Johannson in their article “Six Principles for Integrating Non-Governmental Environmental Standards into Smart Regulation” (2008) 46 *Osgoode Hall L. J.* 345 at 359–360: “‘Smart regulation’ is an umbrella term for efforts to forge a middle path between the extremes of command regulation and deregulation. It aims to make effective and efficient use of public resources. It promotes the use of a sophisticated mix of regulatory instruments, from emission limits to taxes and trading, and from corporate environmental covenants to disclosure obligations and public participation rights. It emphasizes environmental performance goals over the precise techniques used to achieve them. . . . It seeks to stimulate self-reflection and self-correction by regulated actors in line with public goals, rather than by dictating the details of permissible behaviour.” For a more critical assessment, see Jerry V. DeMarco and Toby Vigod, “Smarter Regulation: The Case for Enforcement and Transparency” (2007) 17 *J. Env. L. & Prac.* 85.

¹¹² Class authorizations were issued in Ontario for agricultural works and in the Yukon for placer mining.

¹¹³ For a brief discussion in the Canadian context, see Martin Z.P. Olszynski, “Ancient Maxim, Modern Problems: *De Minimis*, Cumulative Environmental Effects and Risk-based Regulation” (2015) 40:2 *Queens L. J.* 705.

¹¹⁴ UK, Her Majesty’s Treasury, *Reducing Administrative Burdens: Effective Inspection and Enforcement*, by Philip Hampton (London, UK: Her Majesty’s Stationery Office, 2005) at 1.

¹¹⁵ Robert Baldwin & Julia Black, “Really Responsive Regulation” (2008) 71:1 *Mod L Rev* 59 at 66.

consistent with an approximately 60% reduction in authorizations following the implementation of the EPMP starting around 2004/05.¹¹⁶ The reduction in referrals is also consistent with increased reliance on Operational Statements. Figure 5 (below) suggests that, after an initial decline, all known (to the DFO at least)¹¹⁷ habitat activity (all referrals, Operational Statement notifications and class authorizations)¹¹⁸ returned to near pre-EPMP referral levels after a few years. Bearing in mind that Operational Statement notification was voluntary only and that some transition time for the adoption of this tool would be expected, this suggests that the level of habitat-related activity in Canada remained relatively constant throughout the analyzed period (and probably has to this day, as further discussed below). It also suggests that the DFO was fairly successful in delivering a significant reduction in regulatory burden. Put somewhat differently, it means that an increasing portion of habitat-related activity was carried out without the DFO's direct involvement or supervision. Finally but perhaps most importantly, Figure 5 reaffirms that site-specific authorizations have only ever played a very minor role in regulating the totality of impacts to fish habitat in Canada.

With the observed reductions in referrals, one might have expected an increased focus on compliance and enforcement. However, part and parcel of the smart regulatory agenda is a de-emphasizing of traditional enforcement activity.¹¹⁹ Accordingly, in its 2003/04 Report to Parliament, the DFO indicated that near the end of that fiscal year “habitat compliance modernization” had been added to the EPMP, reflecting the program’s “increased emphasis on monitoring and auditing of its regulatory decisions and resourcing *the full continuum* of compliance activities.”¹²⁰

¹¹⁶ Under a standard matrix, one might expect the categories to assume roughly 33% of the available space each. No explanation is provided in DFO's policies for the high placement of the low-risk threshold.

¹¹⁷ As a result of arrangements with various provincial agencies, DFO is not made aware of all habitat-related projects but only those that could potentially require authorization. See e.g. in British Columbia the *Riparian Areas Regulation* B.C. Reg. 376/2004. Thus the actual amount of habitat-related activity in Canada is higher still. Moreover, various agencies have expressed concerns about the effectiveness of such arrangements; see e.g. British Columbia, Office of the Ombudsman, *Public Report No. 50, Striking a Balance: The Challenges of Using a Professional Reliance Model in Environmental Protection — British Columbia's Riparian Areas Regulation* (April 2014) online: <<https://www.bcombudsperson.ca/sites/default/files/Public%20Report%20No%20-%2050%20Striking%20a%20Balance.pdf>>

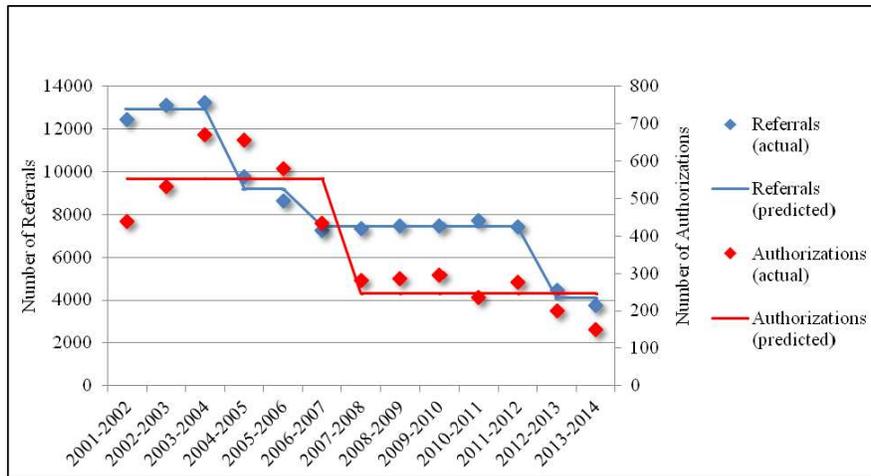
¹¹⁸ Operational Statement notifications and class authorizations are grouped together by DFO in its annual reports but readers should note that the latter only amounted to a fraction (275/year, or 11%, over eight years) of that figure.

¹¹⁹ Wood and Johansson, *supra* note 111; DeMarco and Vigod, *supra* note 111.

¹²⁰ Fisheries and Oceans Canada, Annual Report to Parliament on the Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act*, April 1, 2003 to March 31, 2004 at 9.

Figure 6 (below) indicates a dramatic decline in traditional enforcement activity (warnings and charges) following the introduction of the EPMP and further declines in the past five years. In a paper examining Ontario’s experience with smart regulation, Jerry DeMarco and Toby Vigod observed a correlation between a decreased emphasis on enforcement measures and/or capacity and an increase in pollution exceedances.¹²¹ In the case of fish habitat, the limited information available suggests the same. In 2006, the DFO biologists David Harper and Jason Quigley reported that over 50% of surveyed projects (all from the Pacific region) resulted in HADDs greater than were authorized.¹²² With respect to Operational Statements, a 2011 study of trenchless watercourse crossings in Alberta also identified compliance issues.¹²³ More definitive conclusions are not possible, however, because as noted by the CESD in its 2009 Report to Parliament the DFO has not measured habitat loss or gain, “has limited information on the state of fish habitat across Canada” and has “little documentation to show that it monitored the actual habitat loss that occurred.”¹²⁴ All of this predates the drastic decline (approximately 75%) in enforcement hours allocated since 2012/13.

Figure 3: Section 35 Referrals and Authorizations (Actual and Predicted) (2001/02–2013/14)



¹²¹ DeMarco and Vigod, *supra* note 111.

¹²² Harper and Quigley, *supra* note 58 at 355–356.

¹²³ Nugent, S. 2011. “A review of trenchless watercourse crossings in Alberta with respect to species at risk. Can. Manuscr. Rep. Fish. Aquat. Sci. 2947: vi + 69 p.

¹²⁴ CESD Report 2009, *supra* note 59, ch 1.

Figure 4. The DFO’s Risk Management Matrix¹²⁵

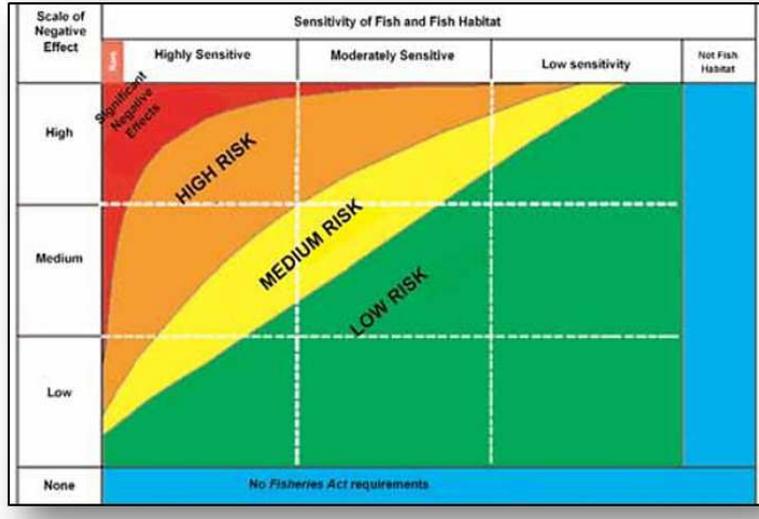
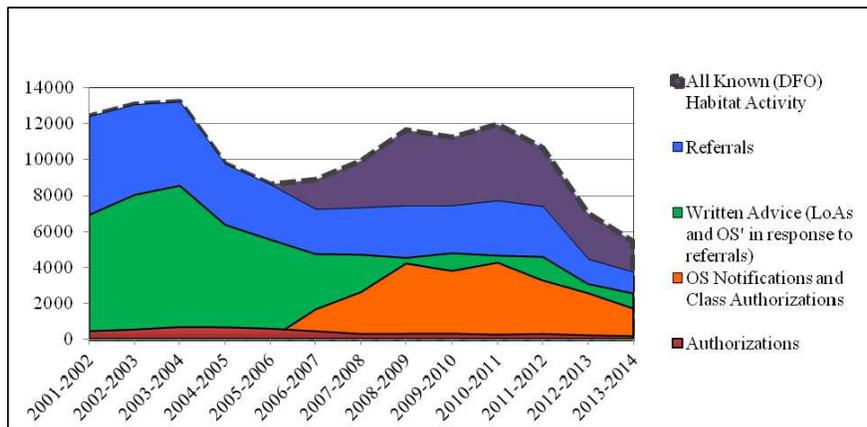
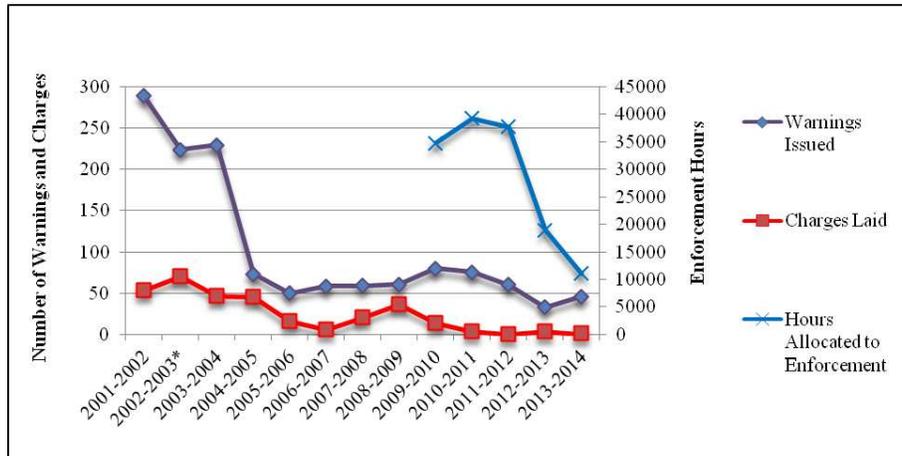


Figure 5: Habitat Activity (2001/02–2013/14)



¹²⁵ Fisheries and Oceans Canada, “Practitioners Guide to the Risk Management Framework for DFO Habitat Management Staff” at 18 (<http://www.dfo-mpo.gc.ca/Library/343443.pdf>)

Figure 6: Habitat/Fisheries Protection Enforcement Activities (2001/02–2013/14)



2. Regional Trends

Figure 7 (below) demonstrates that the Central and Arctic Region and the Pacific Region have always been the busiest regions in terms of section 35 referrals although the Pacific region may now be joining the national trend following the passage of Bill C-38. Bearing in mind its size (3rd largest) and resource-based economy (*e.g.* hydropower, mining, and forestry), some readers may find it puzzling that the Quebec region has consistently received the fewest referrals. For those familiar with the role that federalism and the threat of Quebec separatism in particular has played in Canadian environmental law, however, this result is unsurprising.¹²⁶

3. Sectoral Trends

Figures 8a and 8b demonstrate that the overall trend in decreasing referrals is consistent across all work types,¹²⁷ although in a few cases the decline is more significant than in others, *e.g.* watercourse crossings (roughly a 60% reduction

¹²⁶ See William R. MacKay, “Canadian Federalism and the Environment: The Literature” (2004) 17 *Geo. Int’l L. Rev* 25 at 34, noting that “the provinces continue to exercise the greater share of environmental authority. . . The main reason for this, according to many academics, is the fear that if the federal government were to take a leading, visible role in the environment, this strengthened presence would be perceived as federal interference provoking separatist sentiment in Quebec and objections from provinces highly dependent on natural resource revenue.”

post Bill C-38),¹²⁸ shoreline works (70% reduction),¹²⁹ structures in water (70% reduction),¹³⁰ and dredging (approximately 60% reduction).¹³¹ Mineral, aggregate, and oil and gas exploration, extraction and production decreased from a relatively stable 400 referrals to 100 in 2013/14 (75% reduction).¹³²

With respect to Bill C-38, these reductions can mean one of two things. Proponents are either of the view that (i) historically most of this activity resulted only in temporary disruptions to fish habitat or occurred in water bodies that did not contain fish or the habitat of fish that are part of, or support, commercial, recreational or Aboriginal fisheries, or (ii) that no one is paying attention in any event.¹³³ The beginning of the trend in 2012, a full year and half before the fisheries protection regime was actually brought into force, points towards the latter explanation.

¹²⁷ Two kinds of work types, Control of Nuisance Species and Fish Offal Disposal, have not been included in the graphs for clarity and in light of their low numbers.

¹²⁸ Defined as “Crossings of all kinds that traverse wetlands, streams, brooks, rivers, ponds, lakes, estuaries and any area in the marine environment. Includes small undertakings up to large pipeline and cable crossings across oceans”: Fisheries and Oceans Canada, 2005. Annual Report to Parliament on the Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act*, April 1, 2006 to March 31, 2007, Table 2 at 13.

¹²⁹ *Ibid.*, defined as “physical works along a shoreline, both in the riparian zone and in the zone between Low-Low Water (LLW) (Low Water) and High-High Water (HHW) (Highwater) in a stream, brook, river, lake, estuary or any marine area.”

¹³⁰ *Ibid.*, defined as “structures built in all habitat types (riverine, lacustrine, palustrine (wetlands), estuarine, marine) including: docks and boathouses for personal or commercial purposes, wharves, breakwaters, commercial marine terminals, personal and commercial moorings, boat launches, water intake physical structures including screens, effluent outfall pipes and outfalls, fishing weirs, artificial reefs, and gear placed in water.”

¹³¹ *Ibid.*, defined as “clamshell, backhoe, suction, cutter suction, suction hopper, and any other type of dredging in freshwater, estuarine and marine conditions. Does not include dredging for the purposes of ocean mining of minerals or aggregate.”

¹³² *Ibid.*, defined as “all forms of mining and mineral exploration, including offshore and onshore oil and gas exploration and production, as well as ocean mining. This category also includes the use of explosives or other methods to explore sub-surface geological structures underwater or on land.”

¹³³ *Supra* note 103.

Figure 7: Referrals by Region (2001/02–2013/14)

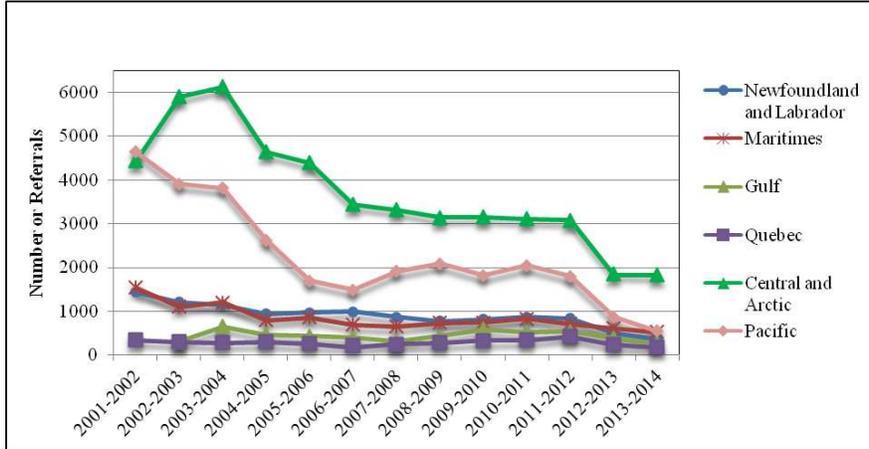


Figure 8a: Referrals by Work Type (2004/05–2013/14)

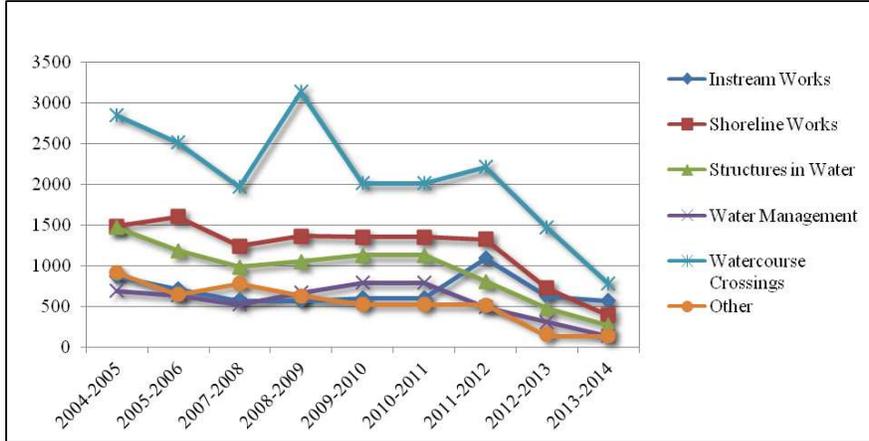
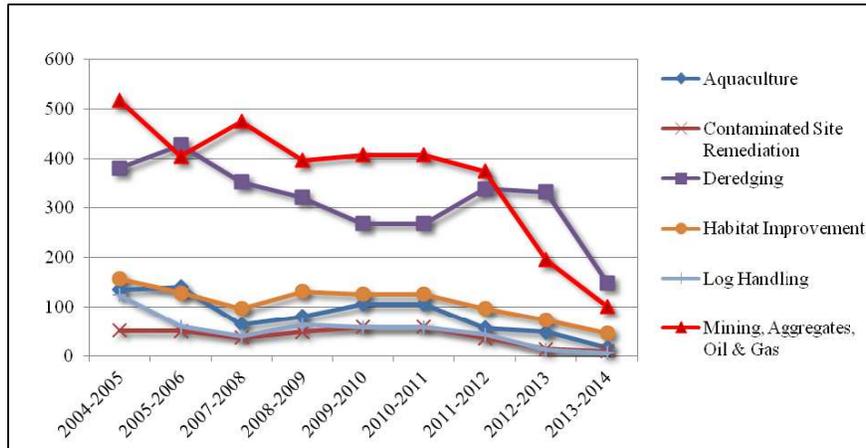


Figure 8b: Referrals by Work Type (2004/05–2013/14)

4. Summary

The foregoing results demonstrate that the federal government has, over the course of the past decade, all but abandoned the habitat protection field. They also suggest that the 2012 changes to the *Fisheries Act* were not driven by bureaucratic ineptitude or a desire to reduce red-tape. On the contrary, DFO appears to have been exemplary in reducing the administrative burden on proponents carrying out what it deemed to be low-risk activities. Rather, the problem appears to have been substantive; government, proponents, or both, deemed actual compliance (*i.e.* avoidance and mitigation of impacts to fish habitat) too burdensome, even in the context of lax enforcement.

C. Habitat Protection v. Fisheries Protection

1. Overall Results

In the five fiscal years before Bill C-38 (2007/08 — 2011/12), the Central and Arctic and Pacific Regions together issued 164, 236, 172, 185 and 219 authorizations/year, respectively. In the six month period between May 1 and October 1 in the following three years (2012, 2013 and 2014), these two regions issued 86, 62 and 36 subsection 35(2) authorizations, respectively, or 172, 124 and 72 authorizations/year (assuming no seasonal variation). Thus, the 2012 vintage, while on the lower end, can be considered reasonably representative of the previous regime, whereas the new regime (2014) clearly represents a departure from the *status quo*, with a 58% reduction in the authorization regime's scope between 2012 and 2014. Seventy-two authorizations from two regions in 2014 would still be higher than 51 (on a national basis) calculated by pro-rating the

four months of data from the DFO’s 2013/14 Annual Report, but it also turns out that 2014 was not a usual year. As further illustrated below, a large number of the 2014 authorizations were in relation to the historic 2013 Alberta floods.¹³⁴

Several mechanisms may be at play here. One possible explanation is that, somewhere in the language of the new regime, the DFO has found the basis for a nearly 60% reduction in its scope. Another possible explanation for reduced authorization activity is a reduction in referrals, which have declined by roughly 50% in these two regions as well (Figure 7, *supra*). Finally, the reduction in authorizations could be the result of a combination of these two mechanisms.

2. Works, Undertakings and Activities

To determine whether the prohibition is being applied to a broader or at least different set of human activities, we categorized authorizations on the basis of the primary work-type for which an authorization was granted.¹³⁵ We also decided to code by sector.¹³⁶ The results (Figure 9a for work-type, 9b for sector, below) indicate that the fisheries protection regime has not, as of yet, captured previously unregulated activities.¹³⁷ Figure 9a also illustrates the disproportionate number of authorizations issued for shoreline work in 2014,

¹³⁴ Kelly Cryderman, “Calgary begins recovery as flood threat moves downstream” *Globe and Mail* (June 22, 2013) online: <http://www.theglobeandmail.com>; Jen Gerson, “Heavy rains in southern Alberta force mandatory evacuations in areas of Calgary and surroundings” *National Post* (June 20, 2013).

¹³⁵ Work categories were determined using the information provided within the “Description of Works of Undertakings” in each authorization, applying the work category definitions contained within DFO’s Annual Reports to Parliament. Changes to these categories and their definitions were last implemented in the 2007/2008 report, where the definitions used for our purposes first appeared (see Table 2 of that report). To determine which of the work categories applied to a given authorization, the overall objective of the project was first considered. The method of work (*e.g.* excavation, dredging) and location of the undertaking also informed the categorization process where ambiguity remained.

¹³⁶ Sectors were also determined using categories selected by DFO. In its 2009-2010 Report, DFO began reporting allocation of compliance effort by sector, identifying ten sectors under which authorizations can be categorized. For the purposes of this paper, the sector to which a proponent belonged was the main consideration in determining how a project would be categorized. The “Description of Works and Undertakings” was also evaluated to confirm categorization. For example, a provincial or municipal government proponent generally would fall into the “Rural/Urban Development” category. However, if the project involved the construction of a road or bridge, the authorization would be coded under “Transportation”. Readers should note that the “Recreational” category does not mean recreational activities as discussed in Part II (*e.g.* all-terrain vehicles), but rather that the proponent is engaged in providing some kind of recreational service, *e.g.* golfing.

¹³⁷ It is probably too early for such a change to take effect, especially in the absence of any kind of educational campaign or other proactive awareness raising activity from the DFO. In fact, all of the messaging surrounding the amendments was about a restriction in the regime’s scope.

which as noted above are related to the Alberta floods of 2013. When shoreline work is adjusted to reflect the average of the two preceding years (see column marked 2014*), the number of authorizations in 2014 decreases further and the distribution becomes similar to that of preceding years (at least in terms of the primary work-types) except that the number of authorizations for mining, aggregates and oil and gas is higher in 2014.

Figure 9b reflects this same pattern, with flood-related work being captured under “rural/urban development”. Figure 9b also clarifies that, with respect to mining, aggregates and oil and gas, the increase in authorizations in 2014 is attributable to mining only; no authorizations were issued to the oil and gas sector in that year. These results can be reconciled with the overall reduction in referrals from this group of sectors (Figure 8b, above) as follows. Mining companies can be expected to have sufficient in-house capacity to assess whether or not an authorization is required, such that the number of referrals can decrease while a higher percentage of those actually made would require authorizations. Furthermore, and in contrast to oil and gas activity, mining projects usually require the destruction of relatively large amounts of fish habitat (*e.g.* for the construction of tailings ponds).

3. HADD v. DPAD

Assuming perfect implementation of both the prior and new regime, one could expect there to be fewer authorizations in the 2014 vintage simply on the basis that one kind of impact, temporary disruptions, is no longer prohibited or regulated. This scenario is complicated, however, by the fact that since the implementation of the EPMP DFO risk-managed low-risk projects away from the authorization stream. Consequently, all authorizations were coded on the basis of the type of impact that was being authorized.¹³⁸ The results (Figure 10, below) indicate that harmful alterations and disruptions alone constituted only a small portion of DFO’s authorization activity under the HADD regime. With respect to disruptions alone, there were only three authorizations issued in 2012 (3.4%) and two in 2013 (3.2%). This is consistent with the DFO’s risk-management framework: in terms of negative effects, a *reduction* in habitat

¹³⁸ Many of the authorizations explicitly identified the type of impact that was being authorized. Some authorizations, however, merely referred to HADD in general terms and did not specify the type of impact(s). Where this occurred, the project description as well as the description of the area of impact informed our selection. Definitions for distinguishing these types of impacts were taken from DFO’s *Decision Framework for the Determination and Authorization of Harmful Alteration, Disruption or Destruction of Fish Habitat*, *supra* note 70. Projects involving the infilling of instream habitat, or the permanent removal of riparian vegetation were categorized as destruction of fish habitat. Impacts that were described as temporary were coded as a harmful alteration or disruption. Where the authorizations did not specifically identify the type of impacts authorized but at least some amount of destruction of fish habitat was apparent from the types of works being authorized, the authorization was coded as ‘Destruction + HA, d, HAd, or PA (2014)’. Impacts were coded as ‘Destruction only’ when the entirety of the impact authorized was described by DFO as destruction.

usefulness (the key term for “harmful alteration” and “disruption”) would be expected to be considered less severe than its total *elimination* (the key term for destruction),¹³⁹ with a greater chance of such impacts being deemed “low-risk” and not requiring authorization.

On the one hand, this suggests that the change from HADD to PAD was not as a drastic one as some industry lawyers and environmental groups suggested, or at least may have been understood as suggesting.¹⁴⁰ Practically speaking, few projects that did not involve at least some destruction of fish habitat would have been caught by the regulatory process under the previous HADD regime anyway. This is not to say that disruptions and other harmful alterations were not prohibited (they were) but proponents were actively dissuaded from seeking an authorization and more or less assured compliance if they followed the mitigation measures set out in a Letter of Advice or applicable Operational Statement. In this latter sense, the change to DPAD could be considered significant in that proponents of such projects no longer have to concern themselves with any mitigation measures whatsoever. The extent of this change is difficult to ascertain, however, because of the previously discussed uncertainty with respect to compliance under the HADD regime. As noted above, implementation of the EPMP included a significant decline in enforcement activity, with an average of 4 and 3 convictions/year in the Central and Arctic and Pacific regions, respectively (Table 2). It is doubtful that these low numbers would have had much (if any) of a deterrent effect.¹⁴¹ Thus, in terms of actual effects on fish habitat, the change to DPAD may have served primarily to simply render lawful projects that would have probably been non-compliant under the HADD regime.

Table 2: Section 35 Convictions Rates (Central & Arctic, Pacific, National)

Fiscal Year	Central & Arctic	Pacific	National
2004-2005	10	2	17
2005-2006	7	4	21
2006-2007	0	7	14
2007-2008	6	10	18

¹³⁹ *Supra* notes 70–72.

¹⁴⁰ Crossman et al., *supra* note 67; Ecojustice, *supra* note 19, WCEL *supra* note 20.

¹⁴¹ Dianne Saxe “The Impact of Prosecution of Corporations and their Officers and Directors upon Regulatory Compliance by Corporations” (1990) 1 J.E.L.P. 91. Dr. Saxe surveyed approximately 100 major Canadian corporations with respect to their environmental performance and how it might be affected by various enforcement policies. Her survey “provides empirical evidence to support the decision of environmental regulators to give greater emphasis to prosecution, both of corporations and of their officers and directors. Corporations which have been prosecuted allocate significantly more of their resources to environmental protection than do corporations which have not been prosecuted” (at 100).

Fiscal Year	Central & Arctic	Pacific	National
2008-2009	0	1	2
2009-2010	6	1	7
2010-2011	3	2	9
2011-2012	7	2	13
2012-2013	0	0	7
2013-2014	2	1	3

Most importantly, Figure 10 makes clear that the change from HADD to DPAD cannot account for the 58% reduction in authorization activity under the new regime. At most, this change could account for a 16% reduction (86 minus 14 authorizations for harmful alteration and/or disruption only). Therefore, there must be some other basis for the observed reduction in the number of authorizations.

Figure 9a: Authorizations by Work Type (2012–2014)

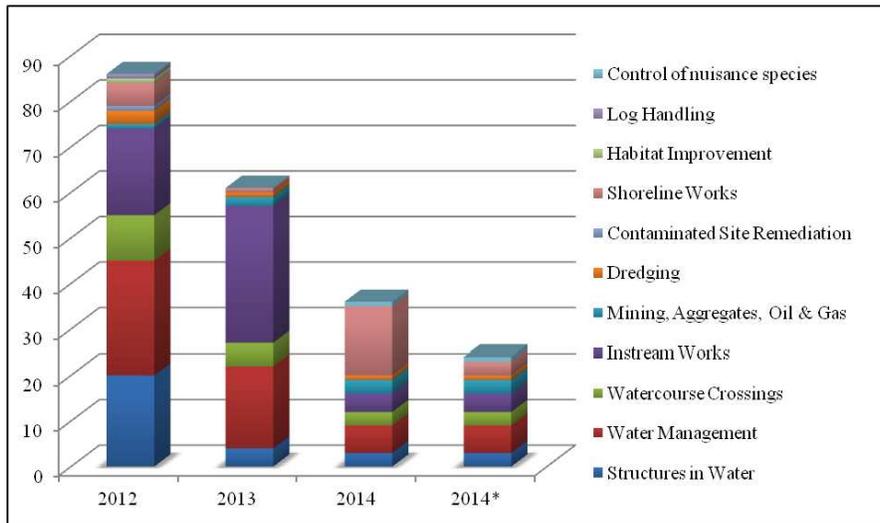


Figure 9b: Authorizations by Sector (2012–2014)

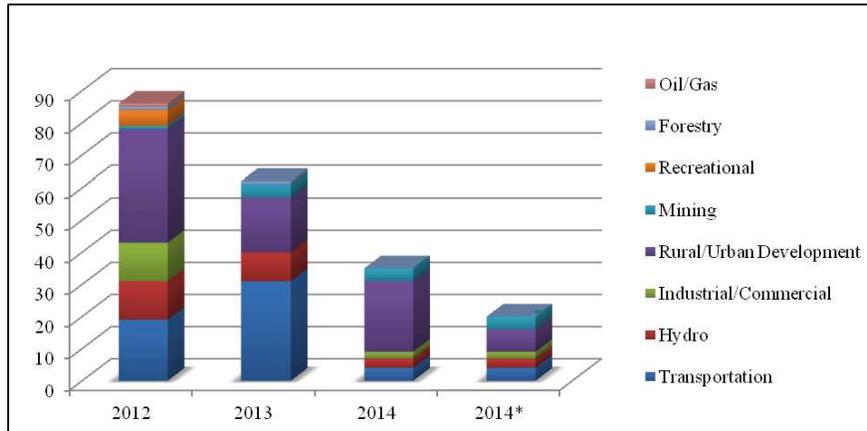
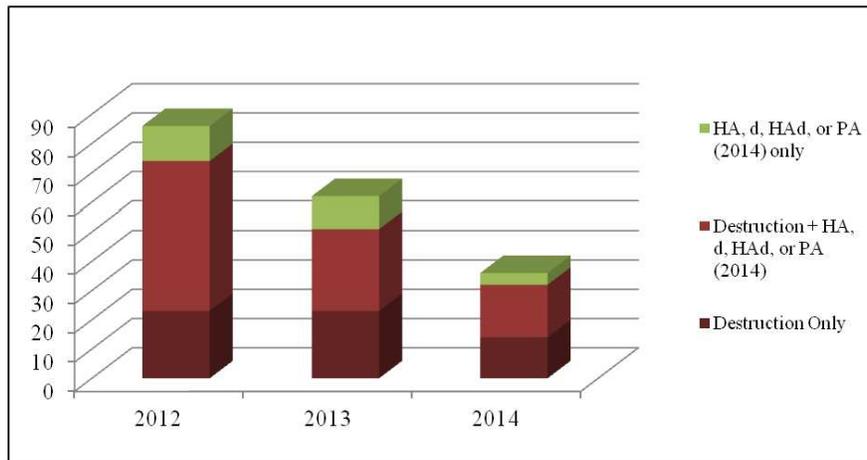


Figure 10: Authorizations by Type of Impact (HADD v. PAD)



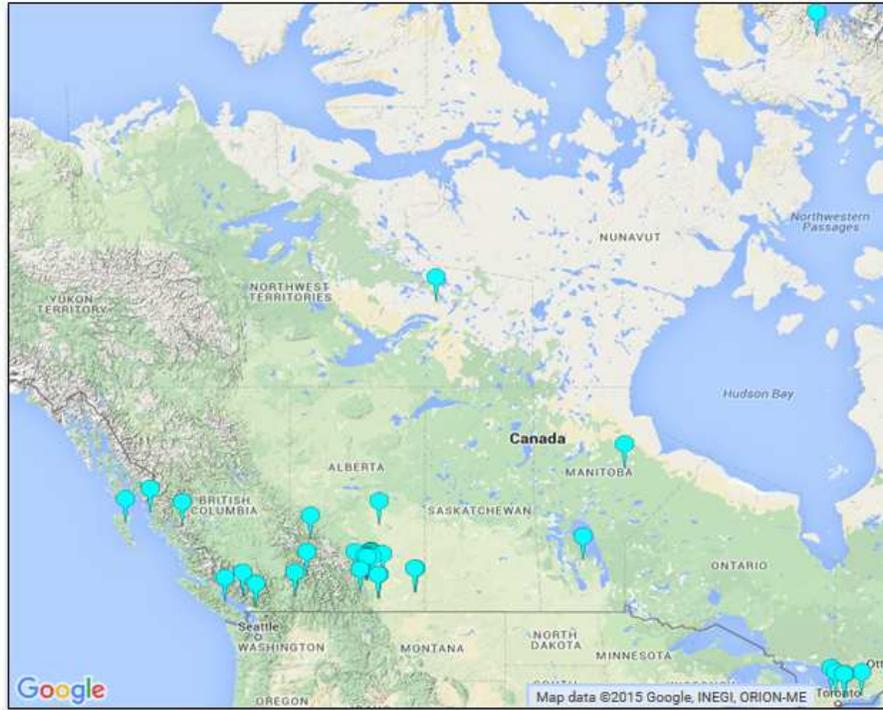
4. The Fisheries Requirement

The foregoing suggests that if the reduction in the number of authorizations is coming from the DFO, it must be through the fisheries requirement. To determine whether this requirement was having the drastic effect predicted by Professors Hutchings and Post, the coordinates of all authorizations issued in 2012, 2013 and 2014 were plotted using Google Maps (Figures 11a, 11b and 11c, respectively).¹⁴²

Figure 11a: Authorizations Issued Between May 1–October 1, 2012**Figure 11b: Authorizations Issued Between May 1–October 1, 2013¹⁴³**

¹⁴² This map, which also provides the name of the proponent for each authorization, is available at <https://8f09d724af0fb307ff0c880df59c12aeb6e38854.googledrive.com/host/0B313p8j8VxBiUUNxNkIXTUIOV1k/xsMapping.html?f=dfoAuthorizations-Map.Data.json>

¹⁴³ Canada's northern territories have been cropped from this image because there were no authorizations issued there during the relevant time period.

Figure 11c: Authorizations Issued Between May 1–October 1, 2014

The first observation is that, apart from the fact that there are fewer authorizations in 2014, their distribution more or less resembles the distribution from 2012 (in fact, 2013 exhibits the strongest urban concentration; such authorizations account for 44% of the total). Although the data is obviously limited, the absence of any obvious change in pattern is consistent with the government’s talking points and the DFO’s approach that the fisheries requirement does not represent a fundamental change to the scope of the regime.¹⁴⁴ In Canada’s vast north, it is probably Aboriginal fisheries in particular that will put the prohibition in play.¹⁴⁵ It seems doubtful, for example, that Kennedy Lake (the water body adjacent to DeBeers’ Gahcho Kue mine in the Northwest Territories, which was issued an authorization in 2014) is home to any kind of significant fishery other than an Aboriginal one. The same could be said for Baffinland Iron Mines Corporations’ 2014 authorization on Baffin Island (Figure 11c, top right corner).

¹⁴⁴ *Fisheries Protection Policy Statement*, supra note 33.

¹⁴⁵ For a discussion of some of the implications of the new “serious harm to fish” regime in Canada’s north specifically, see Nikolaus Gantner, “Does Canada’s New *Fisheries Act* Leave Some Arctic Fish or Habitats Behind?” (2014) 67.1 *Arctic* at iii–v.

The more striking realization, however, is that the vast majority of Canada's freshwater lakes and rivers appear to not have had the benefit of habitat protection well before the implementation of the new fisheries protection regime. It is simply untenable to suggest that there were only two instances of habitat destruction (to say nothing of harmful alteration or disruption) requiring authorization in all of northern British Columbia, Alberta, Saskatchewan, Manitoba and Ontario during the period sampled (excluding the 2014 vintage, which would bring the number to three). In addition to a long-established forestry industry,¹⁴⁶ this vast area includes the Montney and Horn River shale gas plays of northeastern British Columbia and northwestern Alberta, which have seen significant development in the past decade.¹⁴⁷ It also includes Alberta's Lower Athabasca Region, which is home to Canada's oil sands resources (both mining and *in situ*).¹⁴⁸ Most of this development falls within Canada's Peace-Athabasca watershed, the threats to which have most recently been assessed as follows:

High levels of pollution are a concern, with all sub-watersheds except the Williston Lake sub-watershed scoring *moderate* or above. Transportation incidents are *very high* in the Central Peace—Upper, as are pipeline incidents in the Upper Peace and Upper Athabasca. Habitat loss also scores *high*, due primarily to forest loss and, to a lesser extent, farming and urban and industrial development. Habitat loss is greatest in the Lower Athabasca sub-watershed (*very high*) and the Lower Peace and Central Athabasca—Lower sub-watersheds (*high*). . . . The level of habitat fragmentation is *moderate* overall but *high* in the Central Athabasca—Upper, Williston Lake and Upper Peace sub-watersheds.¹⁴⁹

¹⁴⁶ See Natural Resources Canada, "Overview of Canada's forest industry" (accessed 26 August 2015) online: <http://www.nrcan.gc.ca/node/13311>.

¹⁴⁷ The development in this area has been so extensive that the Blueberry River First Nation (BRFN), a signatory of Treaty 8, has recently sued British Columbia for breach of that treaty to the extent that the BRFN can no longer practice their treaty rights to hunt, fish and conduct other activities on the land. See Mark Hume, "First Nations seek injunction barring development in Fort St. John region" *The Globe and Mail* (4 March 2015), describing development in the region as follows: "In addition to two existing hydro dams in the region, there are roughly more than 16,000 oil and gas wells, 28,000 kilometres of pipelines, 4,000 square km of coal tenures, 5,000 square km of logging cutblocks and 45,000 km of road."

¹⁴⁸ Readers interested in learning more about oil sands development are directed to Alberta's Oil Sands Information Portal, described by the government as "a one-window source about the environmental impacts of oil sands development" and including an interactive map and downloadable datasets: <http://osip.alberta.ca/map/>.

¹⁴⁹ The World Wildlife Fund Canada (WWF-Canada) recently launched an innovative online tool, Watershed Reports (<http://watershedreports.wwf.ca/>), which allows users to access the assessed health of, and threats to, their watersheds and sub-watersheds (the project is 50% complete, with a final completion date in 2017). For the Peace-Athabasca watershed, see <http://watershedreports.wwf.ca/#ws-6/by/threat-overall/threat> (last accessed: 20 July 2015).

This assessment is consistent with resource development trends. According to Natural Resources Canada, the total value of Canadian exports in energy, minerals, and metals products has nearly doubled between 2000 and 2013 (to \$207 billion).¹⁵⁰ While some of these gains are attributable to increases in commodity prices, capital expenditures in the mining sector have also risen steadily over the past ten years,¹⁵¹ meaning more roads, bridges, seismic lines, and other related infrastructure. Although some of these projects are captured in the authorizations analyzed here, especially mining and hydro activity in British Columbia, the plotted maps suggest that most of Canada’s north has seen virtually no development activity in the past three years, which is clearly false.¹⁵²

To be sure, even where the DFO has some presence, the news is often bad. British Columbia’s Fraser River is perhaps the best known example.¹⁵³ Similarly, a recent survey of 54 small rivers and streams that flow into the iconic Oldman River (part of the South Saskatchewan watershed in southern Alberta)¹⁵⁴ found that nearly every one faces multiple pressures, including logging roads, energy development and off-road vehicle use, with significant impacts on trout populations in particular.¹⁵⁵ This is consistent with the latest freshwater and

¹⁵⁰ Natural Resources Canada, “Our Resources, New Frontiers: Overview of Competitiveness in Canada’s Natural Resources Sector” (2012) *Energy and Mines Ministers’ Conference*, at 6, available online: <http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/www/pdf/publications/emmc/140179_Our%20Resources%20New%20Frontiers_e.pdf>

¹⁵¹ See Natural Resources Canada, “Mineral Exploration, Deposit Appraisal, and Mine Complex Development Activity in Canada, 2010 and 2011,” Figure 1. Total Mineral Resource Development Expenditures in Canada, 1997-2011 (showing an increase from a low of less than \$5 billion in 1999 to over \$14 billion in 2011) (online: <<https://www.nrcan.gc.ca/mining-materials/exploration/13814#f1>>)

¹⁵² See also Ryan Cheng and Peter Lee, “Canada’s Industrial Concessions: A Spatial Analysis” (2014) *Global Forest Watch* http://www.globalforestwatch.ca/files/publications/20140227A_GFWC_Concessions_Bulletin.pdf.

¹⁵³ Cohen Commission, *supra* note 27.

¹⁵⁴ This river, and the dam that was eventually built on it, lent its name to one of the most important environmental law decisions from the Supreme Court of Canada. In *Friends of the Oldman River Society v. Canada (Minister of Transport)*, [1992] 1 S.C.R. 3, the Supreme Court affirmed the importance of environmental protection and recognized environmental assessment as an integral component of sound governmental decision-making. The decision has been the subject of numerous articles and commentary and continues to play an important role in Canadian environmental law jurisprudence (having been cited almost 200 times in that context) and scholarship to this day. See *e.g.*, Steven A Kennett, “Federal Environmental Jurisdiction after *Oldman*,” Case Comment, (1993) 38:1 McGill LJ 180; Jean Leclair, “The Supreme Court of Canada’s Understanding of Federalism: Efficiency at the Expense of Diversity” (2003) 28:2 Queen’s LJ 411; Jerry V DeMarco, “Law for Future Generations: The Theory of Intergenerational Equity in Canadian Environmental Law” (2004) 15:1 J.E.L.P 1; Marie-Ann Bowden and Martin Olszynski, “Old Puzzle, New Pieces: *Red Chris* and *Vanadium* and the Future of Federal Environmental Assessment” (2011) 89 Can. Bar. Rev. 445.

¹⁵⁵ Bob Weber, “Development threatens virtually all Alberta trout: biologist” *Canadian*

fisheries research generally: “The greatest threat to freshwater ecosystems is the loss or alteration of freshwater habitats through human development.”¹⁵⁶

Finally, another important finding in WWF Canada’s report is that in 25% of cases there is insufficient monitoring data available to assess watershed health.¹⁵⁷ All of the above seriously undermines the Conservative government’s assertion that the DFO’s previous policies went “well beyond what is required” to protect fish and fish habitat.¹⁵⁸

5. Size of Impact?

In light of the above, an attempt was made to determine if there was any other variable that might explain the reduction in authorization activity. Although the size of impact is not explicitly reflected in the new regime, it is often — if incorrectly — equated with significance, and some have suggested that the term “serious harm to fish,” although defined in the Act to mean simply “the death of fish and the permanent alteration, or destruction of, fish habitat,” implies that such impacts need to reach a certain threshold. The results suggest that the DFO has indeed adopted such an approach. Figures 12a and 12b demonstrate that the number of authorizations for impacts less than 1000 m² have declined from 2012 to 2014, while the proportion of impacts between 1000 m² and 10,000 m² has increased. This change can account for roughly 40% (20 out of 51) fewer authorizations from 2012 to 2014.

Press (12 July 2015); <http://www.ctvnews.ca/sci-tech/development-threatens-virtually-all-alberta-trout-biologist-1.2465512>

¹⁵⁶ Nicolas W.R. Lapointe, Steven J. Cooke, Jack G. Imhof et al., *supra* note 99.

¹⁵⁷ *Supra* note 149. This is consistent with most assessments of monitoring capacity in Canada. See e.g. Federal, Provincial and Territorial Governments of Canada, Canadian Biodiversity: Ecosystem Status and Trends 2010 (Ottawa: Canadian Councils of Resource Ministers, 2010) at 104–05.

¹⁵⁸ *Supra* note 5. See also B Favaro, JD Reynolds, IM Côté, “Canada’s weakening aquatic protection” (2012) *Science* 337 (6091), 154, arguing that “[t]he scientific case for protecting aquatic habitats is as strong as ever, and the justifications for weakening protection do not bear up to reasonable scrutiny.”

Figure 12a: Proportion of Authorizations by Impact Size (2012 — 2014)

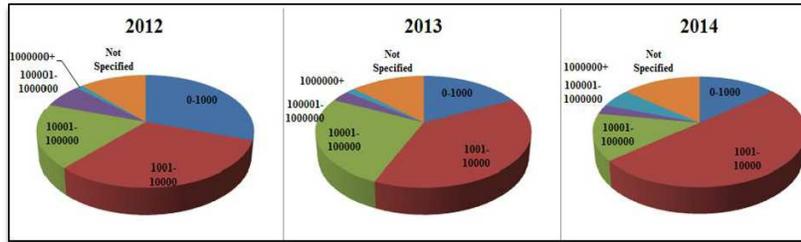
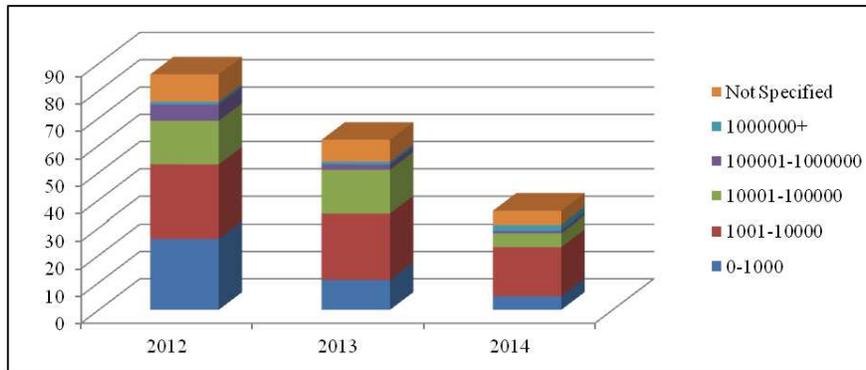


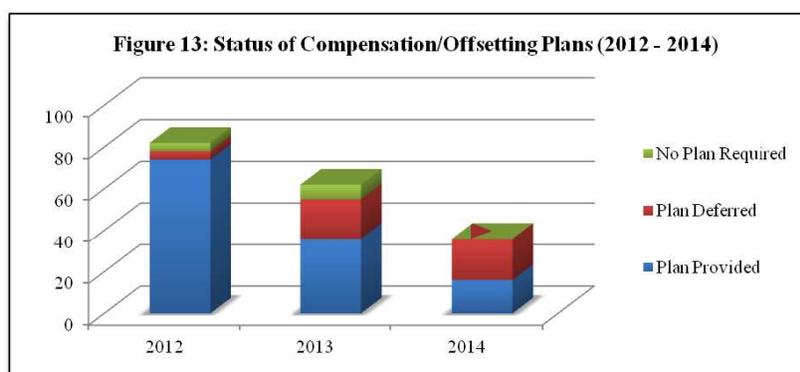
Figure 12b: All Authorizations by Impact Size (2012–2014)



6. Section 6 Factors and Purpose Clauses

Finally, authorizations were analyzed to determine whether the addition of the section 6 factors is having any appreciable effect on their contents. Generally, authorizations from 2014 were observed to be shorter and less detailed than in previous years.¹⁵⁹ With respect to offsetting plans in particular, and bearing in mind that this was a matter of policy before but now is a required consideration, these are increasingly being deferred to a later time (Figure 13).¹⁶⁰ This is probably a reflection of the three month time limit imposed by the new section 35 application regulations,¹⁶¹ coupled with resource constraints following the significant cuts to the DFO's budget. But such an approach is also probably unlawful; section 6 is clear that the Minister must consider the relevant factors *prior* to exercising his or her authority pursuant to section 35.

Figure 13: Status of Compensation/Offsetting Plans (2012–2014)



Arguably, such a state of affairs has been made possible because sections 6 and 6.1 are half measures only; in addition to listing a series of mandatory factors, establishing a clear structure for the regulatory review process also requires transparency (*e.g.* by making decisions public).¹⁶² Notwithstanding the

¹⁵⁹ For 2012, the average was 8.92 pages/authorization, for 2013 it was 8.87 pages, while for 2014 it was 7.50 pages.

¹⁶⁰ For a more detailed discussion of DFO's new offsetting regime, see David Poulton, "Offsetting for Serious Harm: The Recent Evolution of Section 35 of the Fisheries Act, 1985" (2016) 29 J. Env. L & Prac. (forthcoming).

¹⁶¹ *Supra* note 51, s. 6 (sixty day limit to confirm completeness of a subsection 35(2) authorization request) and s. 7 (ninety day limit to issue authorization following notice of completeness).

¹⁶² See Stewart Elgie, "Statutory Structure and Species Survival: How constraints on Cabinet discretion affect Endangered Species Listing Outcomes" (2008) 19 J Env Law & Prac 1 (describing a study of Canada's various endangered species laws (federal and provincial) as indicating that a requirement to give public reasons "can have a substantial

fact that the Supreme Court of Canada has long held that Canada’s fisheries are a public resource,¹⁶³ the DFO has never maintained a public registry of section 35 authorizations. At least under the previous *CEAA, 1992* regime, this reality was offset by the fact that the need for a section 35 authorization triggered a federal environmental assessment, information about which would be posted on the Canadian Environmental Assessment Registry.¹⁶⁴ But as noted in the introduction Bill C-38 also repealed that regime and replaced it with *CEAA, 2012*, whose dominant feature is abandonment of the trigger approach in lieu of a (major) project list, such that the registry no longer reflects the DFO’s authorization activity. Consequently, the only way for non-proponents to become aware of an authorization now is through an access to information request.

IV. DISCUSSION

The foregoing analysis of the habitat/fisheries protection regime under the *Fisheries Act* is consistent with longstanding concerns with respect to Canadian environmental law generally: “Something is badly wrong.”¹⁶⁵ With the passage of Bills C-38 and C-45, it appears that things have gone from badly wrong to worse, the federal government having all but abdicated its role in protecting fish habitat.

Numerous lessons can and should be drawn from this state of affairs, whether with respect to the continuing role of federalism in environmental law and policy, the proper approach to environmental law reform, or the potential for monitoring and other information technologies to better inform decision-making and regulatory regimes more generally. The following two sections focus on two common challenges in modern environmental law and policy: slippage (non-compliance) and risk-based approaches to regulation.

A. Addressing Slippage

In “Taking Slippage Seriously: Noncompliance and Creative Compliance in Environmental Law,” American law professor Daniel Farber distinguishes between two kinds of non-compliance in environmental law: negative slippage and positive slippage. Negative slippage occurs when “something that is legally

effect on the decisions of cabinet,” supporting the “theoretical intuition that greater transparency is not only consistent with democratic principles, it also can produce different — and in this case likely better — policy decisions” (at 26).

¹⁶³ *Interprovincial Co-operative Ltd. v. R.* (1975), [1976] 1 S.C.R. 477 at p. 495: “Federal power in relation to fisheries. . . is concerned with the protection and preservation of fisheries as a public resource, concerned to monitor or regulate undue or injurious exploitation. . . .”

¹⁶⁴ Canadian Environmental Assessment Registry, online: <http://www.ceaa.gc.ca/050/index-eng.cfm>

¹⁶⁵ Stepan Wood, Georgia Tanner and Benjamin Richardson, “What Ever Happened to Canadian Environmental Law?” (2011) 37 *Ecology L. Q.* 981 at 984.

mandated simply fails to happen. Deadlines are missed, standards are ignored or fudged, enforcement misfires.”¹⁶⁶ Positive slippage occurs when “the required standards are renegotiated rather than ignored, resulting in a regulatory regime that may bear little resemblance to the ‘law on the books.’”¹⁶⁷

Canada’s habitat/fisheries protection regime has exhibited both kinds of slippage. The DFO’s virtually non-existent enforcement activity amounts to negative slippage, while its implementation of the section 35 authorization regime is a clear example of positive slippage. With respect to the previous habitat protection regime, the DFO renegotiated what on its face was a broad prohibition against even relatively minor impacts on fish habitat (HADD), replacing it with an extra-statutory risk-based framework that bore little resemblance to the “law on the books”. Similarly, under the new fisheries protection regime, the DFO appears to have substituted qualitative standards (permanent alteration or destruction) with a quantitative one (size of impact). The DFO’s web-based self-assessment tool, which lists a series of works that the DFO advises do not require its review, is also a risk-based renegotiation of the legislative standard.

While Professor Farber acknowledges that some slippage may be inevitable (*e.g.* where the legislature has imposed an unrealistic burden on departments or proponents, which is arguably a fair criticism of the previous HADD regime) and can even be beneficial,¹⁶⁸ he is also very clear about its implications for the rule of law, implications that are equally applicable to Canada:

. . . slippage raises substantial problems of transparency and accountability. In an effort to ensure the transparency and accountability of conventional regulation, society has adopted a variety of procedures, ranging from the constitutional requirements for legislation. . . and judicial review. Slippage erodes these guarantees. . . Much important policy is made through regulatory inaction, settlement of litigation, and other techniques that operate outside of full public view. Moreover, these techniques do not contain the usual opportunities for public input or the normal mandates for deliberative decision-making. They take place, in other words, very much in the shadow of the law, not in the light of public deliberation.¹⁶⁹

Somewhat ironically, in both Canada and the United States the problem of slippage appears to have been exacerbated by principles and doctrines of administrative law. Professor Farber argues that the Supreme Court of the United States’ doctrines with respect to judicial review and standing have increased the difficulty in addressing slippage. With respect to the *Chevron* doctrine:

¹⁶⁶ Farber, *supra* note 36 at 299.

¹⁶⁷ *Ibid.*

¹⁶⁸ *Ibid* at s. 325, noting that it has occasionally “provided an opportunity for some important innovations in environmental regulation.”

¹⁶⁹ *Ibid* at s. 319.

The likelihood that an agency can successfully avoid compliance is inversely related to the strictness with which its legal position will be reviewed in court. The *Chevron* doctrine diminishes the threat of overturning the agency’s legal interpretation. Except when the agency’s position is clearly incompatible with the statutory text (or perhaps, clear legislative history), *Chevron* requires courts to defer to any “reasonable” interpretation by the agency. . .¹⁷⁰

The Canadian analog to *Chevron* is *Dunsmuir*,¹⁷¹ which sets out the basic rule of deference to administrative decision-makers.¹⁷² Discretion with respect to the implementation of a regulatory regime may even be a special case in Canada, mandating additional deference. In *Distribution Canada Inc. v. Minister of National Revenue*,¹⁷³ various retailers on the Canadian side of the U.S./Canada border challenged the Minister’s policy to not collect duties on certain non-exempt groceries and other purchases made by Canadians in the U.S., which had a detrimental effect on their businesses. According to the Federal Court of Appeal, “[o]nly he who is charged with a public duty can determine how to utilize his resources. This is not a case where the Minister *has turned his back on his duties, or where negligence or bad faith has been demonstrated*. It is a case where the Minister has established difficulties in implementation and where he enjoys a discretion with which the law will not interfere.”¹⁷⁴

While standing is not usually a problem for environmental groups in Canada, another doctrine that has thwarted previous attempts to restrict the DFO’s ability to issue Letters of Advice specifically — and which the government would be certain to raise in any challenge to its new, web-based self-assessment tool — is non-reviewability. In *Cassiar Watch v. Canada (Minister of Fisheries & Oceans)*,¹⁷⁵ the Federal Court declined to review a Letter of Advice issued to Shell because of its view that “it is a non-binding opinion which has no legal effect.”¹⁷⁶

If the results discussed in this paper are any indication, this is an area of law in need of serious reconsideration. While it may theoretically be true that policies, risk-based frameworks and extra-statutory lists of exempted works have

¹⁷⁰ *Ibid* at s. 311

¹⁷¹ *New Brunswick (Board of Management) v. Dunsmuir*, 2008 SCC 9, (*sub nom.* Dunsmuir v. New Brunswick) [2008] 1 S.C.R. 190.

¹⁷² See Shaun Fluker and Alice Woolley, “What has *Dunsmuir* Taught?” (2010) 47 *Alberta Law Review* 1017. With respect to the interpretation of legislation, the presumption of deference to administrative decision-makers was recently affirmed in *British Columbia (Securities Commission) v. McLean*, 2013 SCC 67, [2013] 3 S.C.R. 895 at paras. 21–22.

¹⁷³ (*sub nom.* *Distribution Canada Inc. v. M.N.R.*) [1993] 2 F.C. 26 (C.A.), leave to appeal refused [1993] 2 S.C.R. vii [*Distribution Canada Inc.*].

¹⁷⁴ *Ibid.* [emphasis added]

¹⁷⁵ 2010 FC 152.

¹⁷⁶ *Ibid.*, at para 24, citing *Democracy Watch v. Canada (Conflict of Interest & Ethics Commissioner)*, 2009 FCA 15, leave to appeal refused 2009 CarswellNat 1536 (S.C.C.).

no legal effect,¹⁷⁷ the practical effect is a regulatory regime that is entirely different from the one debated and passed by the legislature. In the case of the habitat/fisheries protection provisions, it may be possible to argue that the Minister has in fact “turned [her] back on [her] duties” (the exception carved out in *Distribution Canada Inc.*)¹⁷⁸ Another potential path forward may be to recognize that, in some instances, such efforts amount to suspension (at least partially) of Parliament’s laws, which has long been forbidden: “The Crown may not suspend laws or the execution of laws without the consent of Parliament; nor may it dispense with laws, or the execution of laws.”¹⁷⁹ At the very least, courts should require that risk-based approaches be sufficiently supported by the governing legislation.

B. Lessons for Risk-based Regulation

The DFO’s implementation of the EPMP also provides a case study of risk-based regulation at work, illustrating its promise of reduced administrative burden but also its pitfalls at a time when many regulators throughout Canada are embracing risk-based approaches, including Environment Canada, the National Energy Board and the Alberta Energy Regulator.¹⁸⁰

The deceptively simple idea behind risk-based regulation is that regulators should focus their (increasingly) limited resources on those risks that pose the greatest threat to the achievement of their objectives. As noted by Professor Julia Black, however, risk based regulation is “inherently complex,” entailing the management of not one but three “R’s”: risk, resources and reputation: “Managing each of these elements is complex in itself. Managing them all successfully simultaneously can be impossible, as they can each pull in different directions.”¹⁸¹ Arguably, it is precisely this paradox that led to the 2012

¹⁷⁷ Even this claim is questionable, however, as it seems clear that in the event of a prosecution proponents could and would rely on such instruments to mount a defence of officially induced error or some other due diligence defence.

¹⁷⁸ *Distribution Canada Inc.*, *supra* note 173.

¹⁷⁹ See *R. v. Catagas*, 1977 CarswellMan 110, [1977] M.J. No. 73 (C.A.) at para. 2, citing 7 Hals. (3d) 230 at para. 486. The Court of Appeal continued (at paras 3 and 4): “The distinction between these two ancient powers may be briefly noted. By virtue of the suspending power the Crown suspended the operation of a duly enacted law of Parliament, and such suspension could be for an indefinite period. . . Under the dispensing power the Crown purported to declare that a law enacted by Parliament would be inapplicable to certain named individuals or groups. By virtue of a dispensation in their favour the law would not apply to them, but it would continue to apply to all others.”

¹⁸⁰ Olszynski, *supra* note 109 at 709-710. For an international and cross-sectoral perspective, see Julia Black, “Paradoxes and Failures: ‘New Governance’ Techniques and the Financial Crisis” (2012) 75:6 Mod L Rev 1037 at 1052: “. . . over the last ten to fifteen years, [risk based regulation] has been increasingly adopted by regulators in areas as diverse as the environment, food safety, health and safety, legal services and financial regulation, and by a wide number of OECD countries.”

¹⁸¹ Black, Paradoxes and Failures, *ibid* at 1053.

amendments to the *Fisheries Act* and the DFO’s near total abdication of the habitat field.

As noted above, the DFO appears to have done a relatively good job of managing at least one “R” — its resources: implementation of the EPMP would have resulted in a significant reduction of its regulatory obligations. The important flip side of this coin was proponents’ regulatory burden, which would have seen a commensurate reduction, such that one might assume that the DFO was also successfully managing its reputation — at least with industry. Indeed, one of the drivers for adopting risk-based approaches is to provide “a structured system of decision-making” which can then be presented to “various legitimacy constituencies or audiences as justification for a legitimacy claim to be rational, ordered, and in control.”¹⁸² The DFO’s risk management matrix was precisely such a structured system of decision-making.

And yet industry’s role in lobbying for the 2012 amendments is now well known.¹⁸³ One possible explanation already discussed is that for all of its clamouring about reducing regulatory red-tape, industry’s primary concern has always been substantive: actually mitigating impacts on fish and fish habitat was deemed too burdensome. Another explanation lies in the fact that legitimacy constituencies will rarely — if ever — be homogenous, and that reputation and risk are inextricably linked. Thus, what appealed to some industries did not appeal to environmental groups and others, including Canada’s Aboriginal peoples, who kept pressing the department on its poor performance in actually managing threats to fish and fish habitat.¹⁸⁴ Faced with the apparent impossibility of managing its reputation amongst its various legitimacy constituencies, the government appears to have chosen to simply exit the field.

Finally, with respect to the DFO’s performance in managing fish habitat and recognizing that further efforts are required to ascertain its status in much of Canada, the available evidence is consistent with the tendency for risk-based approaches to neglect cumulative environmental effects. As noted by Black:

Poorly designed risk based approaches, indeed, are likely to lead to persistent non-enforcement regarding certain types of firm and systemic risks. If such systems are not supplemented by other programmes, such as those of random inspection. . .they can under-deter the lower level

¹⁸² *Ibid.*

¹⁸³ See *supra* note 57.

¹⁸⁴ Perhaps the high water mark of this dynamic occurred during the Cohen Commission’s hearings, where DFO’s then-deputy minister, Claire Dansereau, was questioned about DFO’s progress towards meeting the CESD’s 2009 recommendations with respect to monitoring fish habitat in Canada. In a stunning turnabout, Ms. Dansereau replied that DFO’s “No Net Loss” policy — for decades the lynchpin of the habitat protection regime — was actually only a “guiding principle” that did not require DFO “to measure centimetre by centimetre” how much fish habitat is being lost or created. See Mark Hume, “Bureaucrats questioned on principle of Fisheries Act at Cohen Commission”, *The Globe and Mail* (22 September 2011) online: [The Globe and Mail < www.theglobeandmail.com >](http://www.theglobeandmail.com) .

risk creators. . . The overall effect of regulation is then not to reduce risk, but to substitute widely spread risks for lower numbers of larger risks.¹⁸⁵

This is a fair summary of DFO's experience with risk-based regulation as well as of the latest research with respect to threats to freshwater fisheries.¹⁸⁶

V. CONCLUSION

This paper is the first in the environmental law scholarship to systematically assess both the previous and current regimes for the protection of fish habitat under Canada's *Fisheries Act*. The results indicate that the federal government's abandonment of this field is not a recent phenomenon but also that the 2012 changes to the Act have served to further erode an already flawed system. Although the government's *Fisheries Protection Policy Statement* appears to adopt a generous interpretation of the new fisheries protection regime, cuts to the DFO's budget and the strong signal sent to proponents by virtue of the mere fact of the 2012 amendments has resulted in a 58% reduction in the authorization regime's scope. Only a small portion of this reduction can be attributed to the actual legislative changes to section 35; approximately 40% of it can be attributed to the DFO's apparent adoption of an extra-legislative size threshold for impacts to fish habitat that will require authorization. The rest of it appears to be attributable to proponents' views on the likelihood — or not — of being prosecuted. All the while, the evidence that exists suggests that Canadian fisheries and the habitat that supports them continue to be degraded.

With respect to future reforms, there was a brief moment after the passage of Bill C-38 but before the full implementation of the fisheries protection regime that in this author's view represented the best formulation of the habitat protection regime, at least in the short term. Its scope had been broadened to include activities but otherwise the prohibition remained the same (*i.e.* against HADD). That being said, regulatory authorities were provided for what could be considered "minor works" and "minor waters" regulations. In my view such powers are both necessary and appropriate. As Figure 5 demonstrates, the vast majority of habitat-related activity can be considered relatively minor when viewed in isolation but, as the continued degradation of Canada's watersheds makes clear, represents the greatest threat to fish habitat cumulatively. Such authorities could provide an explicit regulatory basis for the DFO's previously policy-based Operational Statements, with the important difference that notification would not be voluntary; proponents would be required to send the DFO some basic information about their project (*e.g.* location, planned mitigation measures).

For the near future, these regulations' primary function would be to gather information, enabling the DFO to better ascertain the state of various fisheries

¹⁸⁵ Black, Really Responsive Regulation, *supra* note 116 at 66–67.

¹⁸⁶ Nicolas W.R. Lapointe, Steven J. Cooke, Jack G. Imhof et al., *supra* note 99 at 116.

and the watersheds that support them, and to assist in targeting enforcement and compliance activity.¹⁸⁷ Over time, this and other information (such as the watershed reports discussed above) would be used to determine which proposed projects require greater scrutiny not because of their individual size but rather because of their location in a watershed and the extent of previous developments’ impacts on the state of that watershed. As fisheries managers know well, several poorly constructed culverts in a second order stream can be far more damaging to fish and fish habitat than the construction of a bridge on a river’s main stem.¹⁸⁸ In the long term, this information could also be used to draft habitat protection legislation appropriate for the 21st century.

¹⁸⁷ See Eric Biber & JB Ruhl, “The Permit Power Revisited: The Theory and Practice of Regulatory Permits in the Administrative State” (2014) 64:2 Duke LJ 133, wherein the authors argue that such an approach, of regulating rather than exempting minor activities but with a minimal burden for proponents (*i.e.* simply providing regulators with information about their project), is the future of the modern environmental state (at 217–218).

¹⁸⁸ See Linda V. Zurkichen, “Assessment of Fish Habitat Impacts Associated with Small Stream Simulated Culverts in BC Ministry of Transportation Roads” M.Sc. Thesis, Royal Roads University (Library of Canada) at 11–15.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.