## HABITAT LOSS: TIME TO ACT

Due to thousands of unregulated small projects across the country, crucial fish habitat is disappearing fast, harming biodiversity, fishing and tourism. It is time for the federal government to rethink its failing policies

By CWF Staff

HERE IS AN ENVIRONMENTAL LOSS UNDERWAY
in Canada that, despite far-reaching consequences
for wildlife, industry and individuals, gets very
little attention. Fish habitat is disappearing, despite protection under the Federal Fisheries Act. In every part of the
country, innumerable small alterations and encroachments
are causing irreparable harm, largely due to lax oversight.
The scale of the problem is unknown, but the damaging
effects are becoming increasingly clear. This country needs
a new way of protecting habitat to ensure abundant fish
and wildlife populations in the future.

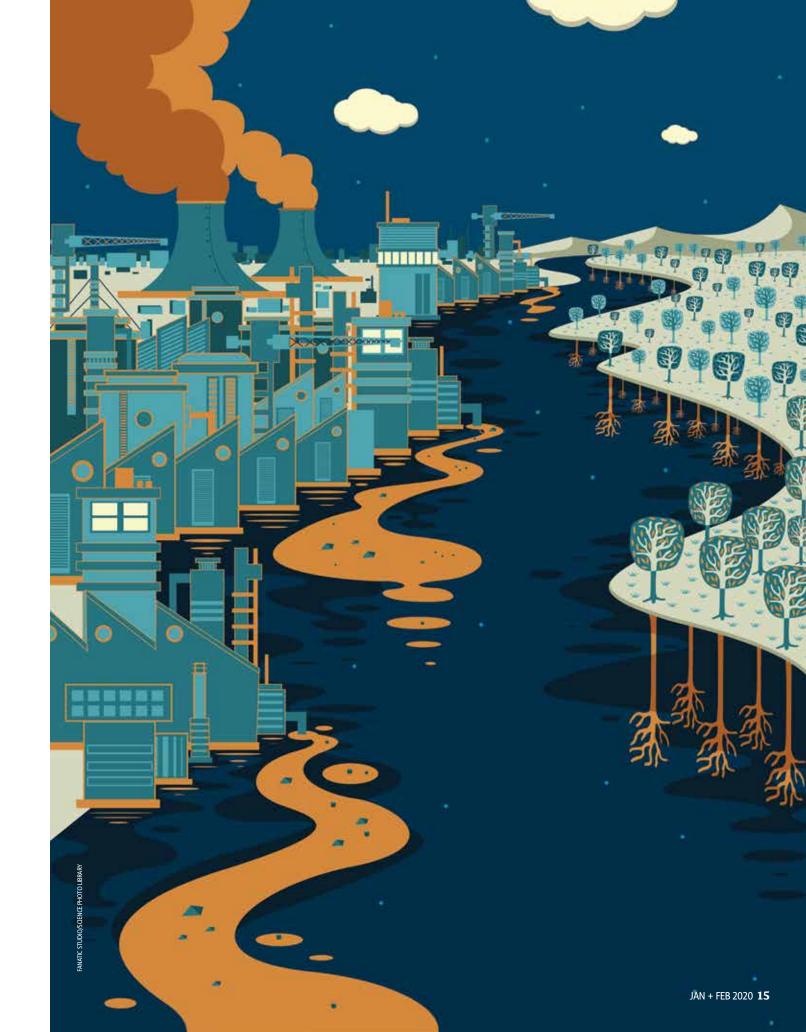
Right now, Canadian habitat is facing a death-by-a-thousand-cuts scenario. The cumulative impact of thousands of individual projects across the country is devastating. It is not a new problem — the 1992 Canadian Environmental Assessment Act required the consideration of cumulative effects of multiple projects in an area. But 28 years later, a lack of agreement persists on how best to deal with it. With countless projects coming onstream annually, it is becoming increasingly important to ensure that many projects with minor impacts don't add up to big problems for wildlife and the services nature provides to Canadians.

In Canada, the federal Fisheries Act is the primary legislative tool to protect fish and their habitat and to regulate commercial fisheries. Both are essential to Canadians, given the benefits provided by aquatic ecosystems and the value of aquatic biodiversity: commercial fisheries are a \$10 billion per year industry, employ more than 70,000 people and are central to the economic health of many Canadian communities. And the 3.2 million Canadians who fish recreationally inject more than \$5 billion each year into regional economies through spending on equipment and travel. Indigenous fisheries are another important contributor to the economy and, more importantly, central in supporting traditional cultures and subsistence harvests.

The Fisheries Act ensures our waters are not polluted and indirectly protects habitat for all aquatic species. Enforcement of the act, the responsibility of Fisheries and Oceans Canada, is central to the health and future of Canada's oceans, lakes and rivers — and to the creatures that inhabit them. Under the law, the destruction of fish habitat by any individual, company or government agency undertaking a project must be authorized by Fisheries and Oceans Canada. This covers everything from a new boat launch to a large-scale, river-diverting construction project. The range and the numbers are enormous.

Over the past 30 years, the system has been modified and even rethought several times. In the 1990s, DFO began delegating responsibility to the inland provinces. It then changed direction, announcing in 1999 that it would be the lead on fish habitat protection across Canada. Following on that decision, in an attempt to address how it could deal with the thousands of projects a year across the country, DFO developed something referred to as a "risk-based approach." This means that projects that cause some habitat destruction but are considered low risk —due to the size or type of that impact—are allowed to proceed without requiring official authorization from DFO. The issue of regulating small projects continued to be a problem; in 2012, the act was changed significantly to alter pivotal wording prohibiting habitat destruction, and even which fish were and were not protected. This was done partly to extract the federal government from having oversight of innumerable "minor" projects that nonetheless destroy habitat in Canada's oceans, lakes and rivers. It was also intended to make the permitting process more efficient for industry, while cutting costs.

What has been the impact of these changes? Several recent studies have examined the number of projects reviewed and authorized annually. Researchers at





a leading cause of declining fish populations in Canada. A 2016 government evaluation of the Fisheries Protection Program acknowledged as much: it states that all projects, "including small shoreline stabilization projects," have impacts on fish and the aquatic ecosystems they live in. There is plenty of supporting scientific literature on the subject, including a 2015 study led by then-chief scientist of DFO, Jake Rice. In Canada each year, uncounted thousands of small projects cause real and permanent damage to fish habitat.

Still, says Lapointe, "no one wants to tie up small projects in a bunch of red tape that doesn't benefit aquatic habitat." The current system is designed to deal with big projects that require major offsets. But even for the large projects, recent studies have shown a consistent trend of habitat loss despite offsets. "We really need to continually improve how the habitat loss from large projects is compensated for. And we must find that middle ground for minor projects that prevents growing habitat loss over time while not being too burdensome," says Lapointe.

Another issue is financial cost. Any system able to monitor the full gamut of projects that take place in this entire country each year would be massive — and massively expensive. DFO simply cannot afford it as it is currently funded.

Given these realities, creative solutions are needed for Fisheries and Oceans Canada to address the growing cumulative impacts of these many small projects. A mix of tools is likely needed. An idea used successfully in other jurisdictions is to charge proponents a fee proportional to the cost of restoring habitat loss from their small projects, as a way of offsetting the harm they cause. These funds

## IN EVERY PART OF THE COUNTRY, SMALL IMPACTS ARE ADDING UP TO BIG PROBLEMS FOR FRESHWATER AND MARINE HABITAT

University of Calgary and Memorial University discovered a stunning drop: from nearly 700 authorizations in 2003-04 to 75 in 2014-15. This means that of the thousands of projects in any given year, all of which damaged habitat to some degree, only a few were authorized by DFO and required to compensate for habitat destroyed.

Nick Lapointe, of the Canadian Wildlife Federation, and Laura Third, a graduate student at University of Toronto, recently looked deeper into this issue. They examined 36 projects in Manitoba that were reviewed by DFO in 2016. Of them, only one was required to have an authorization and provide compensation. Another 13 were considered low to medium risk and allowed to proceed with no compensation as long as they followed recommendations laid out in a letter of advice. They resulted in a total habitat loss of 30,000 square metres (an area equivalent to more than four full soccer fields). The remaining 22 (accounting for a total habitat loss of 618 square metres) were simply told to proceed.

Small impacts add up to big problems for freshwater and marine habitat, so Lapointe and Third's findings are deeply troubling: this is happening year after year, not just in Manitoba but across every province and territory. Lapointe, senior freshwater conservation biologist at CWF, is not alone in his conviction that this gap in protection is

would be pooled regionally and used to finance strategic conservation projects in the area that meet or surpass the cumulative damage done. Another possible tool is expanding the use of "habitat banks." In this model, private organizations (companies, conservation groups and other NGOs, and Indigenous groups) earn credits by restoring and enhancing damaged areas. They then can "sell" the credits to other projects that have been required to compensate for habitat loss they caused. The proceeds of the sale would then fund future conservation projects. Currently permitted only in narrow circumstances, the habitat-banking system could be expanded.

In addition to financial solutions, there are regulatory avenues, including regulations that require projects to be done in specific ways or that specify the maximum amount of habitat loss or alteration an area can sustain.

Canada has an opportunity right now to stop the ongoing loss of fish, wildlife and habitat due to cumulative impacts. As DFO consults on the next rethink of the system over the coming year, it will need to develop a new approach to fish-habitat protection, one based on creative thinking, the best science and meaningful stakeholder involvement. The future of fish and wildlife inhabiting Canadian lakes, rivers and oceans depends on it.