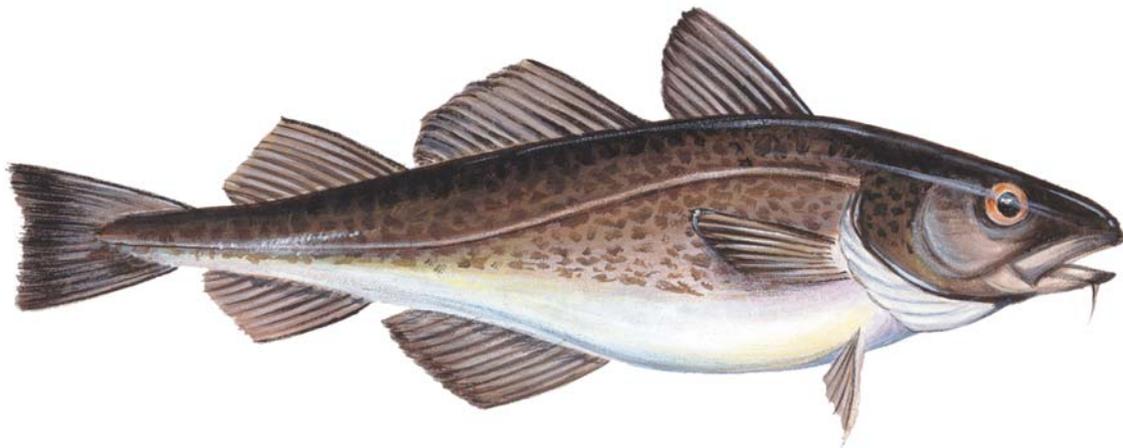




# SPECIES AT RISK ACT

CONSULTATION WORKBOOK  
on the proposed addition of a species to the  
List of Wildlife Species at Risk as

*Special Concern*



## The Atlantic Cod (Arctic Lakes population)

December 2010

Aussi disponible en français



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Canada

Cover illustration of the Atlantic Cod by Gary Taylor © Fisheries and Oceans Canada

**CONSULTATION WORKBOOK  
Atlantic Cod (Arctic Lakes population)**

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## Introduction

### Why are we asking for your feedback on the Atlantic Cod (Arctic Lakes population)?

The purpose of this workbook is to invite all Canadians to share their views on whether the status of the Atlantic Cod (Arctic Lakes population) should be added to the federal *Species at Risk Act* (SARA) as “Special Concern”.

### The Workbook summary

This workbook is broken down into three parts.

- Part 1 provides general background information on the federal *Species at Risk Act*, and explains how a species is added to the List of Wildlife Species at Risk, and what happens once that occurs.
- Part 2 provides information about the Atlantic Cod (Arctic Lakes population) in Canada and outlines its current “at risk” status.
- Part 3 (detachable) consists of a questionnaire for you to complete and send to the federal government. It is intended to assist you in stating your concerns and advice.

This workbook can also be downloaded by visiting:

[www.registrelep.gc.ca/involved/consultation/default\\_f.cfm](http://www.registrelep.gc.ca/involved/consultation/default_f.cfm)

### Your view is important to us!

Your view on whether the Atlantic Cod (Arctic Lakes population) should be added to the SARA List of Wildlife Species at Risk as “Special Concern” is important to this consultation process. Your opinions will be carefully considered.

## Part 1: The *Species at Risk Act*

The *Species at Risk Act* (SARA) became law on June 5, 2003. This federal legislation helps prevent Canada's wildlife species from becoming extinct. The Act sets out how the federal government will decide which species are in greatest need of protection and what it will do to protect those species. It identifies how governments, organizations and individuals can work together to protect plants and animals (including aquatic species), and it establishes penalties for failing to obey the *Act*.

Plants and animals protected under the *Act* are included in the SARA "List of Wildlife Species at Risk". This inventory of protected species will be called "the SARA List" in the rest of this consultation workbook.

### Who determines if a species is "at risk"?

The federal government will consider adding a species to the SARA List only if the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) considers a species 'at risk' and recommends legal protection. COSEWIC is a legally recognized group of independent experts who use science and traditional knowledge to determine which species need added protection. These recommendations are formally presented to the federal government.

As part of the recommendations, COSEWIC places the species it considers to be "at risk" into one of five categories:

Extinct - A wildlife species that no longer exists.

Extirpated - A wildlife species that is no longer found in the wild in Canada, but may be found elsewhere.

Endangered - A wildlife species that will likely soon become Extirpated or Extinct.

Threatened - A wildlife species likely to become Endangered if nothing is done to help protect it.

Special Concern - A wildlife species that may become Threatened or Endangered if nothing is done to help protect it.

Once the COSEWIC recommendations are received, the federal Cabinet must decide if it will support, reject or send recommendations back to COSEWIC for further consideration. As part of the Cabinet's consideration process, it must consider the views of Canadians, as well as the economic and social implications of protecting a species under SARA.

### What happens once a species or population is added to the SARA List?

The amount of protection that SARA provides depends on its status in the above five "at risk" categories.

It is illegal to kill, harm, harass, possess, collect, buy, sell or trade an Extirpated, Endangered or Threatened species. It is also generally illegal to damage or destroy the places these species live. These prohibitions do not apply to species of Special Concern.

The ministers responsible for the *Act* are: the Minister of the Environment, who is responsible for animals and plants found on federal lands; and the Minister of Fisheries and Oceans, who is responsible for aquatic animals. Under special circumstances, these Ministers may make exceptions to the above prohibitions. For example, a responsible minister can issue a permit that would allow a qualified scientist to carry out a research project that would likely benefit a listed species, but may require the collection of specimens, or a physical relocation from its current habitat. Exceptions can only be made if the Minister is assured that the survival or recovery of the species will not be jeopardized.

### Public consultation

When deciding whether to add a species to the SARA List, the federal government must consider potential social and economic benefits and costs. It must also consider the potential consequences of *not* adding the species. To do this, government representatives meet with various group and individuals that have a direct interest in the species or that wish to provide comments. This may include landowners, aboriginal groups, land users, wildlife management boards, non-government environmental organizations and industry. This consultation workbook provides another option to allow Canadians to provide their views to government.

Following the consultation period, the Government carefully considers all comments it receives. Following this final consideration, the Government must decide whether to add the species to the SARA List. Its decision is published in the Canada Gazette, Part II and on the SARA Public Registry.

## Recovery strategies and management plans

If a wildlife species is added to the SARA List as an **Extirpated, Endangered or Threatened** species, the federal government must prepare a strategy for its recovery. The *recovery strategy* outlines known threats to the species, identifies the habitat it needs to survive, and highlights gaps in knowledge. It also sets a goal for the species' recovery.

A recovery strategy must be completed within one year of a species being listed as Endangered, and within two years if it is Threatened or Extirpated.

If a wildlife species is considered **Special Concern**, the federal government must prepare a *management plan* within three years of the species being added to the SARA List. The management plan identifies conservation measures aimed at protecting the species and its habitat.

The recovery strategies and management plans are prepared in cooperation with directly affected groups, including wildlife management boards, Aboriginal organizations and provincial or territorial governments responsible for managing the species. Using public notices, letters and meetings, every effort is made towards to consult individuals, organizations and communities that may be directly affected by these strategies and plans.

When complete, the recovery strategy or management plan is posted on the online SARA Public Registry website, which provides information and documents about species at risk in Canada. Once posted, the public has 60 days to let the federal government hear its views. **The government then has 30 days to consider any comments received, make any changes to the proposed recovery strategy or management plan, and post a final copy in the Public Registry.**

## Action plans

After the final posting of the recovery strategy, one or more **action plans** are prepared. Action plans identify ways to reduce threats to the species and protect its critical habitat, as well as other activities to be undertaken to support the recovery strategy. Action plans are prepared in cooperation with directly affected groups, including wildlife management boards, Aboriginal organizations and provincial or territorial governments responsible for managing the species. Using public notices, letters and meetings, every effort is made to consult individuals, organizations and communities that may be directly affected by these plans.

When the proposed action plan is completed, it is posted on the Public Registry for 60 days, to allow the federal government to hear views of Canadians. After

60 days, the government has 30 days to consider any comments received, make any changes to the action plan and post a final copy in the Public Registry.

#### For more information

Visit the SARA Public Registry (<http://www.sararegistry.gc.ca>) for more information on the *Species at Risk Act* and the various species that receive federal protection.

Additional information can be found on the Fisheries and Oceans Canada Species at Risk website ([www.dfo-mpo.gc.ca/species-especes/](http://www.dfo-mpo.gc.ca/species-especes/)) and on the website of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) ([www.cosewic.gc.ca](http://www.cosewic.gc.ca)).

## Part 2: Atlantic Cod (Arctic Lakes population)

REFERENCE : COSEWIC. 2010. COSEWIC assessment and status report on Atlantic Cod *Gadus morhua* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 76 pp.

### COSEWIC Designation

1998: Atlantic Cod was considered a single Designatable Unit and was assessed by COSEWIC as "*Special Concern*"

2003: Atlantic Cod were separated into four (4) Designated Units

- i. Laurentian North - Threatened
- ii. Newfoundland & Labrador - Endangered
- iii. Maritimes - Special Concern
- iv. Arctic Population - Special Concern

2010: Atlantic Cod were further separated into six (6) Designated Units

- i. Laurentian North - Endangered
- ii. Newfoundland and Labrador

Maritimes unit is further separated into 2 new Units

- iii. Laurentian South - Endangered
- iv. Southern Population - Endangered

Arctic unit is further separated into 2 new Units

- v. **Arctic Lakes - Special Concern**
- vi. Arctic Marine - Data Deficient

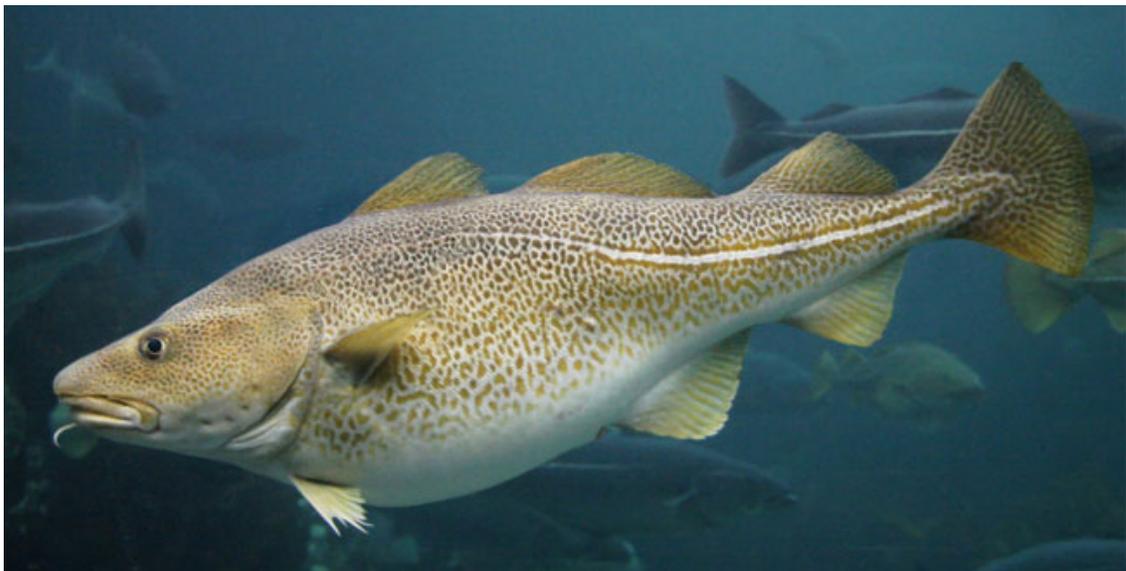
### Current SARA Listing Status

The Atlantic Cod (Arctic Lakes population) is not currently listed on the federal SARA List.

*As a result of COSEWIC's re-evaluation of the Atlantic Cod (Arctic Lakes population) as a separate Designatable Unit in 2010, the Government of Canada is presently considering whether to add this species to the SARA List of Wildlife Species at Risk as "Special Concern".*

### Species description

The Atlantic Cod (*Gadus morhua*) is a member of the Gadidae family. The Gadidae family also includes other well-known species of cod, such as Arctic Cod and Greenland Cod. Atlantic Cod have a “classic”, streamlined shape and are able to sustain moderate speed over relatively long distances. They are characterized by three dorsal fins, two anal fins, a single chin barbel and a very distinct lateral line. Their colour is brown to green, with spots on the lateral and dorsal surface. Cod in the ocean may grow to lengths exceeding 2.0 m, while maximum length within the Arctic Lakes population appears to be slightly less than 1.5 m.



Reproduced with permission. Photo Credit: Dieter Craasmann

**Figure 1.** The Atlantic Cod in a marine environment.

### Where is the Arctic Lakes population of Atlantic Cod?

Marine populations of Atlantic Cod are the original source of the Arctic Lakes population; they consist of three separate populations. Atlantic Cod in the Arctic lakes inhabit three saltwater, coastal lakes on south-eastern Baffin Island (Fig. 2); Lakes, Ogac, Qasigialiminiq and Tariujarusiq. These Lakes are separated from the coastal environment and their cod populations have become genetically distinct from their marine cousins and from each other. Seawater enters these lakes only during the highest summer tides. These Arctic lakes are considered meromictic, or stratified, and have a freshwater layer of water a few metres deep, with a larger saltwater layer beneath it. The cod live only in the saltwater layer, except for very short trips into the freshwater layer.

- Ogac Lake (also known as Ogak Lake and Ney Harbour) - Across Frobisher Bay, 117 km from Iqaluit at the head of Ney Harbour (62°51'N, 67°20'W; NTS map 025J14).
- Qasigialimiq Lake - First lake on south arm of Nettilling Fjord; across from Pangnirtung and deeper into Cumberland Sound (66°02'N, 68°12'W; NTS map 026K00).
- Tariujarusiq Lake - First lake on north arm of Brown Inlet, just west from Nettilling Fjord (65°29'N, 67°20'W; NTS map 026G00).

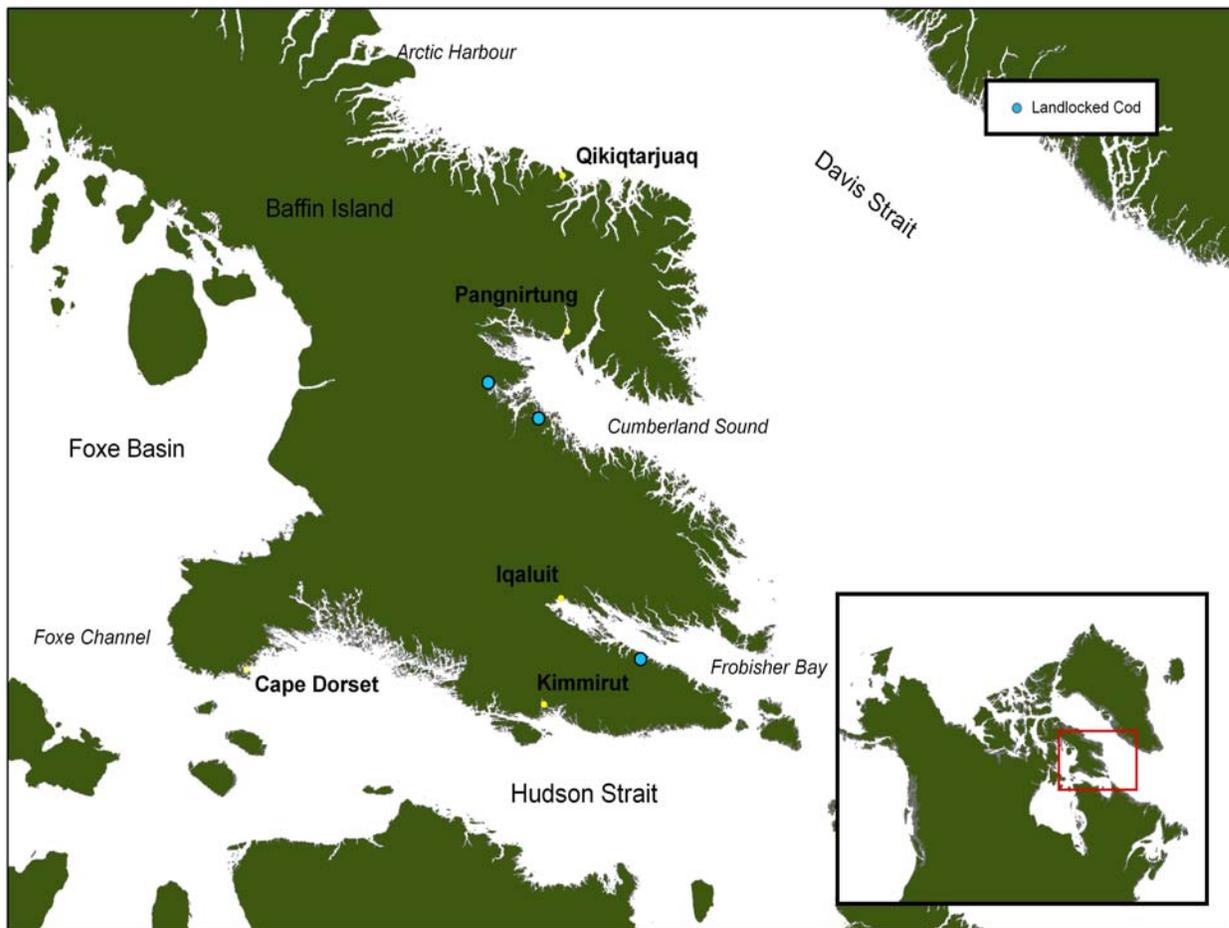


Figure 2. Location of the Arctic Lakes population of Atlantic Cod (blue dots).

### How many Atlantic Cod are there in the Arctic Lakes population?

Population estimates for two of the three Arctic lakes are not available; however, some information does exist for Ogac Lake.

Based on a study from 1962, the number of reproductive cod in Ogac Lake in Frobisher Bay is estimated at 500 individuals. Less than 10,000 immature cod are estimated to live in Ogac Lake, and few will reach reproductive size.

Given that each population is genetically unique, and that inter-mixing between the lakes and the coastal environment does not take place, any decline in a one lake's population will not be replaced by another.

### Threats to the Atlantic Cod (Arctic Lakes population)

Atlantic Cod in the Arctic Lakes populations are found in only three coastal lakes, and the number of reproductive adults may be no more than a few thousand in total.

While fishing is typically cited as the reason for the decline for most fish stocks, it is only one of the reasons that these combined lake populations have been designated as Special Concern.

The small number of verified locations for these populations and the small area of these lakes is another reason for designation. The combined surface area of the three lakes is less than 20 square kilometres, suggesting this small area and restricted distribution may be especially sensitive to disturbance. The lakes themselves are unique habitats and may be easily disturbed. No other fish occur in these lakes and the cod rely on high tides to bring in food. Changing sea levels and the resultant tide levels would likely affect these populations of Atlantic Cod.

Immigration of other Atlantic Cod populations is unlikely, due to the isolated nature of these lakes as well as the shallow and temporary inlet/outlets.

### What will happen if the Atlantic Cod (Arctic Lakes population) is added to the SARA List as "Special Concern"?

Automatic prohibition provisions of SARA do not apply to species of Special Concern, however a management plan will be required within three years of the species being added to the SARA list.

A management plan may include the following measures:

- Restriction of recreational fishing in areas where the species is known to occur;
- Increased protection of areas of known habitat;
- Strict guidelines may be established for those who wish to carry out research on the species or in areas of critical habitat; and
- More research may be carried out on potential threats to these isolated populations of Atlantic Cod and the level of impact of various human activities.

Please note that a management planning process will involve further consultation.

### Part 3: Let us know what you think

The following questionnaire invites you to reflect on the implications of adding the Atlantic Cod (Arctic Lakes population) to the SARA List as "Special Concern".

Your answers and comments will tell us what you think about the protection and recovery of this unique species and the possible effects of a decision to include it on the SARA List.

If you wish to keep the other sections of this workbook, please feel free to detach them and return only the questionnaire.

Return the completed questionnaire or your comments by mail, fax or e-mail to the following address:

SARA Coordinator  
Fisheries and Oceans Canada  
501 University Crescent  
Winnipeg, Manitoba R3T 2N6

Email: [fwisar@dfp-mpo.gc.ca](mailto:fwisar@dfp-mpo.gc.ca)  
Fax: 204-983-5192  
Telephone: 204-984-0599  
Toll-free: 1-866-538-1609

You can also provide your views online by visiting the Public Registry ([www.sararegistry.gc.ca](http://www.sararegistry.gc.ca)) and posting your comments.

**Please submit your comments by FEBRUARY 11, 2011.**

## Questionnaire on the Atlantic Cod (Arctic Lakes population)

1. In what capacity are you completing this questionnaire? Please specify.

Individual

Member of an Aboriginal group or Aboriginal organization:

\_\_\_\_\_

Representative of an organization or company:

\_\_\_\_\_

Other:

\_\_\_\_\_

2. Your name (optional): \_\_\_\_\_

3. Where do you live (if individual)? Where is your organization located?

Nunavut

Northwest Territories or Yukon

Other Canadian province

Outside Canada

4. Which sectors do you represent? Check all that apply.

Aboriginal policy (including Land Claim and Inuit Designated Organizations)

Mines, Oil and Gas - exploration, exploitation, transportation

Agriculture, Forestry

Non-profit Organization - environmental conservation

Commerce

Non-profit Organization - economic, social and community development

Construction

Service sector - public administration, health and social welfare

Commercial Fishing

Service sector - tourism, culture

Hunting, Fishing and Trapping

Service sector - transportation and communications

Hydroelectric or Wind Energy - exploration, production, transportation

Other (please specify):

5. How familiar are you with the *Species at Risk Act*?

- I am not familiar with the *Act*
- I know this *Act* well
- I have heard about this *Act* in the media
- I have gathered some information on this *Act* (pamphlets, websites, consultation workbooks, etc.)
- I have participated in information sessions or public consultations relating to this *Act*
- Other (please specify): \_\_\_\_\_

6. a) Are you in favour of the Government of Canada adding Atlantic Cod (Arctic Lakes population) to the SARA List?

- Yes                       No                       Undecided

b) If you have answered "Yes" or "No", please indicate the reasons for your answer.

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c) If you have answered "Undecided", please indicate why:

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7. Based on your understanding of the *Species at Risk Act*,

a) Do you believe that your activities could be affected if the Atlantic Cod (Arctic Lakes population) is added to the SARA List? If so, how?

- Positive     Negative     No affect     Not sure

b) Please describe how your activities would be negatively or positively affected.

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8. Which of these options best reflect your agreement or disagreement with the following statements concerning the Atlantic Cod (Arctic Lakes population):

<p><b>The Atlantic Cod (Arctic Lakes population)</b></p>	<p>Strongly disagree</p>	<p>Somewhat disagree</p>	<p>Indifferent</p>	<p>Somewhat agree</p>	<p>Strongly agree</p>	<p>No opinion</p>
<p>They are of social, cultural and traditional importance in my community (<i>e.g.</i> are used for ceremonial purposes)</p>						
<p>They are, or have been, an important subsistence food source</p>						
<p>They have economic value (<i>e.g.</i> commerce, hunting)</p>						
<p>They create job opportunities (<i>e.g.</i> tourism) in the local economy</p>						
<p>They play an important role in maintaining a healthy ecosystem</p>						
<p>They are important to our Canadian heritage</p>						
<p>They will be a valuable resource for future generations</p>						
<p>I value them, though I have never seen them</p>						
<p>Other (please specify):</p>						

9. Do you think you could contribute to the conservation of Atlantic Cod (Arctic Lakes population) as an individual or organization? Can you give a few examples of activities?

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**The following questions are optional**

**10. Has this workbook helped you?**

a) Understand how the listing process works under SARA?

Yes     No     Undecided

b) Understand the important issues concerning the Atlantic Cod (Arctic Lake Population)?

Yes     No     Undecided

c) Find an effective way to communicate your views on the Atlantic Cod (Arctic Lake Population)?

Yes     No     Undecided

**11. What changes or additions can we make to the workbook to make it easier to understand or more user-friendly?**

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**THANK YOU!**

Please submit your comments on the Atlantic Cod (Arctic Lakes population) by mail, fax or e-mail to:

SARA Coordinator  
Fisheries and Oceans Canada  
501 University Crescent  
Winnipeg, Manitoba R3T 2N6

Email: [fwisar@dfo-mpo.gc.ca](mailto:fwisar@dfo-mpo.gc.ca)  
Fax: 204-983-5192  
Telephone: 204-984-0599  
Toll-free: 1-866-538-1609

**PLEASE SUBMIT COMMENTS BY FEBRUARY 11, 2011**