Consultation on Amending the List of Species Under the *Species at Risk Act*

Central & Arctic Region

March 2004

Fisheries and Oceans Canada

Pêches et Océans Canada

Canada

Please send your comments on this consultation to Fisheries & Oceans Canada, Central and Arctic Region at:

fwisar@dfo-mpo.gc.ca

Or by regular mail comments should be sent to the following address:

Central and Arctic Region
SARA Coordinator
Freshwater Institute
Fisheries & Oceans Canada
501 University Avenue
Winnipeg, Manitoba
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To request for additional copies of the workbook, please call 1-866-715-7272

For more information on the Species at Risk Act, please visit the Public Registry at
http://www.sararegistry.gc.ca

For more information on species at risk, please visit Environment Canada's Species at Risk website:
www.speciesatrisk.gc.ca

Information on species at risk is also available on the website of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC):
www.cosewic.gc.ca

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PART I: ADDITION OF SPECIES TO THE *SPECIES AT RISK ACT*

Public consultation

Background

The Government of Canada proclaimed the Species at Risk Act (SARA) on June 5, 2003 as part of its strategy for the protection of wildlife species at risk. Attached to the Act is Schedule 1, the list of the species that receive protection under SARA, hereinafter referred to as the 'SARA list'.

The existing SARA list reflects the 233 species the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) had assessed and found to be at risk at the time of the reintroduction of SARA (then known as Bill C-5), to the House of Commons on October 9th, 2002. Since that time, COSEWIC has assessed or reassessed an additional 91 species as being at risk, making them eligible for consideration for addition to the SARA list. The Minister of the Environment is responsible for the listing of all 91 species. Twenty eight of them are aquatic species and are the subject of consultations being conducted by the Minister of Fisheries & Oceans Canada. This document deals with eight aquatic species which occur in Ontario, the Prairie Provinces and the Arctic, under the jurisdiction of the Central and Arctic Region of the Fisheries & Oceans Canada (DFO).

Nearly 40 per cent of the 91 newly eligible species occur in parks administered by the Parks Canada Agency, which was formerly under the authority of the Minister of Canadian Heritage and is now under the authority of the Minister of the Environment. Responsibility for those species (both terrestrial and aquatic) that occur within parks, is shared between the Parks Canada Agency and either Environment Canada or Fisheries and Oceans Canada.

Reflecting government policy, SARA has been designed to ensure the persistence of Canadian wildlife species and the habitats that support them, while embracing Canadian values of participation. Public involvement is integral to the process of listing species as being at risk, as it is to the ultimate protection of Canadian wildlife. The best way to secure the survival of species at risk and their habitats is through the active participation of all those concerned. Your comments on this document will be given serious consideration.

Purpose of the consultation

Having received the COSEWIC assessment of the species' status, the Minister of the Environment must recommend to the Governor in Council one of the following possible courses of action as set out in SARA:

a) that the COSEWIC assessment be accepted and the species be added to the SARA list; or
b) that the species not be added to the SARA list; or
c) that the species be referred back to COSEWIC for further information or consideration.

The Government of Canada is obligated to take one of these actions within nine months of the Governor in Council having received the assessment from the Minister of the Environment.

COSEWIC bases its assessments solely on its evaluation of the biological status of each species. Consultation with Canadians regarding the potential impacts of the addition of each species to the SARA list will occur before the Minister of the Environment can arrive at informed decisions as to the appropriate course of action, in accordance with the options outlined above. Of particular interest in these discussions is the identification of the benefits and costs of adding or not adding each of the species to the SARA list, relative to the potential impacts on these species and on society of not adding them.

In this context, before the government makes decisions regarding the SARA list, Canadians will have the opportunity to express their views and concerns. This consultation allows those interested to contribute to the government decision-

making process. Where applicable, Wildlife Management Boards will be consulted. Aboriginal people identified as being affected will have the opportunity to contribute to the process. Other members of the public that are either affected or interested will have the opportunity to provide their views. This includes, but is not limited to, industries, industry groups and resource users, landowners, land users and environmental non-government organizations.

Process of public consultations
Canadians are invited to comment on whether all or some of the species included in this document should be added to the SARA list. This document has been posted on the Public Registry. Affected Aboriginal people and other identified concerned groups will be contacted.

This document will be circulated to provincial and territorial jurisdictions, Wildlife Management Boards, federal departments and agencies. Notice will also be sent to recognized stakeholders, including environmental and industrial non-government organizations and individuals who have made their interests known to the Canadian Wildlife Service. Other audiences may be engaged directly through other forms of consultation.

Role and impact of public consultation
The results of this public consultation are of great relevance to the entire process of listing species at risk. The comments received will be carefully reviewed and evaluated. They will then be documented in a Regulatory Impact Analysis Statement (RIAS). The RIAS is an integral part of the federal regulatory process and is published with all regulatory proposals in the Canada Gazette Part I.

Following initial consultations, a draft Order (an instrument that serves notice of a decision taken by the executive arm of government) proposing to list all or some of the 91 species under consideration will be prepared. This draft Order will be published along with the RIAS in the Canada Gazette Part I for a comment period. The Minister of the Environment will take into consideration comments and any additional information received, following publication in the Canada Gazette Part I. The Minister will then make a recommendation to the Governor in Council on whether to add certain species to the SARA list or to refer them back to COSEWIC. The final decision will be published in Canada Gazette Part II and on the Public Registry.

Process of identifying and listing species at risk

The Species at Risk Act
The Species at Risk Act strengthens and enhances the Government of Canada's capacity to protect Canadian wildlife species, subspecies and distinct populations that are at risk of becoming Extinct or Extirpated. The Act applies only to species on the SARA list.

Openness and transparency, including public consultation, is required in making decisions about which species should be included on the SARA list. The process begins with the assessment of a species as being at risk by COSEWIC. Upon receipt of these assessments, the Minister of the Environment then has 90 days to report on how he or she intends to respond to the assessment and to the extent possible, provide timelines for action. The Minister will then make a recommendation to the Governor in Council on whether to add certain species to the SARA list or to refer them back to COSEWIC. Once a species is added to the SARA list, specific actions must be taken within specified time periods to help ensure that species' protection and recovery.

Process and role of COSEWIC
COSEWIC comprises experts on wildlife species at risk. Their backgrounds are in the fields of biology, ecology, genetics, aboriginal traditional knowledge and other relevant fields and they come from various communities, including government, academia, Aboriginal organizations and non-government organizations.

Initially, COSEWIC commissions a status report for the evaluation of the conservation status of a species. To be accepted, status reports must be peer-reviewed and

approved by a subcommittee of species specialists. In special circumstances assessments can be done on an emergency basis.

COSEWIC then meets to examine the status report, discuss the species and determine whether or not the species is at risk and if so, assess the level of risk.

For more information on COSEWIC visit:

www.cosewic.gc.ca.

Terms used to define the degree of risk to a species

The degree of risk to a species is categorized according to the terms Extirpated, Endangered, Threatened and Special Concern. A species is assessed by COSEWIC as Extirpated when it is no longer found in the wild in Canada but still exists elsewhere. It is Endangered if it is facing imminent extirpation or extinction. An assessment of Threatened means that the species is likely to become Endangered if nothing is done to reverse the factors leading to its Extirpation or Extinction. COSEWIC assesses a species as Special Concern if it may become a Threatened or Endangered species because of a combination of biological characteristics and identified threats.

Significance of the addition of a species to the SARA list

The protection that comes into effect following the addition of a species to the SARA list depends upon the degree of risk assigned to the species, the type of species and where it occurs.

Protection for listed Extirpated, Endangered and Threatened species

Under the Act, prohibitions protect individuals of Extirpated, Endangered and Threatened species. These prohibitions make it an offence to kill, harm, harass, capture or take an individual of a species listed as Extirpated, Endangered or Threatened, or to damage or destroy the residence of one or more individuals of an Endangered or a Threatened species. The Act also makes it an offence to possess, collect, buy, sell or trade an individual of a species that is Extirpated, Endangered or Threatened or a part or derivative of one. These prohibitions will come into force June 1st, 2004.

The focus of protection will be on those species for which the federal government has direct legal authority. The protection will be in force for all listed birds protected under the Migratory Birds Convention Act, 1994 and for listed aquatic species. The prohibitions will also apply to all listed species on federal lands.

For all other listed Endangered, Threatened and Extirpated species, the provinces and territories have the responsibility to ensure that they receive adequate protection. Should species not be effectively protected, SARA has “safety-net” provisions that give the federal government the power to make an Order securing their protection. The federal government would consult with the jurisdiction concerned and the public before any safety-net provisions would be invoked.

Exceptions to these prohibitions may be authorized by the Minister of the Environment or the Minister of Fisheries and Oceans These ministers can enter into agreements or issue permits only for research relating to the conservation of a species that is conducted by qualified scientists, for activities that benefit a listed species or enhance its chances of survival, and for activities that incidentally affect a listed species. These exceptions can be made only when it is established that all reasonable alternatives have been considered and the best solution has been adopted, when all feasible measures will be taken to minimize the impact of the activity, and when the survival or recovery of the species will not be jeopardized.

Protection for listed species of Special Concern

The prohibitions of SARA for species listed as Extirpated, Endangered and Threatened will not apply to species of Special Concern; however any existing protections and prohibitions, such as those authorized by the Migratory Birds Convention Act or the Canada National Parks Act, continue to be in force.

Recovery strategies and action plans for Extirpated, Endangered and Threatened species

The addition of an Extirpated, Endangered or Threatened species to the SARA list triggers the requirement for the preparation of a recovery strategy and action plan which will be the subject of separate consultations.

Recovery strategies will be completed and made available on the SARA Public Registry to allow for public review and comment, within one year for Endangered species and within two years for Threatened and Extirpated newly listed species.

Recovery strategies will address the known threats to the species and its habitat. They will identify areas where more research is needed and population objectives that will help ensure the species' survival or recovery and will include a statement of the timeframe. Recovery strategies and action plans will identify, to the extent possible, the critical habitat of the species. Action plans will include measures to address threats, help the species recover and protect critical habitat. Measures to implement the recovery strategy will also be identified in the action plan.

Recovery strategies and action plans will be prepared in cooperation with Wildlife Management Boards and aboriginal organizations directly affected by them and with the jurisdictions responsible for the management of the species. Landowners and other stakeholders directly affected by the recovery strategy will also be consulted.

Management plans for Species of Special Concern

For species of Special Concern management plans will be prepared and made available on the Public Registry within three years of their addition to the SARA list, allowing for public review and comment. Management plans will include appropriate conservation measures for the species and for its habitat.

Management plans will be prepared in cooperation with jurisdictions responsible for the management of the species, including directly affected Wildlife Management Boards and aboriginal organizations. Landowners, lessees and others directly affected by a management plan will also be consulted.

Public comments solicited on the addition of 8 aquatic species to the SARA list

The 8 aquatic species include the Channel Darter, Northern Madtom, Pugnose Shiner, Shortjaw Cisco, Atlantic Cod, Kidneyshell, Round Hickorynut and Lake Winnipeg *Physa* snail. They have been assessed or reassessed by COSEWIC as species at risk and are being considered for addition to the SARA list.

Please e-mail your comments to Fisheries & Oceans Canada, Central and Arctic Region at:

fwisar@dfo-mpo.gc.ca

by no later than the 14th of July, 2004, or by regular mail, please address comments to:

Central and Arctic Region
SARA Coordinator
Freshwater Institute
Fisheries & Oceans Canada
501 University Avenue
Winnipeg, Manitoba
R3T 2N6

Your comments will be reviewed and used to consider whether or not to place each species on the SARA list.

PART II: SPECIES PROPOSED FOR AMENDMENT TO THE SARA LIST CENTRAL AND ARCTIC REGION

Endangered

Fish

Northern Madtom (*Noturus stigmosus*)

Status:	Endangered
Last Examination:	November 2002
Distribution and Biology:	The northern madtom has an overall colour pattern that is mottled with three irregular dark saddles on the back located at the front of the dorsal fin, behind the dorsal fin and at the adipose fin. Unlike the brindled madtom, *Noturus miurus*, the dorsal and adipose fins have pale distal margins. There are three or four irregular crescent-shaped bars on the caudal fin; the middle bar usually extending across the upper and lower caudal rays and touching the caudal peduncle. Two pale spots about three-quarters the diameter of the eye are usually present just anterior to the dorsal fin. Maximum total length is 132 mm. The preferred habitat of the northern madtom is clear to turbid water of large creeks to big rivers with moderate to swift current. It occurs on bottoms of sand, gravel and rocks occasionally with silt, detritus, and accumulated debris, and is sometimes associated with macrophytes. In Canada, the northern madtom is known only from the Detroit River, Lake St. Clair, and 2 tributaries of Lake St. Clair, the Thames and Sydenham Rivers.
COSEWIC Reason for Designation:	This species has a very restricted Canadian range (two extant locations), which is impacted by deterioration in water quality and potential negative interactions with an exotic species. One population (Sydenham River) has been lost since 1975.
Potential Protective Measures and Impacts:	Legal listing of the northern madtom will invoke the prohibition provisions of SARA. Over the longer term, potential measures may result in management measures and identification of critical habitat that may impact individuals, businesses, and governments. Examples of potential protective measures may include: • Measures to change land and water use activities – these range from the activities of individuals (i.e. gardening, farming, recreation, etc.) to those of commercial entities (i.e. urban development, farming, ranching, etc.). • Measures to improve water quality (i.e. reducing suspended solids and nutrients) and control the timing of water flows into tributaries, aquifers, lakes and rivers. It should be noted that the recovery planning process will involve further consultation.

Pugnose Shiner (*Notropis anogenus*)

Status:	Endangered
Last Examination:	November 2002
Distribution and Biology:	The pugnose shiner is a timid and secretive fish that seeks cover in clear waters among aquatic plants, which also provide food and breeding sites. Lifespan is probably only three years. Spawning occurs from mid-May to July at temperatures of 21-29°C. Gravid females may have up to 1275 eggs but may not lay all of these. Pugnose shiners consume a variety of small plant and animal foods up to 2 mm in size. Its diet includes plants and filamentous green algae, cladocerans, *Bosmina* and *Chydorous*, small leaches and caddisfly larvae. The pugnose shiner has been recorded from 6 general locations in Canada and is still established at four of these: St. Lawrence River, Long Point Bay in lake Erie, open coastal marshes of Lake St. Clair, and the Old Ausable Channel. In 2003, two new occurrences were recorded from small drainages near Wallaceburg.
COSEWIC Reason for Designation:	The pugnose shiner has a limited, fragmented Canadian distribution, being found only in Ontario where it is subject to declining habitat quality. The isolated nature of its preferred habitat may prevent connectivity of fragmented populations and may prevent gene flow between existing populations and inhibit re-colonization of other suitable habitats.
Potential Protective Measures and Impacts:	Legal listing of the pugnose shiner will invoke the prohibition provisions of SARA. Over the longer term, potential measures may result in management measures and identification of critical habitat that may impact individuals, businesses, and governments. Examples of potential protective measures may include: • Measures to change land and water use activities – these range from the activities of individuals (i.e. gardening, farming, recreation, etc.) to those of commercial entities (i.e. urban development, farming, ranching, etc.). • Measures to improve water quality (i.e. reducing suspended solids and nutrients) and control the timing of water flows into tributaries, aquifers, lakes and rivers. It should be noted that the recovery planning process will involve further consultation.

Molluscs

Kidneyshell (*Ptychobranchus fasciolaris*)

Status: Endangered

Last Examination: May 2003

Distribution and Biology:

The kidneyshell, *Ptychobranchus fasciolaris* (Rafinesque 1820), is a medium to large freshwater mussel (maximum length in Canada ~120 mm) that is easily recognized by its elongate, yellow-brown shell with wide, interrupted green rays that look like squarish spots. The kidneyshell is most often found in small to medium-sized rivers and streams, where it prefers shallow areas with clear, swift-flowing water and substrates of firmly packed coarse gravel and sand. It is rarely found in either large rivers or headwater creeks, but has been found on gravel shoals in Lake Erie and Lake St. Clair. It is often found near beds of water willow, an aquatic plant and is usually found deeply buried in the substrate. Larval freshwater mussels are parasitic and must undergo a period of encystment on a suitable host in order to successfully develop to the juvenile stage. Host species for the kidneyshell include the blackside darter, fantail darter and johnny darter. In Canada, it is known only from southern Ontario, where it was once found in the Grand, Thames, Sydenham, Ausable, Niagara and Detroit rivers, as well as Lake Erie and Lake St. Clair.

COSEWIC Reason for Designation:

This species has been lost from about 70% of its historical range in Canada due to impacts of the zebra mussel and land use practices. It is now restricted to the East Sydenham and Ausable rivers. Although both populations appear to be reproducing, there is evidence that abundance has declined in the East Sydenham River. Agricultural impacts, including siltation, have eliminated populations in the Grand and Thames rivers, and threaten the continued existence of this species in Canada.

Potential Protective Measures and Impacts:

Legal listing of the kidneyshell will invoke the prohibition provisions of SARA. Over the longer term, potential measures may result in management measures and identification of critical habitat that may impact individuals, businesses, and governments.

Examples of potential protective measures may include:

- Measures to change land and water use activities – these range from the activities of individuals (i.e. gardening, farming, recreation, etc.) to those of commercial entities (i.e. urban development, farming, ranching, etc.).

- Measures to improve water quality (i.e. reducing suspended solids and nutrients) and control the timing of water flows into tributaries, aquifers, lakes and rivers.

It should be noted that the recovery planning process will involve further consultation.

Round Hickorynut (*Obovaria subrotunda*)

Status:	Endangered
Last Examination:	May 2003
Distribution and Biology:	The round hickorynut is a small mussel reaching a maximum size of 60 - 65 mm. The mussel is readily recognized by its round shape and prominent centrally located, inward curving beaks that are elevated well above the hinge line. Beak sculpture is weak, consisting of 4 to 5 weak double bars which are slightly sinuous centrally and angled posteriorly. The shell is generally dark in colour ranging from olive-brown to dark brown and is relatively smooth except for prominent growth rests. Larval freshwater mussels are parasitic and must undergo a period of encystment on a suitable host in order to successfully develop to the juvenile stage. Host species for the kidneyshell include the greenside darter and possibly the eastern sand darter. The Canadian distribution of this species was always restricted to southern Ontario where it was once found in the Welland, Grand, Sydenham, Thames, St. Clair and Detroit Rivers as well as the waters of Lake St. Clair and western Lake Erie.
COSEWIC Reason for Designation:	This species has been lost from about 90% of its former range in Canada. Populations in the Grand and Thames rivers are extirpated and populations in the Sydenham River are declining, all due to the combined effects of pollution and agricultural impacts. Most of the Great lakes populations have been lost due to impacts of zebra mussels, and the remaining population in the St. Clair delta near Walpole Island may be at risk. If the Eastern Sand Darter were the host of this species, then the decline of this threatened fish would affect the mussel's survival.
Potential Protective Measures and Impacts:	Legal listing of the round hickorynut will invoke the prohibition provisions of SARA. Over the longer term, potential measures may result in management measures and identification of critical habitat that may impact individuals, businesses, and governments. Examples of potential protective measures may include: • Measures to change land and water use activities – these range from the activities of individuals (i.e. gardening, farming, recreation, etc.) to those of commercial entities (i.e. urban development, farming, ranching, etc.). • Measures to improve water quality (i.e. reducing suspended solids and nutrients) and control the timing of water flows into tributaries, aquifers, lakes and rivers. It should be noted that the recovery planning process will involve further consultation.

Lake Winnipeg Physa snail (*Physa* sp.)

Status:	Endangered
Last Examination By COSEWIC:	November 2002
Distribution and biology:	The Lake Winnipeg Physa snail is endemic to Canada and its distribution is confined to Lake Winnipeg. There are currently five extant populations occurring in the following localities; (1) Fisher River Indian Reserve, (2) Pebble Beach, (3) Camp Morton, (4) Dunnottar and (5) Sunset Beach. Distribution is fragmented. Biology is unknown.
COSEWIC Reason for Designation:	Habitat destruction is the major threat particularly with shoreline habitat alteration such as increase recreational use, increase logging in surrounding watershed, increase intensive agriculture and expanded municipal drainage programs.
Possible Protective Measures and Impacts:	Legal listing of the Lake Winnipeg Physa snail will invoke the prohibition provisions of SARA. Over the longer term, potential measures may result in management measures that impact on individuals, businesses, and governments. Examples of potential protective measures may include: • Restricting recreational use in areas where the species is known to occur. • Restricting gear type used in the commercial fishery in areas where the species is known to occur. • Strict guidelines may be established for those who wish to carry out research on the species or in areas of their critical habitat. • More research may be carried out on potential threats to the species and the level of impact of various human activities, especially more research on impacts of lake eutrophication and shoreline alteration. • More research may be carried out on areas of critical habitat for the species (the process of identifying critical habitat for endangered species is still in the initial stages). These broad ranges of measures have the potential to impact First Nations activities, cottage owners, recreational users and other industries. It should be noted that the recovery planning process will involve further consultation.

THREATENED

Fish

Shortjaw Cisco *(Coregonus zenithicus)*

Status: Threatened

Last Examination by COSEWIC: May 2003

Distribution and biology: The shortjaw cisco is a member of a taxonomically complicated group of closely related cisco forms. Historically, the shortjaw cisco was once an important component of the "chub" fishery on the Great Lakes as well as the "tullibee" fishery on Lake Winnipeg. The species is now believed to be extirpated from all the Great Lakes except Lake Superior where it is currently scarce. The species has also been documented from a number of other lakes including Lake Attawapiskat , Basswood Lake, Big Trout Lake, Deer Lake, Lake Nipigon, Lac Seul, Lake of the Woods, Lake Saganaga, Loonhaunt Lake, Sandy Lake, Sandybeach Lake, and White Partridge Lake from Ontario; Lake Athapapuskow , George Lake, Lake Winnipeg and Lake Winnipegosis from Manitoba; Lake Athabasca, Lac la Ronge and Reindeer Lake from Saskatchewan; Barrow Lake from Alberta; and Great Slave Lake in the Northwest Territories.

What little is known of the life history of the shortjaw cisco generally originates from the Great Lakes. The species occurs in deep water generally occupying depths of 55m to 144m. Growth is characterized as rapid during the first year followed by slower growth in subsequent years. Maximum lengths attained are in the range of 350mm for males and 370mm for females. Sexual maturity is believed to occur by the fifth or sixth year. Spawning occurs over a clay bottom where the eggs are abandoned. A 300mm female may produce as many as 20,000 eggs. Freshwater shrimp, planktonic crustaceans and insect larvae are the primary food items of adult fish. Little is known of the early life history for the species.

COSEWIC Reason for Designation: The shortjaw cisco has been extirpated from Lake Huron and Lake Erie and is in decline in Lake Superior and Great Slave Lake. It is still present in Lake Nipigon and numerous smaller lakes where its status is not well known. Threats include: food fisheries; habitat loss and degradation resulting from urban, agriculture and industrial activities; introductions of exotic species; sea lamprey predation, and population destabilization resulting from climatic change, and introgressive hybridization. Remaining populations are severely fragmented and the rescue potential is negligible especially as only remaining U.S. populations are those in Lake Superior which are probably endangered.

Possible Protective Measures and Impacts:

Legal listing of the shortjaw cisco will invoke the prohibition provisions of SARA. Potential measures could include:

- Reduction or curtailment of fishing activities if they are deemed to be detrimental to the recovery of the species.
- Monitoring of fisheries catch and by-catch to determine current and/or allowable levels of harvest.
- Issuance of permits to allow incidental harvest at prescribed rates.
- More research directed at better understanding of the life history and habitat requirements of the species.
- Continued support for broad based ecosystem and watershed initiatives that will contribute to the recovery of the species.
- Development of stewardship initiatives that would involve stakeholders in recovery efforts.
- Continued support for educational awareness programs to inform the public and stakeholders about the shortjaw cisco.
- Development of recommendations to fisheries management agencies to promote site-specific recovery efforts.

Ultimately some measures may have the potential to impact on commercial, domestic and sport fisheries along with industries or developments that have the potential to adversely affect the species or its habitat.

Any individuals or organizations that may require one-on-one consultations should identify that need in Part III of this workbook.

A recovery strategy, currently under development for the shortjaw cisco, will address any issues that may relate to these provisions. A recovery strategy will also identify measures to further the recovery of the species and will involve further consultations.

Channel Darter (*Percina copelandi*)

Status: Threatened

Last Examination: May 2002

Distribution and Biology: The channel darter, *Percina copelandi* (Jordan, 1877), is a small benthic percid (subfamily Etheostomatinae). This fish is light sand or olive-coloured with brown speckles on its back. X-shaped markings are scattered over its dorsal surface. A dark spot or bar may be present beneath the eye and extend onto the snout. There are 8-18 brown oblong blotches along the lateral line linked by a thin brown line. Adults are commonly 40 mm in total length. Although the channel darter is uncommon in Canada, disjunct populations can be found in Ontario and Quebec. In Ontario, specimens were found in the tributaries to Lake Ontario and along the shores and tributaries of Lake Erie and Lake St. Clair. In Quebec, specimens of channel darter were captured in the tributaries of the St. Lawrence River in the regions of Chaudière-Appalaches, Estrie, Lanaudière, Mauricie-Bois Francs, Montérégie and the Outaouais.

COSEWIC Reason for Designation: This species exists in low numbers where found, and its habitat is impacted by siltation and fluctuations in water temperature.

Potential Protective Measures and Impacts: Legal listing of the Channel Darter will invoke the prohibition provisions of SARA. Over the longer term, potential measures may result in management measures and identification of critical habitat that may impact individuals, businesses, and governments.

Examples of potential protective measures may include:

- Measures to change land and water use activities – these range from the activities of individuals (i.e. gardening, farming, recreation, etc.) to those of commercial entities (i.e. urban development, farming, ranching, etc.).

- Measures to improve water quality (i.e. reducing suspended solids and nutrients) and control the timing of water flows into tributaries, aquifers, lakes and rivers.

It should be noted that the recovery planning process will involve further consultation.

SPECIAL CONCERN

Fish

Atlantic Cod (Arctic population) (*Gadus morhua*)

Status: Special Concern

Last Examination By COSEWIC: May 2003

Distribution and biology: Arctic populations of the Atlantic cod are confined to a few coastal salt lakes on southeast Baffin Island. Populations are confirmed or thought to exist in only seven lakes. These populations exhibit extreme slow growth and late sexual maturity making them sensitive to exploitation or disturbance.

COSEWIC Reason for Designation: Arctic populations are known only from a few coastal salt lakes and the adult component of the population may number no more than a few thousand. Uncertainty with respect to the actual number of locales makes it difficult to assign any higher status, but the known populations are sensitive to human activities.

Possible Protective Measures and Impacts: Legal listing of the Atlantic cod (Arctic population) will invoke the prohibition provisions of SARA. Over the longer term, potential measures may result in measures that may impact on individuals, businesses, and governments.

Examples of potential protective measures may include:

- Restricting recreational fishing in areas where the species is known to occur.
- Restricting gear type used in the commercial fishery in areas where the species is known to occur.
- Strict guidelines may be established for those who wish to carry out research on the species or in areas or their critical habitat.
- More research may be carried out on potential threats to the species and the level of impact of various human activities.

It should be noted that the recovery planning process will involve further consultation.

Part III: Questionnaire

Questionnaire

Name:

Affiliation:

Species of Interest:

1.a) Based on what you have learned about the *Species at Risk Act*, do you think the listing of the species of interest to you would affect your activities? How?

b) If a legal listing will affect your activities, do you see these effects as a cost or benefit to you? In what way?

c) For you, would the costs or benefits of a legal listing change over time? If so, how would they change and do you have any suggestions on how to minimize the impacts?

d) Over the next 5 years what do you think are the most important social and economic indicators that government should monitor?

2. In order to be truly effective, the recovery of species at risk must be a cooperative process that includes organizations and individuals with knowledge of these species and the threats is faces. How can relevant parties be included in the recovery of the species?

3. How can you as an individual, or your industry or organization as a group, participate in the recovery of the species? Give examples of particular activities, if you can.

4. Please add any other comments or concerns (include additional sheets, if necessary).

PLEASE SEND COMMENTS BY Wednesday July 14, 2004

THANK YOU

GLOSSARY

COSEWIC: The Committee on the Status of Endangered Wildlife in Canada. The committee comprises experts on wildlife species at risk. Their backgrounds are in the fields of biology, ecology genetics and other relevant fields such as aboriginal traditional knowledge. These experts come from various communities, including among others, governments and academia.

Disjunct populations: populations which are separate to the degree that there is no genetic exchange occurring between them.

Endemic species: a species occurring naturally only in one region.

Exotic species: Species which are not native to North America.

Fragmentation: the division of larger areas of natural habitat into smaller ones separated by a different (usually modified) habitat.

Governor in Council: The Governor General of Canada acting on the advice of the Queen's Privy Council for Canada (i.e. Cabinet)

Order: Order in Council (OIC). An instrument that serves notice of decision taken by the executive arm of government, for example, an Order in Council accompanies all regulations.

Privy Council Office (PCO): PCO assists the Clerk of the Privy Council Office in providing professional, non-partisan support to the Prime Minister in his or her role as head of government on all policy and operational issues. For more on the Privy Council Office, visit: http://www.pco-bcp.gc.ca/.

RENEW (Recovery of Nationally Endangered Wildlife in Canada): the national recovery program established under the Accord for the Protection of Species at Risk.

RIAS: An analysis of the expected impact of each regulatory initiative must be done. The results of this analysis are summarized in a Regulatory Impact Analysis Statement (RIAS). The RIAS is, in effect, a public accounting of the need for each regulation in terms of this policy.

SARA list: Schedule 1 of the Species at Risk Act (SARA); the list of the species that receive protection under SARA.