SUBMISSION TO THE
NUNAVUT WILDLIFE MANAGEMENT BOARD

FOR

Information: X **Decision:**

Issue: Information regarding the possible addition of the Acadian Redfish (*Sebastes fasciatus*) and the Deepwater Redfish (*Sebastes mentella*) to the List of Wildlife Species at Risk on the *Species at Risk Act*.

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Background:

As per 3.3 of the Harmonized Listing Process, DFO is informing NWMB of assessment results. COSEWIC has completed status updates for the Acadian Redfish and Deepwater Redfish.

DFO does not intend to move forward with listing consultations for species that occur in both Nunavut and Nunavik waters until an MOU has been developed and approved to harmonize the SARA listing process and Nunavik Inuit Land Claims Agreement. This means the SARA listing process will not move forward at this time for the Acadian and Deepwater Redfish.

Acadian Redfish and Deepwater Redfish – General

Because the two species cannot be easily distinguished (Fig. 1), DFO Fisheries Management treats the two species as a single management unit. For this reason, the two species have been assessed together by COSEWIC in the 2010 report and both have been designated as Threatened.

Redfish inhabit cold waters along slopes of banks and channels at a depth of 100 to 700 m. Deepwater Redfish are typically found in waters of 350 to 700 m depth while Acadian Redfish prefer slightly shallower waters of from 150 t0 300 m. While Deepwater Redfish occur on both sides of the Atlantic, the Acadian Redfish is found only in the western Atlantic, mainly along the coast of Canada (Figure 2).

Redfish have a long life span (up to at least 75 years) and late maturation and slow growth give this species low resilience and are considered limiting factors. Deepwater and Acadian Redfish have both been major commercial species in the past. Given their large historical abundance, they must have played an important role in the marine ecosystem.

Incidental capture in the northern shrimp fishery may be the biggest current threat to northern populations of these species.

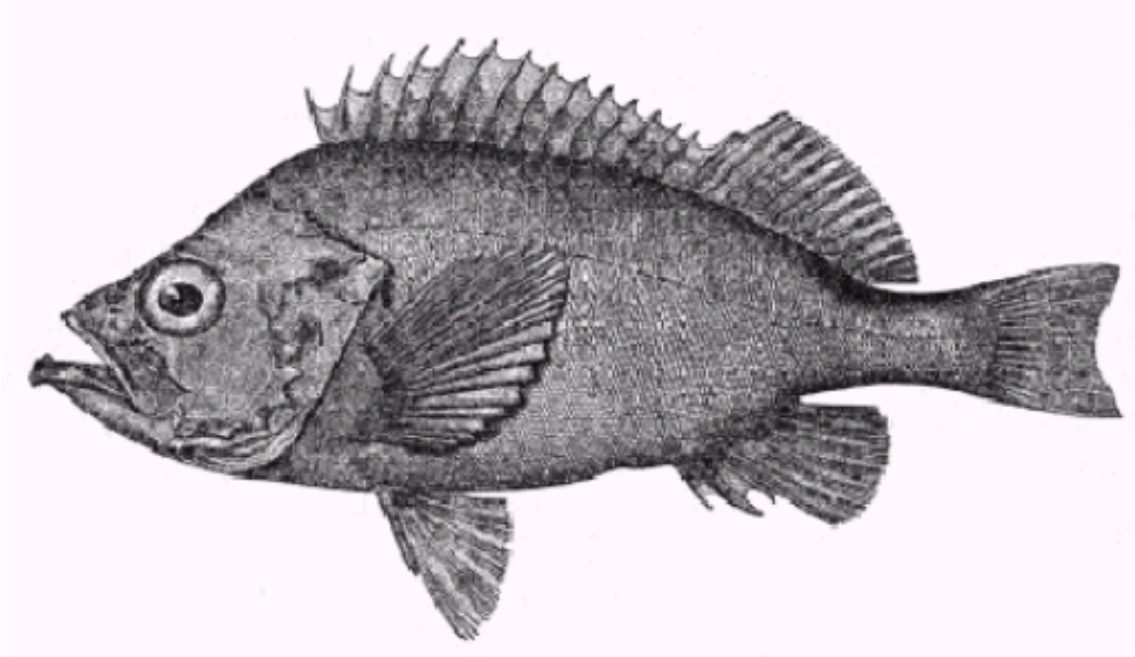

Figure 1: Drawing of the Acadian Redfsh (*Sebastes fasciaius*). It is impossible to distinguish the Acadian Redfish from the Deepwater Redfish (*Sebastes mentella*).

Acadian Redfish - Atlantic Population

This species is long lived, late maturing and very vulnerable to mortality from human activities. It has experienced a 99% decline in the abundance of individuals over a period of two generations. Since the 1990's there has been some stability. Directed fishing and incidental harvest in fisheries for other species (bycatch) are the main known threats. In some areas where this species occurs the fishery is closed. This species occurs in both Nunavut and Nunavik waters (Fig. 2).

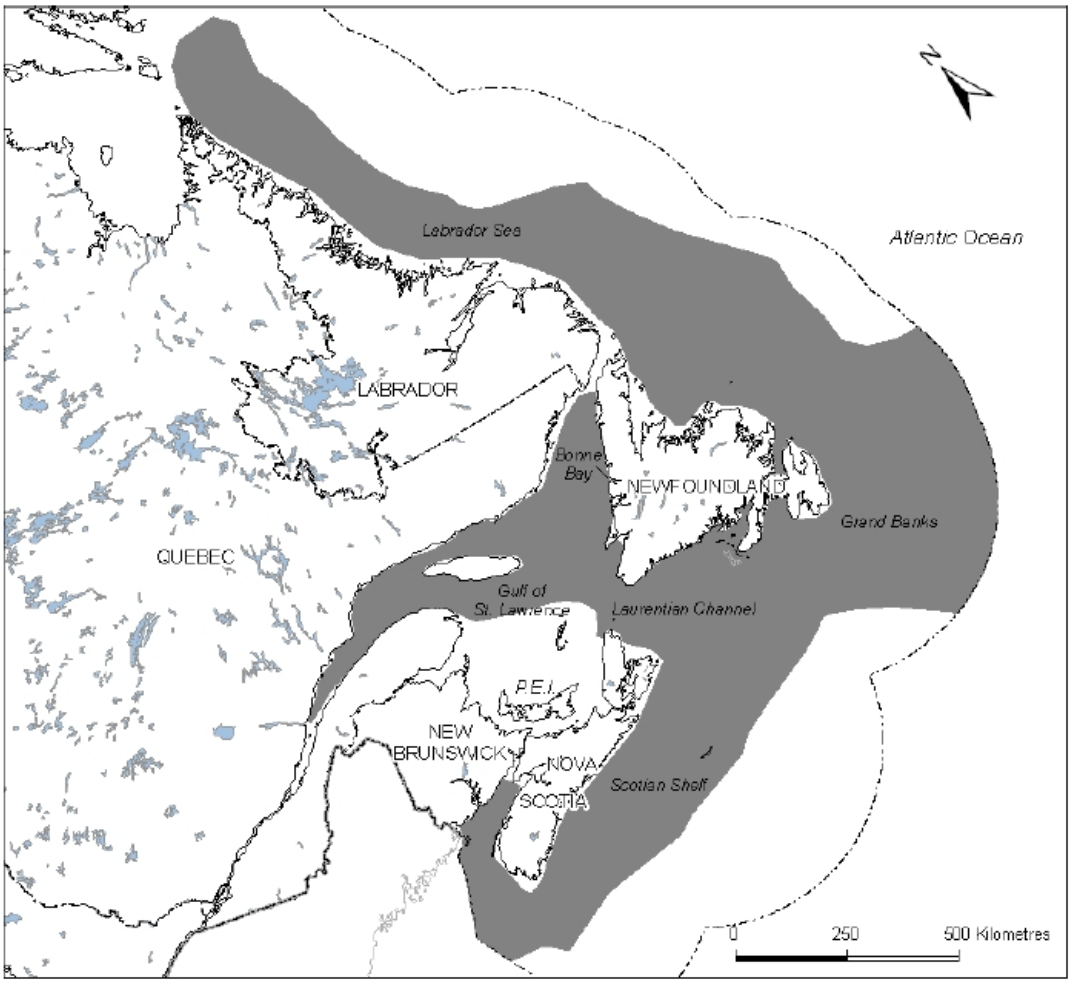

Figure 2: The distribution of the Acadian Redfish in Canadian waters.

Deepwater Redfish - Northern population

This species is long lived, late maturing and very vulnerable to mortality from human activities. Abundance of mature individuals has declined by 98% since 1978. Directed fishing and incidental harvest in fisheries of other species (bycatch) are the main known threats. This species met the criteria for being assessed as endangered, however COSEWIC felt that because it is located over a large area, has several million mature individuals and there is evidence that the population may be stable or increasing the designation of Threatened was more appropriate. The Canadian distribution of the Deepwater Redfish is shown in Figure 3.

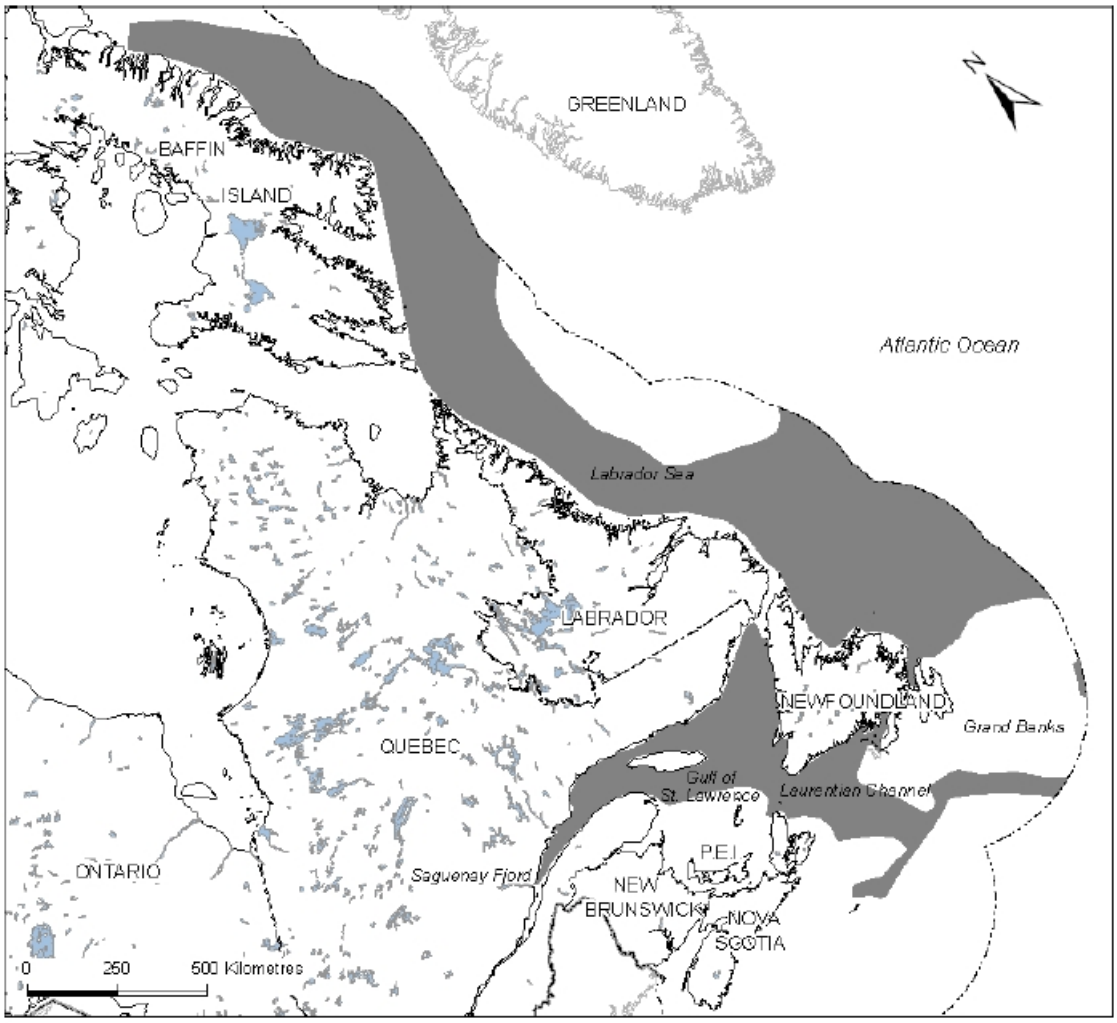

Figure 3: The distribution of the Deepwater Redfish in Canadian waters.

Should either of these species eventually be listed under SARA, automatic prohibitions apply and a recovery strategy and action plan must be developed.

The complete COSEWIC status report for the Acadian and Atlantic Redfish can be obtained from the SARA Registry at:
http://www.sararegistry.gc.ca/9C047373-F075-48B5-856A-1B1DF4FCDF81/sr_Deepwater-and-Acadian-Redfish_0810_e.pdf

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Date:
26 September 2010

Assessment Summary – April 2010
Common name
Acadian Redfish - Atlantic population

Scientific name
Sebastes fasciatus

Status
Threatened

Reason for designation
As with other members of the family Sebastidae, this species is long-lived (maximum age about 75 yr), late-maturing (generation time 16-18 yr), and highly vulnerable to mortality from human activities. Recruitment is episodic, with strong year-classes only occurring every 5-12 years. Abundance of mature individuals has declined 99% in areas of highest historical abundance over about two generations. However, since the 1990s, there has been no long-term trend in one area, and trends have been stable or increasing in other areas where large declines have been previously observed. Directed fishing and incidental harvest in fisheries for other species (bycatch) are the main known threats. Fisheries in parts of the range of this designatable unit (DU) are currently closed, but remain open in other areas. Bycatch in shrimp fisheries has been substantially reduced since the 1990s by use of separator grates in trawls, but could still be frequent enough to affect population recovery.

Occurrence
Atlantic Ocean

Status history
Designated Threatened in April 2010.

Assessment Summary – April 2010
Common name
Deepwater Redfish - Northern population

Scientific name
Sebastes mentella

Status
Threatened

Reason for designation
As with other members of the family Sebastidae, this species is long-lived (maximum age about 75 yr), late-maturing (generation time 23 yr), and highly vulnerable to mortality from human activities. Recruitment is episodic, with strong year-classes only occurring every 5-12 years. Abundance of mature individuals has declined 98% since 1978, somewhat over one generation. However, declines have stopped since the mid-1990s and increases have been observed in some areas. Directed fishing and incidental harvest in fisheries for other species (bycatch) are the main known threats. Fisheries in parts of this designatable unit are currently closed, but remain open in other areas. Bycatch in shrimp fisheries has been substantially reduced since the 1990s by use of separator grates in trawls, but could still affect population recovery.

Occurrence
Arctic Ocean, Atlantic Ocean

Status history
Designated Threatened in April 2010.