

**Nooksack Dace in Canada:
Critical Habitat Protection Statement**

This is a statement of how the critical habitat of Nooksack dace (*Rhinichthys cataractae* ssp.) is legally protected. This statement is pursuant to, and in compliance with, Section 58 (5) of the *Species at Risk Act* (SARA), S. C. 2002, c. 29. Critical habitat for the Nooksack dace was identified in the Final Recovery Strategy for this species, posted in June 2008 on the SARA Public Registry. Please refer to the Recovery Strategy for details about the identified critical habitat.

Human activities which could potentially destroy critical habitat for this species, as identified in the Final Recovery Strategy, and the federal legislation which would be used to provide protection against such destruction, are:

Threats	Federal Legislation
Water extraction from surface and groundwater sources can lead to dewatering of riffles during periods of the year.	Where water withdrawals result in dewatering of riffles to the extent that there is a harmful alteration, disruption or destruction of fish habitat Section 35 of the Fisheries Act offers protection.
High flows from urban storm water systems entering streams can cause scouring of gravel from riffles.	Where the volume of stormwater is serious enough to result in destruction of a riffle, Section 35 of the Fisheries Act offers protection.
Agricultural grazing where livestock have unimpeded access to streams can damage gravel by compression impacting its structure.	Section 35 of the Fisheries Act offers protection where such works or undertakings result in the harmful alteration, disruption or destruction of fish habitat.
Gravel mining, land development, and agricultural activities can remove riparian vegetation.	Section 35 of the Fisheries Act offers protection where such works or undertakings result in the harmful alteration, disruption and destruction of fish habitat through the removal of riparian vegetation.
Gravel mining, land development, agricultural activities can generate sediment which can clog riffles.	Section 35 of the Fisheries Act offers protection where such works or undertakings result in the harmful alteration, disruption or destruction of fish habitat and Section 36 prohibits the release

	of a deleterious substance into waters frequented by fish.
Instream works such as stream crossings, dredging and ditch maintenance, man-made dams and weirs that can destroy riffles and riparian habitat.	Section 35 of the Fisheries Act offers protection where such works or undertakings result in the harmful alteration, disruption or destruction of fish habitat.

Fisheries and Oceans Canada (DFO) recognizes that there are threats to Nooksack dace individuals and populations which also need to be addressed although there is no legal obligation under SARA to make a protection statement. They are identified below as well as legal and non-legal tools that exist to manage and mitigate these threats.

- Invasive predators, competitors and plants can impact individuals or populations through consuming Nooksack dace, reducing their fitness or altering riparian composition respectively.
 - Legislation can help but cannot completely prevent the introductions of alien invasive species. There needs to be more education and awareness programs to prevent the introduction and spread of invasive species which is a key element of the 2004 Invasive Alien Species Strategy for Canada.
- Nutrients from fertilizers or manure can cause low oxygen levels in the water, and urban and agricultural runoff waters can be toxic to Nooksack dace.
 - Where a point source can be identified Section 36 of the Fisheries Act could be applied if the discharge is determined to be deleterious to fish. It is most effective to improve practices to minimize the introduction of these nutrients to watercourses.

Fisheries and Oceans Canada will continue to support and implement activities directed towards informing and sensitising Canadians on the threats to Nooksack dace critical habitat, and to individuals and populations to aid in the protection and recovery of the species. As additional knowledge is gained regarding potential threats and effectiveness of protection measures, additional management and mitigation measures will be developed and implemented as appropriate.