Response Statement - Wavy-rayed Lampmussel

December 2, 2010

Common Name: Wavy-rayed Lampmussel
Scientific Name: *Lampsilis fasciola*

Status assessment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC): Special Concern

How the Minister of the Environment intends to respond to the assessment: The Minister of the Environment will forward the COSEWIC assessment of the Wavy-rayed Lampmussel to the Governor in Council within three months. The Minister of Fisheries and Oceans will consult with the government of Ontario, Aboriginal peoples, stakeholders, and the public on whether or not the Wavy-rayed Lampmussel should be added to the *List of Wildlife Species at Risk* (Schedule 1) under the *Species at Risk Act* as Special Concern .

Once a species has been assessed by COSEWIC, further steps must be undertaken before it is added to Schedule 1 of the *Species at Risk Act*. For more information on this process, please view The Species Listing Process Under SARA.

Reason(s) for status designation provided by COSEWIC: This medium-sized freshwater mussel is confined to four river systems and the Lake St. Clair delta in southern Ontario. Since the original COSEWIC assessment of Endangered in 1999, surveys have identified a large, previously unknown reproducing population in the Maitland River. The mussels in the Thames River are also now reproducing. The largest population is in the Grand River; smaller but apparently reproducing populations are in the Ausable River and Lake St. Clair delta. Although water and habitat quality have declined throughout most of the species' former range in Canada, there are signs of improvement in some populations but habitats in Great Lakes waters are now heavily infested with invasive mussels and are uninhabitable for native mussels. The main limiting factor is the availability of shallow, silt-free riffle/run habitat. All riverine populations are in areas of intense agriculture and urban and industrial development, subject to degradation, siltation, and pollution. Invasive mussels continue to threaten the Lake St. Clair delta population and could be a threat to populations in the Grand and Thames rivers if they invade upstream reservoirs.

Occurrence: Ontario

Competent Minister(s):
Minister of Fisheries and Oceans

Province(s) and territory (territories) to be consulted:
Ontario

Applicable federal legislation: Fisheries are managed and fish habitat is protected under the *Fisheries Act*.

Conservation activities underway: Conservation activities underway: The Wavyrayed Lampmussel has been reassessed at a lower level, in part, due to ongoing recovery activities directed under the existing Recovery Strategy. In 2009, studies were conducted to evaluate the Round Goby, an invasive species, as a threat to the critical habitat of freshwater mussels at risk including the Wavyrayed Lampmussel in Ontario. Habitat Stewardship Funds were provided to the St. Clair Region Conservation Authority to promote habitat stewardship in the Sydenham River ecosystem which contains 14 aquatic species at risk including the Wavyrayed Lampmussel. Activities included: decrease nutrient and sediment loading through hands on habitat improvement; increase knowledge of species at risk; the causes and solutions to landowners and students; evaluate the impact of stewardship initiatives in past and present years through benthic sampling, water quality testing and electrofishing.