



INFORMATION SUMMARY ON THE PROPOSED LISTING OF SILVER LAMPREY (GREAT LAKES – UPPER ST. LAWRENCE POPULATIONS) AS “SPECIAL CONCERN” UNDER THE *SPECIES AT RISK ACT*



The *Species at Risk Act*

Canada proclaimed the *Species at Risk Act* (SARA) in 2003 as part of a strategy to provide for the legal protection of wildlife species and the conservation of biological diversity.

An independent committee of experts, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), has the mandate to conduct assessments on the status of wildlife species and categorize them according to their level of risk for extinction (extinct, extirpated, endangered, threatened, or special concern).

The Government of Canada considers COSEWIC's assessment, in addition to potential socio-economic impacts and feedback received from Canadians themselves before deciding whether or not to include the species on the List of Wildlife Species at Risk under SARA.

Once listed, recovery strategies are

Purpose of the summary

The Government of Canada would like to hear your comments on the potential impacts of listing of the Great Lakes – Upper St. Lawrence populations of the Silver Lamprey (*Ichthyomyzon unicuspis*), as “special concern” under the *Species at Risk Act* (SARA). Fisheries and Oceans Canada has prepared this summary to provide information on the status of this species in Canada.

prepared for extirpated, endangered, and threatened species. Management Plans are prepared for species of special concern. Species of special concern are not subject to automatic prohibitions.

About Silver Lamprey

The Silver Lamprey is an eel-shaped fish that possesses a sucking disc mouth and is without jaws or paired fins. In the larval phase, the Silver Lamprey construct shallow burrows, typically in sand or silt. The larval phase lasts four-to-seven years before they begin a metamorphosis where they also develop eyes and teeth, and may drift downstream into lakes or rivers. Adult Silver Lampreys are parasitic, feeding on the flesh and body fluid of other fishes. Length ranges in size from nine-to-39 cm.

They occur in freshwater in parts of eastern North America, with a range extending from Manitoba to Tennessee in the west, to Québec and New York in the east. Silver Lamprey in the Great Lakes-Upper St. Lawrence River population have been documented in 41 streams and 7 lakes including Lake Ontario, Lake Huron, Lake Superior, Lake Erie, Lake St. Clair, Lake Nipissing, Lac St. Pierre and Lac St. Louis.



Special Concern status

Silver Lamprey has been assessed by COSEWIC as a species of “special concern”. This is the lowest level of risk category and indicates that this species is not presently endangered, but is considered to be sensitive to human activities and natural events due to biological factors and/or threats. If listed under SARA as “special concern”, Silver Lamprey will not be subject to prohibitions.

Threats

Key threats include control measures designed to target a specific invasive species in the Great Lakes tributaries - the Sea Lamprey. Specifically, the lampricide applications and the construction of barriers that limit the migration of Sea Lamprey to spawning areas also create threats for the native Silver Lamprey. The Silver Lamprey is also vulnerable to pollution, habitat alteration, dam construction, siltation, water fluctuations and competition from invasive species, including the Sea Lamprey.

Special significance

Lampreys are descended from the most ancestral lineage of vertebrates and may provide insight into evolutionary pathways. Additionally, they have been used as biomonitors of containment levels and may perform important ecosystem services as filter feeders. Silver Lamprey is an important component of the predator-prey

relationship for native fishes in the Great Lakes and Upper St. Lawrence River

Protection and recovery

If Silver Lamprey is added to the List of Wildlife Species at Risk as a species of “special concern”, it will not be subject to prohibitions under SARA; however Fisheries and Oceans Canada will be required to produce a Management Plan for the species in an effort to ensure that it does not become endangered due to human activity. The Management Plan will include conservation measures for the species and set goals and objectives for maintaining sustainable population levels.

Socio-economic impacts

An analysis of potential social and economic impacts of listing the Silver Lamprey will be conducted.

Management measures

If Silver Lamprey is listed under SARA, Fisheries and Oceans Canada will, in collaboration and consultation with stakeholders and partners, use the best available information to develop a Management Plan to address threats and help identify gaps in our knowledge of the species, so that necessary research can be undertaken to better inform future management decisions.

Your feedback is important

The Government of Canada would like your opinion on listing Silver Lamprey as “special concern” under SARA, and on the impacts that listing would have on you, your industry, and/or the ecosystem. Your answers will be used to help decide whether or not to list the species under SARA:

- 1. How would your activities be affected if Silver Lamprey was listed as “special concern” ?*
- 2. What would be the environmental, social, cultural, and economic impacts of listing this species ?*
- 3. Do you support listing Silver Lamprey as “special concern” ? Why or why not?*
- 4. Do you represent an industry, community, Aboriginal community or organization, or other group? If so, which one?*

To submit your responses or to receive further information, please contact:

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