

Proposed Recovery Strategy for Spotted Gar

Plain Language Summary

BACKGROUND

The Spotted Gar is a freshwater fish found only in North America, within the Mississippi and Great Lakes drainage basins. In Canada, the Spotted Gar occurs in three coastal wetlands of Lake Erie: Long Point Bay/Big Creek National Wildlife Area (NWA), Point Pelee National Park and Rondeau Bay. In addition, new records exist for East Lake, in Prince Edward County, and Hamilton Harbour (both part of Lake Ontario's drainage); however, it is not known whether reproducing populations exist at these locations since only one individual was found at each location (in 2007 and 2010, respectively). Although this fish is known to occur in heavily vegetated wetlands in the shallower near-shore area, the size of the Canadian Lake Erie populations are unknown.

Threats to Spotted Gar populations include overall habitat loss (due to dredging, filling and harbour improvements), sediment and nutrient loading, exotic species, barriers restricting movement, climate change and possibly fishing pressure (commercial/recreational incidental harvest).

The Spotted Gar is considered a Threatened species under the federal *Species at Risk Act*. As such, the Act requires that the government develop a recovery strategy to help stop the decline of the Spotted Gar

Fisheries and Oceans Canada, in cooperation with the government of Ontario, has developed a recovery strategy to help protect and recover the Spotted Gar.

RECOVERY GOALS

The population and distribution objective is to maintain current distributions and densities of extant populations of Spotted Gar in the three coastal wetlands of Lake Erie (Point Pelee National Park, Rondeau Bay and Long Point Bay/Big Creek NWA).

The short- to medium-term recovery objectives for the Spotted Gar, to be addressed over the next five to ten years, are:

- i. Refine population and distribution objectives;
- ii. Ensure adequate protection of critical habitat;
- iii. Determine long-term population and habitat trends;
- iv. Identify threats, evaluate their relative impacts and implement remedial actions to reduce their effects;
- v. Enhance efficiency of recovery efforts;
- vi. Enhance quality and extent of available habitat;
- vii. Improve overall awareness and appreciation of the Spotted Gar and the coastal wetland habitats that support it; and,
- viii. Engage landowners, communities and organizations in stewardship actions that minimize/eliminate identified threats to Spotted Gar and its habitat.

RECOVERY STRATEGY

Three main approaches will be used to support the objectives. Each approach will involve a number of activities (see recovery strategy for full details), including those listed below:

Research and monitoring:

- Conduct targeted background surveys at current and historical sites as well as other areas of suitable habitat to determine range, abundance and population size.
- Establish and implement a monitoring program to assess changes in population and habitat characteristics.
- Determine home range size and seasonal habitat needs of each Spotted Gar life-stage.
- Confirm the significance of all threat factors impacting populations.
- Evaluate the degree of connectivity (hydrologic, ecological and genetic) between Spotted Gar populations.

Management and coordination:

- Coordinate with recovery teams and stewardship groups, including the Essex-Erie Recovery Team and other relevant groups to share knowledge and implement recovery actions.
- Encourage municipalities and other land management groups to protect habitats that are important to Spotted Gar within their jurisdiction (e.g., within Official Plans).

Stewardship, outreach and awareness:

- Promote basin-wide stewardship efforts among landowners within watersheds of the occupied coastal wetlands in Lake Erie.
- Facilitate, through existing stewardship initiatives, the implementation of Best Management Practices and encourage the completion and implementation of Environmental Farm Plans and Nutrient Management Plans.

CRITICAL HABITAT

Using the best available information, critical habitat has been identified for Spotted Gar populations in the following areas:

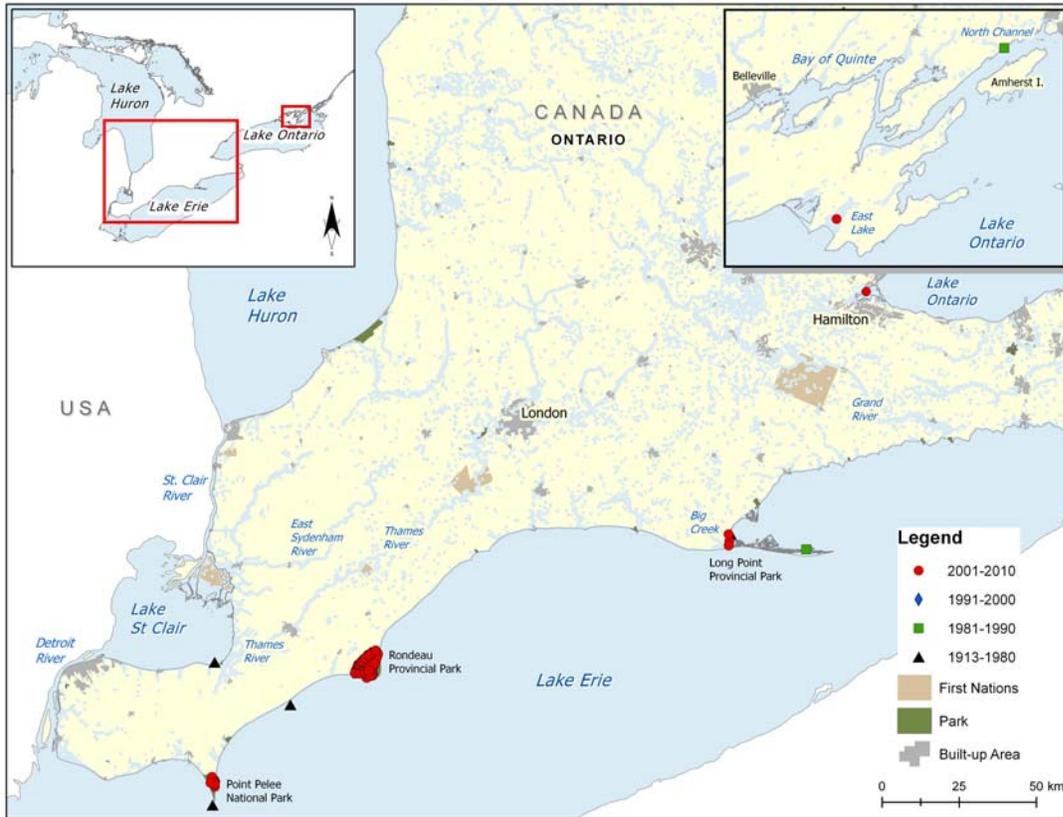
1. Point Pelee National Park;
2. Long Point Bay/Big Creek NWA; and,
3. Rondeau Bay.

A strategic environmental assessment was conducted to ensure the strategy does not have inadvertent negative effects on other species. The assessment concluded the strategy will clearly benefit the overall environment and will have no significant negative effects.

The recovery strategy will be supported by one or more action plans that will be developed within five years of the final recovery strategy being posted on the public registry, and will provide further details on specific recovery measures to be taken to support the conservation of the species. Wherever possible, recovery action plans will be linked to existing watershed

recovery teams (Essex-Erie region) to ensure that activities to protect the Spotted Gar are beneficial to all species at risk, and to eliminate possible duplication of effort.

The success of recovery actions will be evaluated largely by tracking changes in population distribution and abundance, and changes in habitat. The entire recovery strategy will be reported on every five years to evaluate progress and incorporate new information.



Range of Spotted Gar in Canada