

Habitat Protection for the Westslope Cutthroat Trout in Alberta

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Matter Commented On: *Critical Habitat of the Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) Alberta Population Order*, [SOR/2014-241](#) (November 20, 2015)

On December 2, 2015, the Minister of Fisheries and Oceans Canada published a critical habitat protection order issued under sections 58(4) and (5) of the *Species at Risk Act*, [SC 2002, c 29](#) (SARA) covering identified critical habitat for the westslope cutthroat trout located on Alberta public lands. Over the last 12 months the Faculty's Environmental Law Clinic assisted the [Alberta Wilderness Association](#) and the [Timberwolf Wilderness Society](#) in their efforts to see this Order issued by the Minister. This comment revisits the process that ultimately led to this Order and describes the Order itself. At the outset it is worth noting this is only the second critical habitat protection order issued to date under sections 58(4) and (5) of SARA, and the first such order to be applied on provincial lands.

The Alberta population of westslope cutthroat trout was listed under SARA as a threatened species in 2013. This listing placed an obligation on the Minister under sections 37 to 46 of SARA to produce a recovery strategy that, among other things, identifies critical habitat for the species. On March 28, 2014, the Minister published the Westslope Cutthroat Trout Recovery Strategy (WCT Recovery Strategy) on the [SARA public registry](#). The WCT Recovery Strategy is a combined effort of both the federal Minister and Alberta Environment.

There is no doubt the westslope cutthroat trout is teetering on the brink of extinction in Alberta – a rapid decline in population numbers due to both human ignorance and decades of the multiple use philosophy that has governed public land management along the eastern slopes in Alberta. The fish species was once abundant throughout the rivers and streams of the mountains and foothills in Alberta. The recovery strategy itself paints a bleak reality now, noting that out of approximately 274 waterbodies historically occupied by westslope cutthroat trout, there are approximately about 51 genetically pure populations of the trout remaining in the upper Bow and Oldman watersheds of the South Saskatchewan River basin. However, biologists who work closely with the species say the reality for the fish is indeed much more dire than the recovery strategy suggests, holding there are only about 15 to 20 genetically pure populations left in the province. Lorne Fitch provides the following introduction to the WCT Recovery Strategy:

Westslope cutthroat trout now exist on the edges, fringes and margins of their former range. Populations are disconnected from one another and are small enough some are at significant risk of winking out of existence. A combination of things has led to this state: changes in habitat caused by various developments; stocking of non-native trout species, some of which hybridize with cutthroat trout, others that compete with them for space and resources; and, the additive feature of multiple, synergistic cumulative effects. Most of these impacts on cutthroat trout continue to influence the status of the Alberta population, plus climate change is an added concern.

Although cutthroat trout survived and thrived for about 10,000 years the recent, rapid pace of change in as short a period as a human life span has been beyond their ability to cope and evolve. A recovery strategy is a life boat of sorts, in the face of these perils. It is a mechanism to delay the negative trajectory of the population and, over time, allow a modest recovery so the species is not so imperiled and in danger of disappearing from Alberta watersheds (WCT Recovery Strategy, at iv).

Under provincial laws the WCT Recovery Strategy is more of leaky dingy than a life boat (see [here](#) for why that is), but under SARA the WCT Recovery Strategy can produce real legal protection for the critical habitat of the westslope cutthroat trout.

The federal legislation acknowledges the protection of critical habitat is essential to the recovery of a threatened species. This is reflected in the preamble to SARA which states “habitat of species at risk is key to their conservation”. Section 2(1) of SARA defines critical habitat as “habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species’ critical habitat in the recovery strategy or in an action plan for the species”. Section 2(1) of SARA also defines habitat for aquatic species as “spawning grounds and nursery, rearing, food supply, migration and any other areas on which aquatic species depend directly or indirectly in order to carry out their life processes, or areas where aquatic species formerly occurred and have the potential to be reintroduced”. These definitions received some judicial consideration in *Environmental Defence Canada v Canada (Fisheries and Oceans)*, [2009 FC 878](#) where the Federal Court ruled that the term ‘habitat’ in SARA includes both an identified geographic location and the biological attributes of that location that allows a species to use it for the function of carrying out its life processes. The Court also stated that the geographic area of critical habitat is inextricably linked to its biological attributes which allow a species to carry out its life processes.

The WCT Recovery Strategy identifies critical habitat for the westslope cutthroat trout in following named waterbodies:

Critical habitat in Banff National Park: Sawback Lake, Spray River, Elk Lake, Babel Creek, Little Fish Lake, Big Fish Lake, Helen Creek, Cuthead Creek, Outlet Creek, Upper Bow River; and,

Critical habitat in Alberta (outside of National Parks): Corral Creek, Livingstone River and tributaries, Beaver Creek, Speers Creek, White Creek, Hidden Creek and tributaries, Oldman River and tributaries, Racehorse Creek and tributaries, Sharples Creek, Unnamed tributary to Blairmore Creek, Star Creek, Allison Creek, Girardi Creek, O’Haggen Creek, Syncline Brook, South Castle River and tributaries, West Castle River and tributaries, Gold Creek and tributaries, Gorge Creek and tributary, Unnamed tributary to Flat Creek, Deep Creek, Zephyr Creek, Unnamed ‘Cutthroat’ Creek, Picklejar Lakes (#4 Lake), Picklejar Lake (#2 Lake), Picklejar Creek, Prairie Creek, Trail Creek, Silvester Creek, Evan-Thomas Creek, Waiparous Creek and tributaries, Unnamed tributary to Jumpingpound Creek.

The recovery team used an area of occupancy approach to identify habitat, which means that all areas currently occupied by genetically pure native westslope cutthroat trout within their historic range of distribution are identified as critical habitat. The exact coordinates within the above-named waterbodies are set out in the WCT Recovery Strategy (see pages 29 – 34). The WCT Recovery Strategy also identifies the biophysical functions, features and attributes of critical habitat for each life stage of the westslope cutthroat trout. These functions, features and attributes include riffles, pools, food availability, cold water temperature, adequate water depth and velocity, riparian vegetation, undercut banks, and sediment/silt free substrate.

If there is going to be actual recovery for the westslope cutthroat trout populations in Alberta, the activities which have led to the destruction of the functions, features and attributes of habitat for the species must be halted. The WCT Recovery Strategy identifies timber extraction, mining, hydroelectric power development, off road vehicle use, roads and other linear disturbances as activities likely to result in the destruction of critical habitat for westslope cutthroat trout. Many of such activities are ongoing and/or proposed in locations identified in the WCT Recovery Strategy as critical habitat. For example, there is watershed-wide degradation in Silvester Creek from off road vehicle trails, logging and other access roads, and grazing. Recent clear-cut logging continues to produce long-duration fine-sediment loading, in a range likely to be causing substantial egg and larvae death, as well as reduced condition of juveniles. And Riversdale Resources proposes to construct an open-pit [coal mine](#) in the watershed of upper Gold Creek and its tributaries.

Halting these activities is where the Critical Habitat Order serves its purpose. The Order itself amounts to one paragraph, and states that section 58(1) applies to the critical habitat identified in the WCT Recovery Strategy (other than those locations within Banff National Park protected by section 58(2):

Subsection 58(1) of the *Species at Risk Act* applies to the critical habitat of the Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) Alberta population — which is identified in the recovery strategy for that species that is included in the Species at Risk Public Registry — other than the portion of that critical habitat that is already protected under that subsection because it is in a place referred to in subsection 58(2) of that Act, more specifically, in Banff National Park of Canada as described in Part 2 of Schedule 1 to the *Canada National Parks Act*.

Simply put, the Order engages section 58(1) of SARA and thus prohibits a person from destroying the functions, features and attributes of westslope cutthroat critical habitat identified in the Order. A person who contravenes section 58(1) is liable to a fine of up to \$1,000,000 or imprisonment up to 5 years. Section 73 of SARA does provide the Minister with authority to permit a person to engage in an activity that affects westslope cutthroat trout critical habitat, but such authority is subject to strict conditions including that the activity not jeopardize the survival or recovery of the species. It seems unlikely and contrary to the purpose of SARA for any of the activities identified in the WCT Recovery Strategy to be allowable under section 73. That being said, it remains to be seen what the larger effect of this prohibition will be along the eastern slopes of the Rocky Mountains in Alberta and how sharp of an arrow it will be in the quiver of conservationists.

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