

Aquatic Species at Risk



Canada's *Species at Risk Act*: Implications to Great Lakes Management

COSEWIC Status - SPECIAL CONCERN May 2001
SARA Status - SPECIAL CONCERN June 2003



Macrhybopsis stoveriana
© Joseph R. Tomelleri

Making A Great Lake Superior Conference
October 29-31, 2007. Duluth, MN



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Second Session, Thirty-seventh Parliament, 51 Elizabeth II, 2002	Deuxième session, trente-septième législature, 51 Elizabeth II, 2002
STATUTES OF CANADA 2002	LOIS DU CANADA (2002)
CHAPTER 29	CHAPITRE 29
An Act respecting the protection of wildlife species at risk in Canada	Loi concernant la protection des espèces sauvages en péril au Canada
<hr/> BILL C-5 ASSENTED TO 12th DECEMBER, 2002	<hr/> PROJET DE LOI C-5 SANCTIONNÉ LE 12 DÉCEMBRE 2002

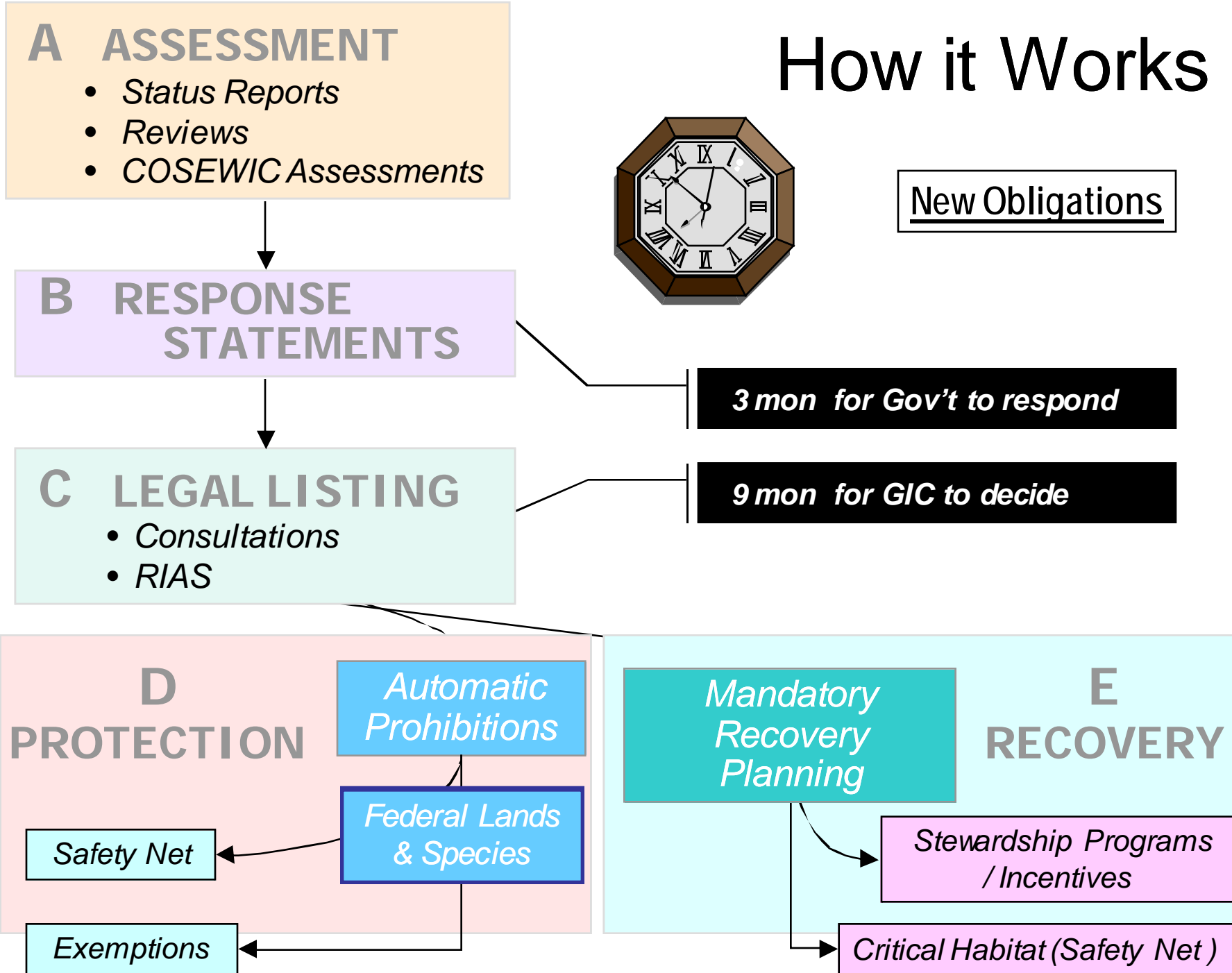
- ◆ ***Species at Risk Act (SARA)***
- ◆ **“The purposes of this enactment are to prevent Canadian indigenous species, subspecies and distinct populations of wildlife from becoming extirpated or extinct, to provide for the recovery of endangered or threatened species, to encourage the management of other species to prevent them from becoming at risk.”**
- ◆ **Came fully into Force in June 2004**

COSEWIC Status - EXTIRPATED May 2000
SARA Status - EXTIRPATED June 2003



Polyodon spathula
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How it Works



A ASSESSMENT

- *Status Reports*
- *Reviews*
- *COSEWIC Assessments*



COSEWIC Status – THREATENED November 2000
SARA Status – THREATENED June 2003



Ammocrypta pellucida
Illustration by E. Edmonson & H. Corrip (NYSDC)



COSEWIC Status – ENDANGERED November 2002
SARA Status – ENDANGERED January 2005



Noturus stigmosus
© J.R. Tomelleri

◆ **Committee on the Status of Endangered Wildlife in Canada (COSEWIC)**

- ◆ Since 1978, wildlife status in Canada decided by this independent scientific committee
- ◆ Expert reps from universities, provincial & federal govts, and NGOs



A ASSESSMENT

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- *COSEWIC Assessments*



Mandate:

- ◆ **Assess risk of extinction**
- ◆ **Use best available biological information:**
 - ◆ Scientific research
 - ◆ Community knowledge
 - ◆ Aboriginal traditional knowledge
- ◆ **Identify threats**
- ◆ **Produce Assessments**
 - ◆ criteria adapted from World Conservation Union criteria (IUCN) (2000)

COSEWIC Status – THREATENED April 2008
SARA Status – UNDER CONSIDERATION



Quadrula quadrula
Photo de National Water Research Institute



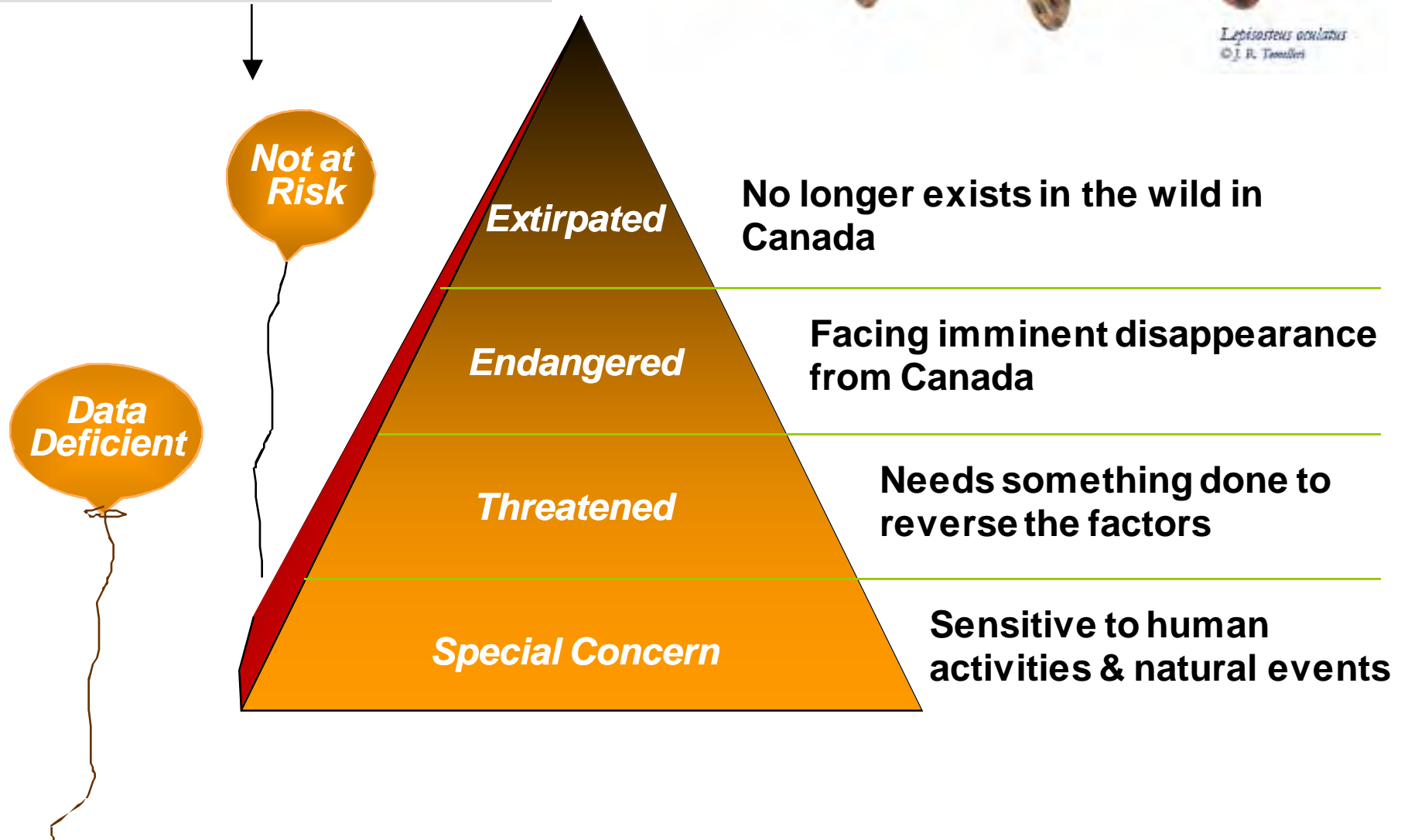
A ASSESSMENT

- Status Reports
- Reviews
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COSEWIC Status – THREATENED May 2005
SARA Status – THREATENED June 2003



Lepidososteus ocellatus
© J. R. Tomlin

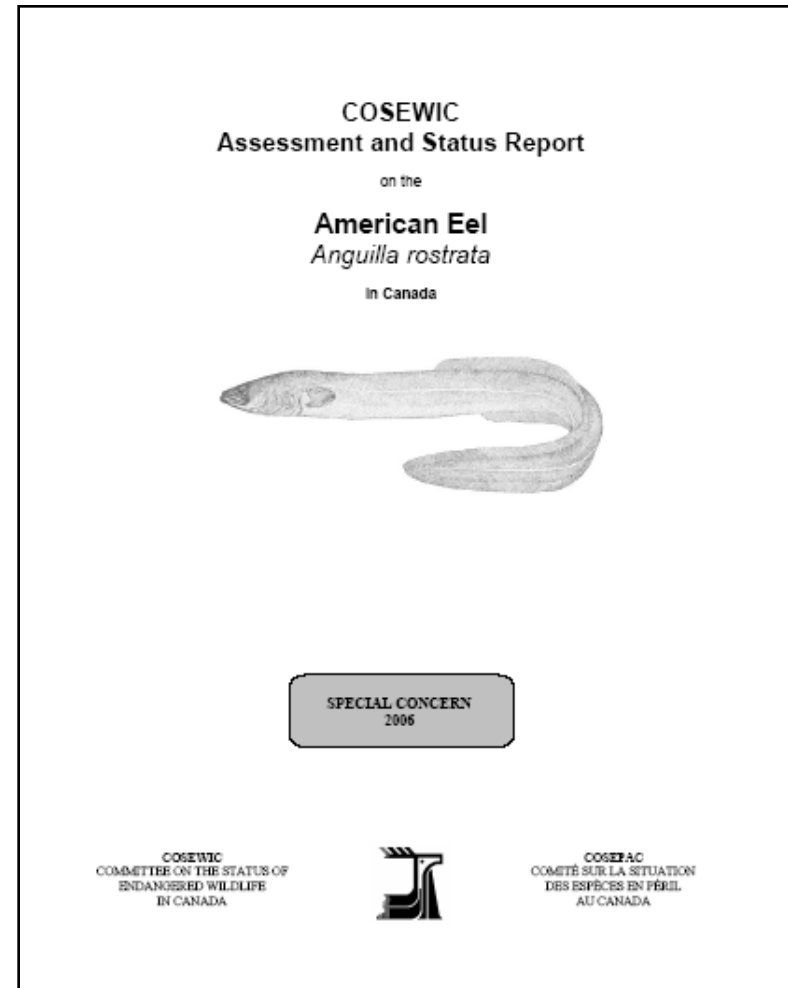
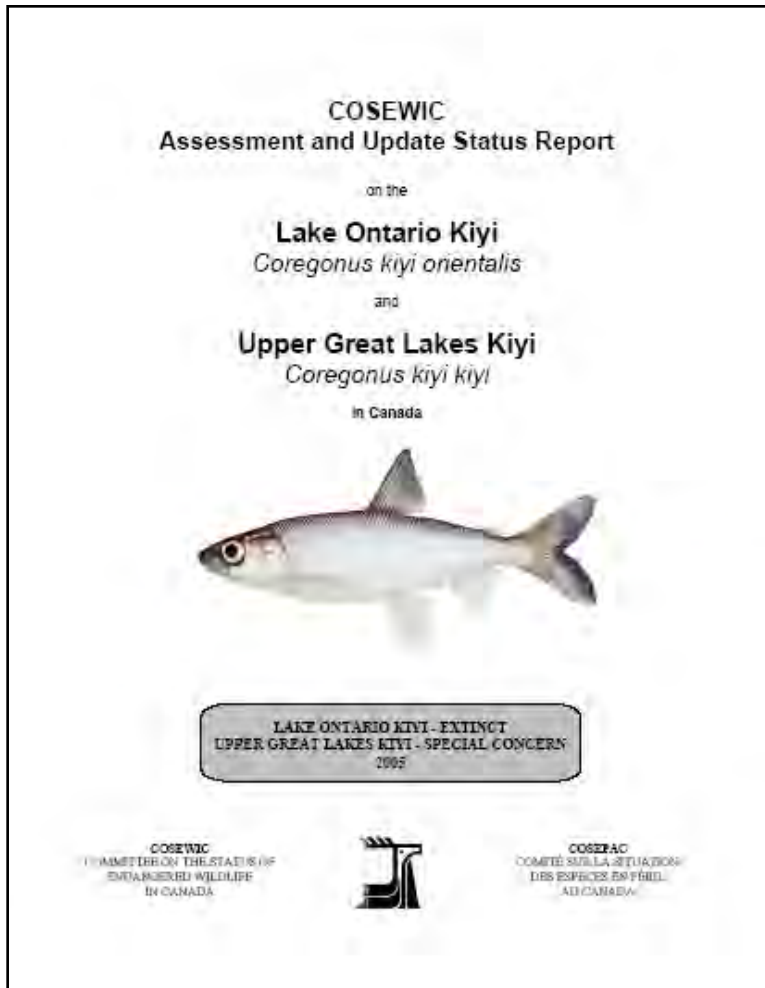


A ASSESSMENT

- *Status Reports*
- *Reviews*
- *COSEWIC Assessments*

Published in SARA
Public Registry

Forwarded to the Federal
Minister of Environment



COSEWIC Status – SPECIAL CONCERN May 2005
SARA Status – SPECIAL CONCERN September 2006



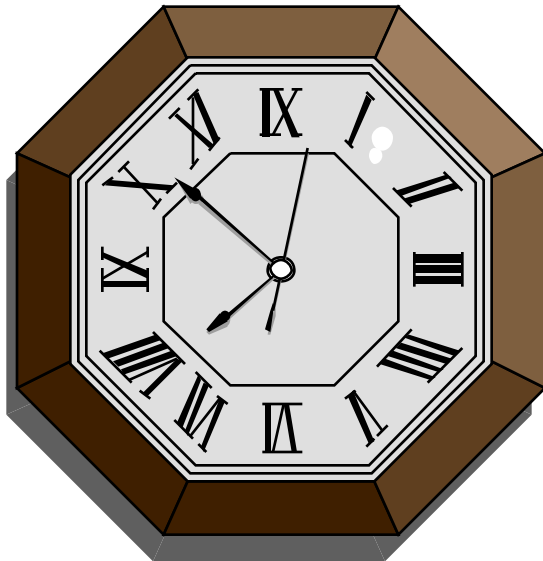
Esoc americanus vermiculatus
© J.R. Tomelleri

B RESPONSE STATEMENTS

90 days for Min to respond (in SARA Public Registry)

Might include...

- ◆ Basic info on species
- ◆ Competent Minister(s)
- ◆ Notice to Canadians of consultations on whether or not to add species to SARA List
- ◆ Indicate when the assessment is to be forwarded to the GiC to trigger the nine months allowed to make a SARA listing decision



↓

B RESPONSE STATEMENTS

90 days for Min to respond (in SARA Public Registry)

↓

Response Statement - Atlantic Salmon, Lake Ontario population

November 29, 2006

Common Name: Atlantic Salmon, Lake Ontario population

Scientific Name: *Salmo salar*

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

Reason(s) for status designation provided by COSEWIC: Once a prolific species throughout the Lake Ontario watershed, there has been no record of a wild Atlantic salmon since 1898. The Lake Ontario Atlantic salmon was extinguished through habitat destruction and through over-exploitation by a food and commercial fishery. Attempts to re-establish Atlantic salmon through stocking have failed, and the original strain is no longer available.

Occurrence: Ontario

Competent Minister(s):

Minister of Fisheries and Oceans

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

Ontario

Applicable federal legislation: *Fisheries Act*


How the Minister of the Environment intends to respond to the assessment: The Minister of the Environment (or the Minister of Fisheries and Oceans) will undertake consultations with the government of Ontario, Aboriginal peoples, stakeholders, and the public on whether or not the Atlantic Salmon Lake Ontario population should be added to the *List of Wildlife Species at Risk* (Schedule 1) under the *Species at Risk Act*. The Minister of the Environment will forward the COSEWIC assessment of the Atlantic Salmon Lake Ontario population to the GIC upon completion of consultations.

C LEGALLISTING

- *Recovery Potential Assessments (including Allowable Harm Assessments)*
- *Socio-Economic Analyses*
- *Consultations*
- *RIAS & Listing Recommendation*

Within 9 months of receipt of COSEWIC assessment for GIC to decide (in SARA Public Registry)

- 1. Accept Assessment & add**
- 2. Decide not to add to List**
- 3. Refer back to COSEWIC**


 Fisheries and Oceans Canada / Pêches et Océans Canada
 Science Sciences
 Quebec, and Central and Arctic Regions Canadian Science Advisory Secretariat
 Science Advisory Report 2005/036

RECOVERY POTENTIAL ASSESSMENT OF CUMBERLAND SOUND, UNGAVA BAY, EASTERN HUDSON BAY AND ST. LAWRENCE BELUGA POPULATIONS (*Delphinapterus leucas*)





Figure 1. Summer distribution of Cumberland Sound, eastern Hudson Bay, Ungava Bay and St. Lawrence beluga populations.

Context

Beluga whales occur throughout the Canadian Arctic and in the St. Lawrence River estuary. Seven populations are recognized, of which the Cumberland Sound, Eastern Hudson Bay (EHB), Ungava Bay and St. Lawrence River Estuary (SLE) beluga populations are considered endangered or threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The Southeast Baffin Island-Cumberland Sound population was designated Endangered in April 1990. In May 2004, the structure of the population was redefined and named "Cumberland Sound population", and the Southeast Baffin Island animals were included as part of the Western Hudson Bay population. The status of the Cumberland Sound population was re-examined and designated as threatened in May 2004. The reason for designation is that numbers declined by about 1500 animals between the 1920s and the present. This decline is due to harvesting by the Hudson Bay Company until the 1940s and harvesting by the Inuit until 1979. Hunting has been regulated since 1979 and current quotas appear to be sustainable. Potential threats identified in COSEWIC Assessment Status Report include the increase of small vessel traffic, and the associated noise of outboard motors, as well as the fishery removals of Greenland halibut, a food of belugas.

Eastern Hudson Bay (EHB) beluga were designated as threatened in 1988, and as endangered in 2004. The population was reduced by at least 50% by commercial harvesting and continued to decline until recently. High subsistence harvest levels have prevented recovery. In COSEWIC Assessment Status Report, concerns have been expressed about habitat degradation of estuaries by hydroelectric projects


August 2005 

Socio-Economic Analysis For the Regulatory Impact Analysis Statement (RIAS) To Add Lake Winnipeg Physa, Atlantic Cod (Arctic population) Channel Darter and Shortjaw Cisco to Schedule 1 of the Species at Risk Act



Policy and Economics Central and Arctic Region Department of Fisheries and Oceans

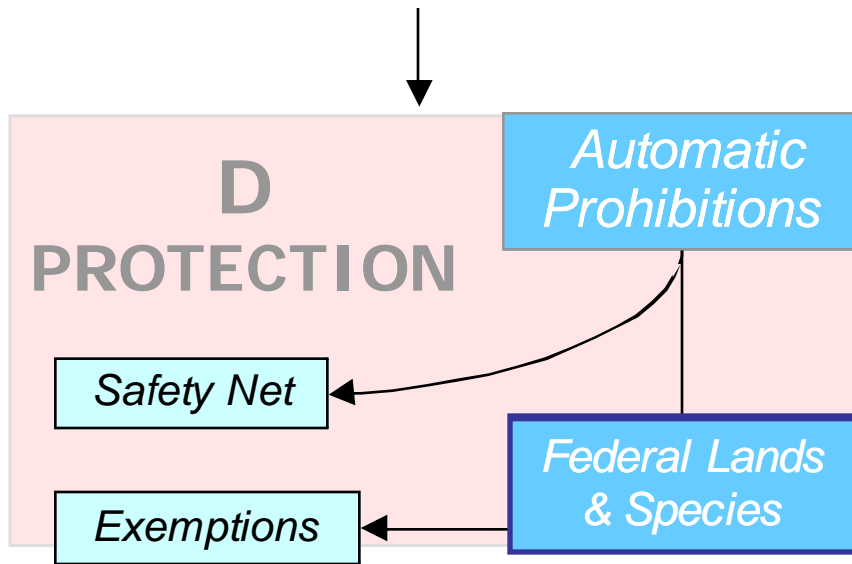
Winnipeg, Manitoba R3T 2N6 May 2005

CONSULTATION WORKBOOK
 on the addition of the Atlantic salmon (Lake Ontario population), Rainbow mussel, Mapleleaf mussel (Saskatchewan-Nelson population) and Mapleleaf mussel (Great Lakes-Western St. Lawrence population) to the SARA List:



December 2006



COSEWIC Status - THREATENED May 2002
SARA Status - UNDER CONSIDERATION



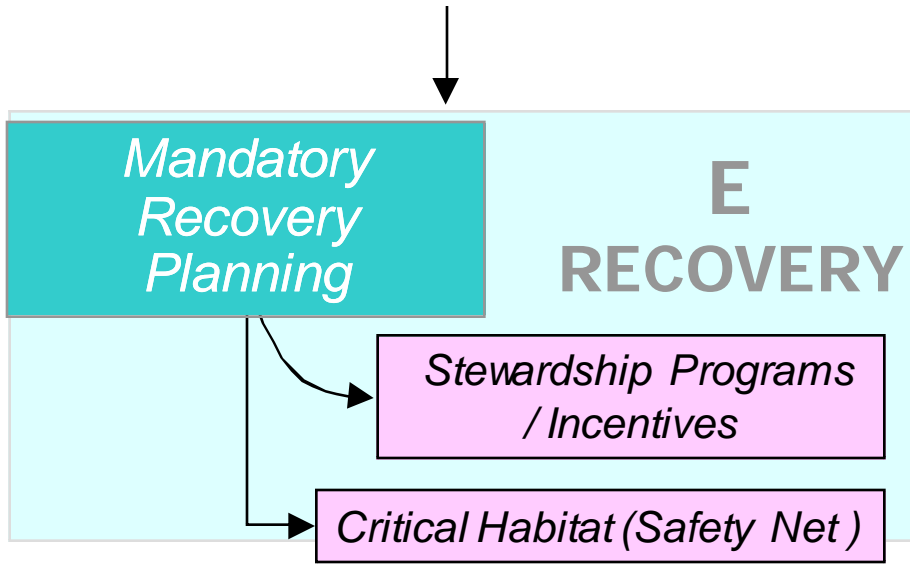
Percina copelandi
Photo by Ellen Edmonson (NYSDEC)

s.32-33



For Listed EX, EN, TH species, you can not:

- ◆ Kill, harm, harass, capture, take, possess, collect, buy, sell or trade an individual or its parts
- ◆ Damage or destroy residences of endangered or threatened SARA listed species (and listed extirpated species if a recovery strategy has recommended the reintroduction of the species into the wild in Canada)



COSEWIC Status –
 ENDANGERED May 2001
 SARA Status –
 ENDANGERED June 2003

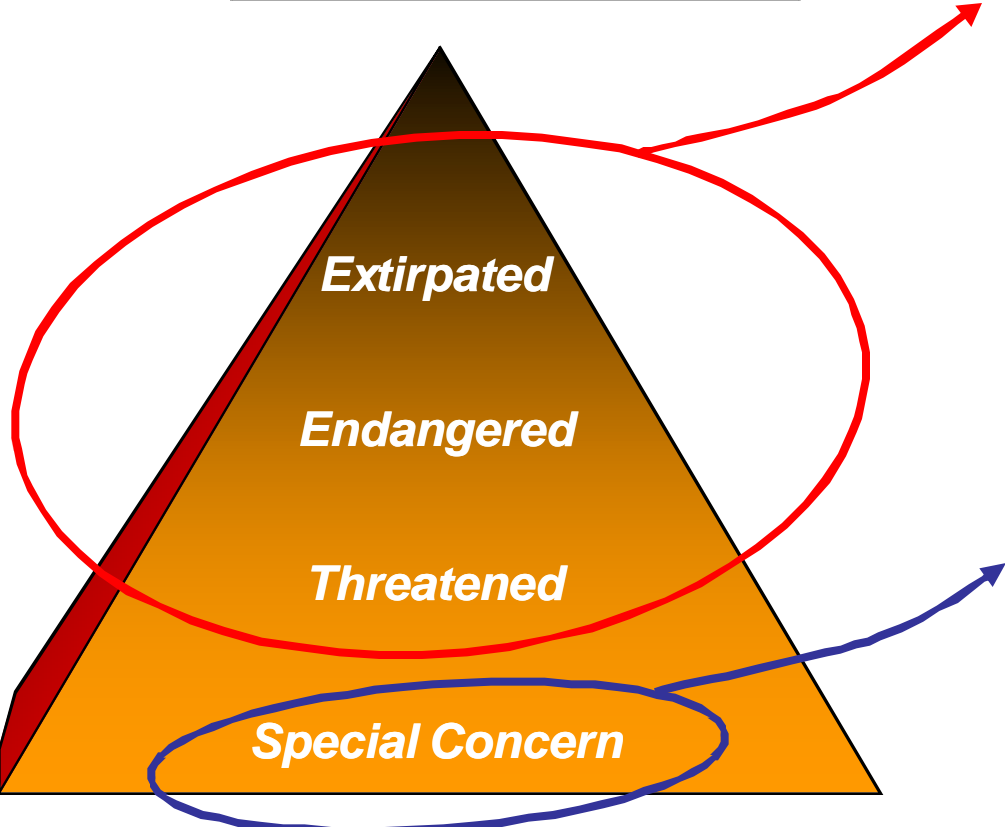
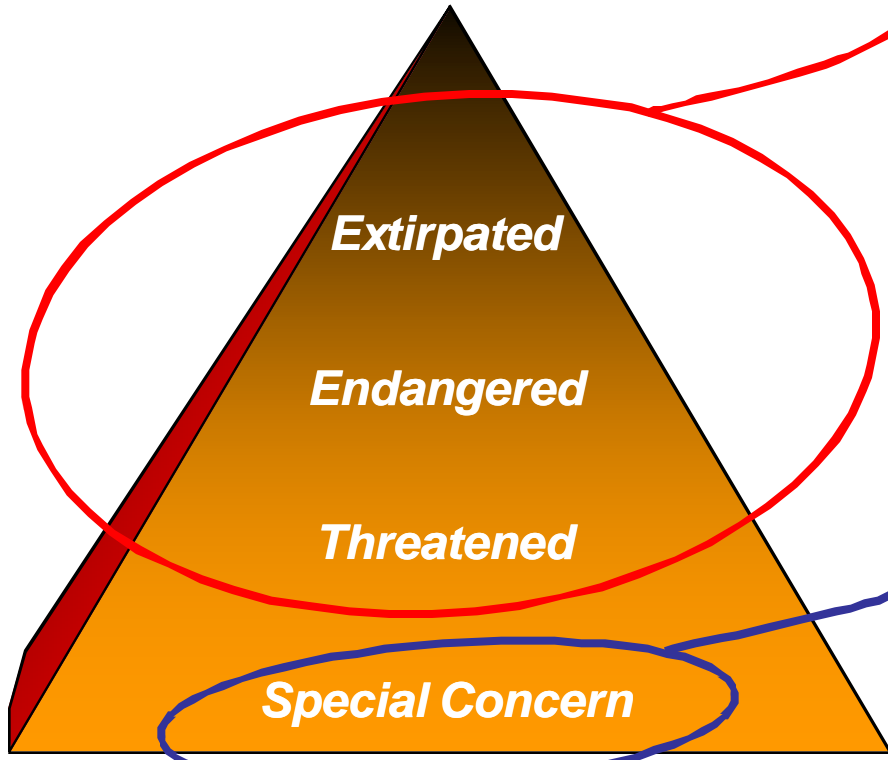


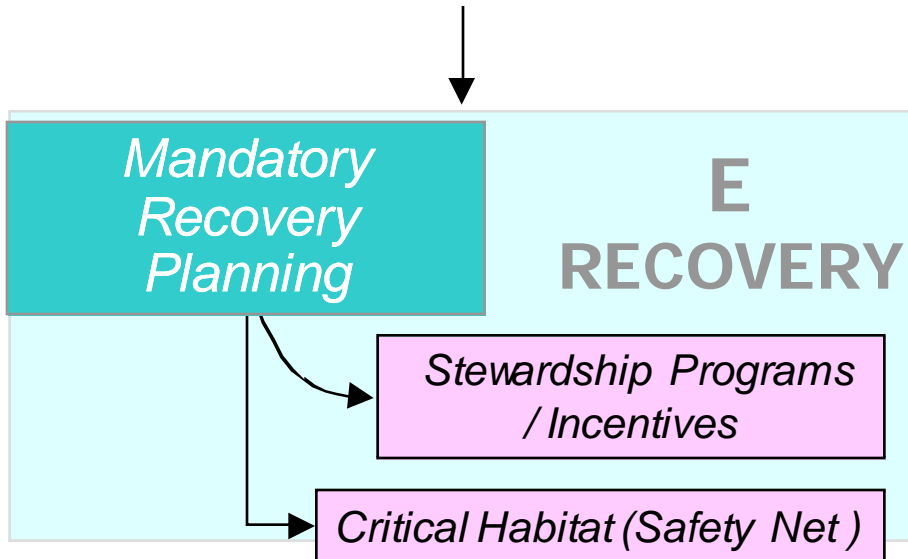
Simpsonia ambigua (Say, 1825)
 Photo by National Water Research Institute

1. Recovery Strategies

2. Action Plans

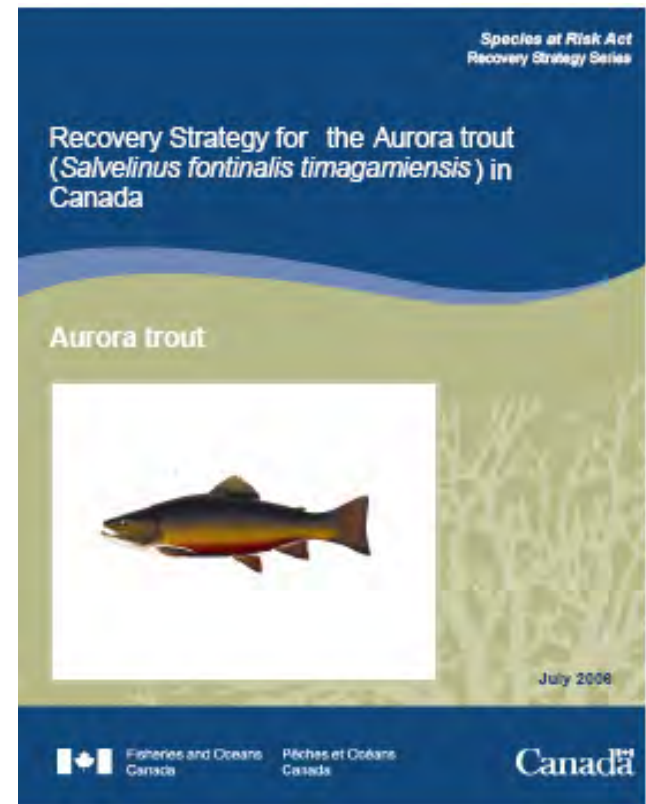
3. Management Plans

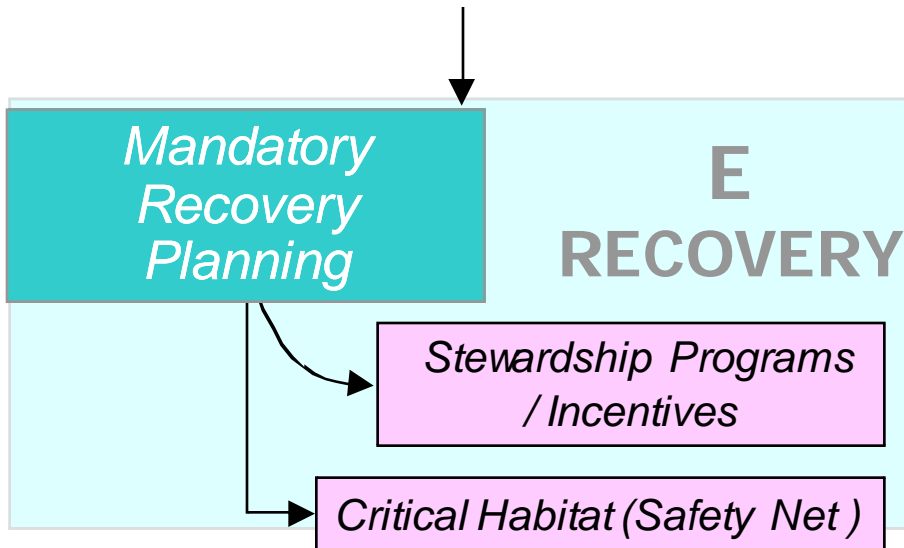




1. Recovery Strategies

- ◆ **Mandatory for EX, EN and TH species**
- ◆ **Identifies**
 - ◆ **Population objectives**
 - ◆ **Strategies to address threats**
 - ◆ **Critical Habitat, to extent possible**
 - ◆ **Timelines for Action Plans**
- ◆ **Inclusive process of development**
- ◆ **Published in SARA Public Registry**





2. Action Plans

- ◆ Action Plans implement Recovery Strategies



- ◆ Detail actions needed to reach population objectives



- ◆ Identify critical habitat and ways to protect it

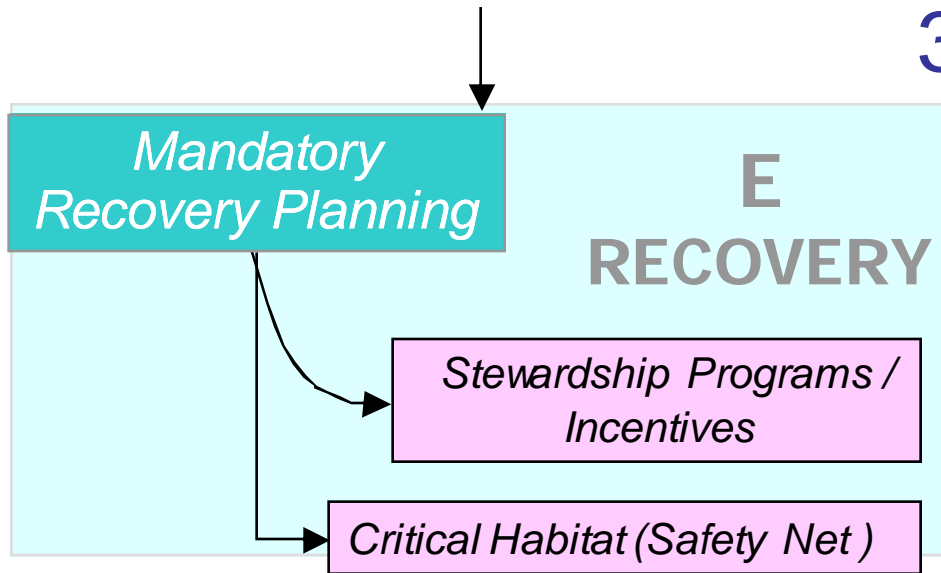
- ◆ Evaluate socioeconomic costs and benefits of its implementation



- ◆ Involve broad consultation
- ◆ Published in SARA Public Registry

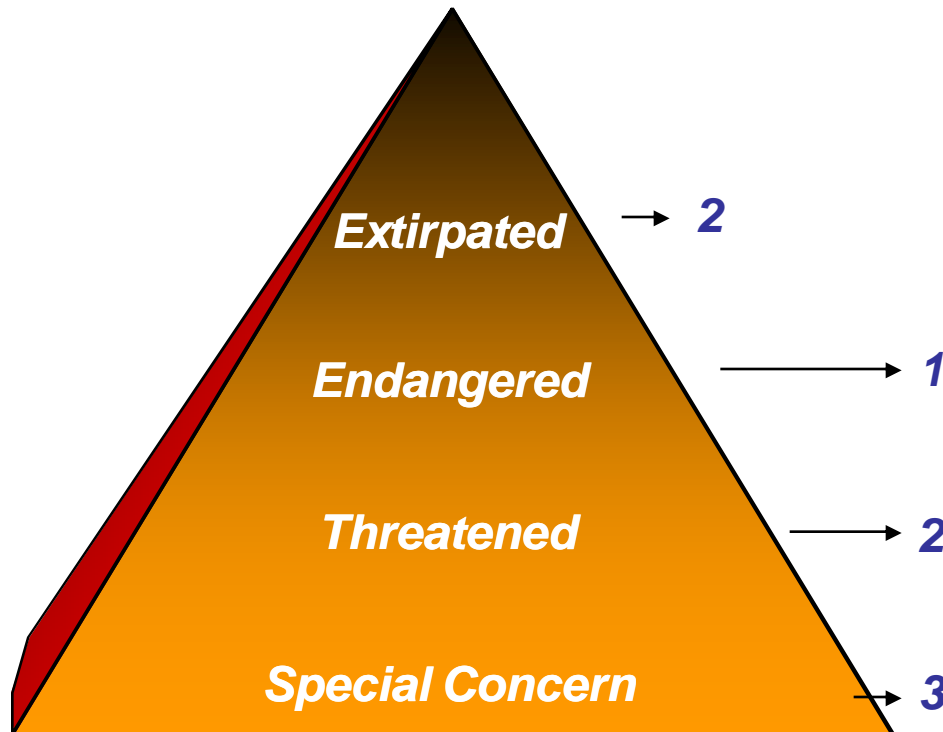
3. Management Plans

- ◆ Needed for Special Concern species



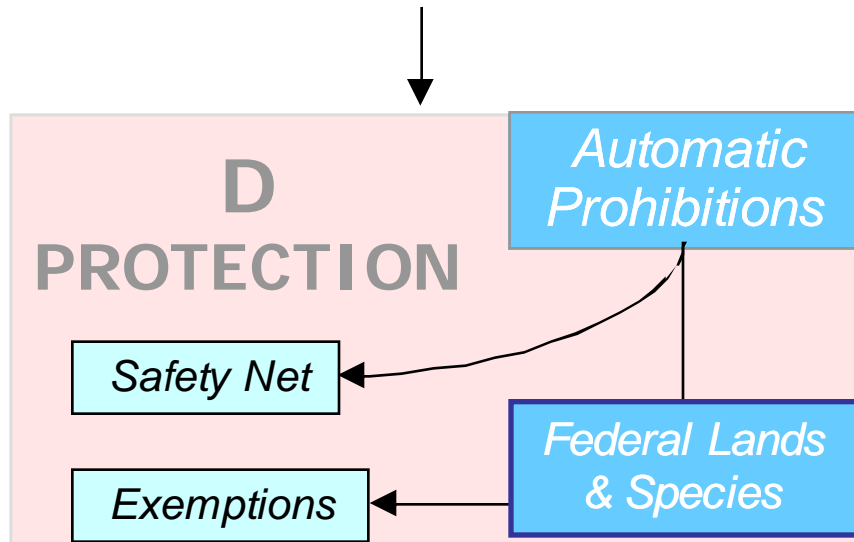
Timelines

- ◆ Listing triggers timelines for document preparation
- ◆ Ministerial reporting on Recovery Strategy, Action Plan & Mgt Plan implementation in & every 5 years



Years to complete

Exemptions – Agreements & Permits



3 activities qualify:

- **scientific research relating to conservation of the species**
- ✿ **enhancement work on the listed species**
- ✿ **incidental effect while carrying out the activity**

s 73: The Minister may authorize a person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or the residences of its individuals

COSEWIC Status – THREATENED May 2003
SARA Status – UNDER CONSIDERATION



Coregonus zenithicus (Reindeer Lake, SK)
Photo by L. Murray (University of Manitoba)

A ASSESSMENT

- Status Reports
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B RESPONSE STATEMENTS

C LEGAL LISTING

- Consultations
- RIAS

D PROTECTION

Automatic Prohibitions

Federal Lands & Species

Safety Net

Exemptions

Mandatory Recovery Planning

E RECOVERY

Stewardship Programs / Incentives

Critical Habitat (Safety Net)

Shortjaw Cisco:

- ◆ Threatened: May 2003
- ◆ Response Statement: Apr 2004
- ◆ Consultations: Completed
- ◆ Listing Decision: Send Back – Apr 2006
- ◆ COSEWIC: currently revising, reassess 2008?

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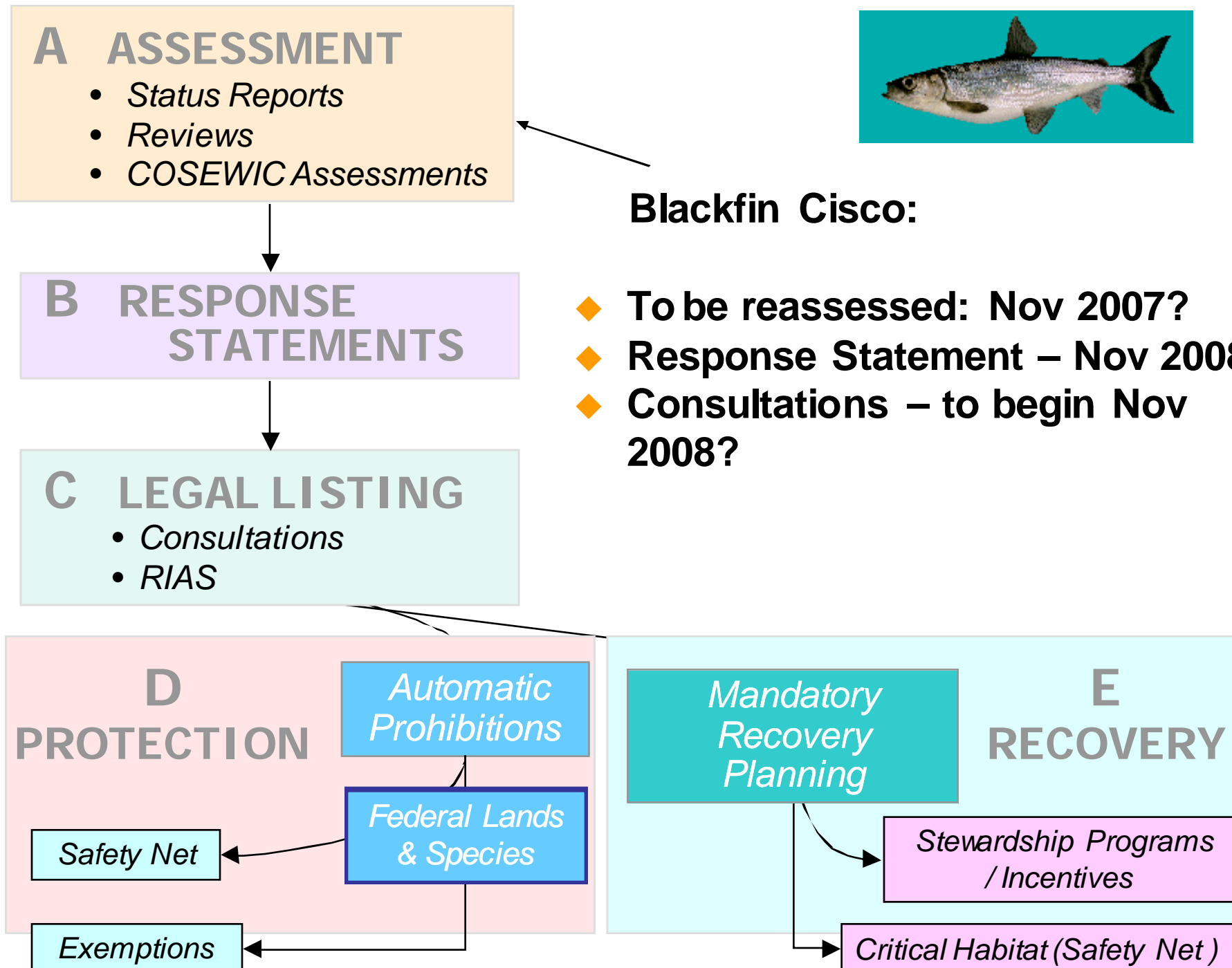
Kiyi (Upper Great Lakes popn):

- ◆ Special Concern: May 2005
- ◆ Response Statement: Nov 2005
- ◆ Consultations: Completed
- ◆ Listing Decision – Jan 2008?



Blackfin Cisco:

- ◆ To be reassessed: Nov 2007?
- ◆ Response Statement – Nov 2008?
- ◆ Consultations – to begin Nov 2008?



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COSEWIC Status – SPECIAL CONCERN April 2006
SARA Status – UNDER CONSIDERATION



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- RIAS

Deepwater Sculpin (Great Lakes – Western St. Lawrence popn):

- ◆ **Special Concern: Apr 2006**
- ◆ **Response Statement: Nov 2006**
- ◆ **Consultations: Completed**
- ◆ **Listing Decision – Jan 2008?**

D PROTECTION

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Stewardship Programs / Incentives

Critical Habitat (Safety Net)

COSEWIC Status – THREATENED November 2006
SARA Status – UNDER CONSIDERATION



Acipenser fulvescens
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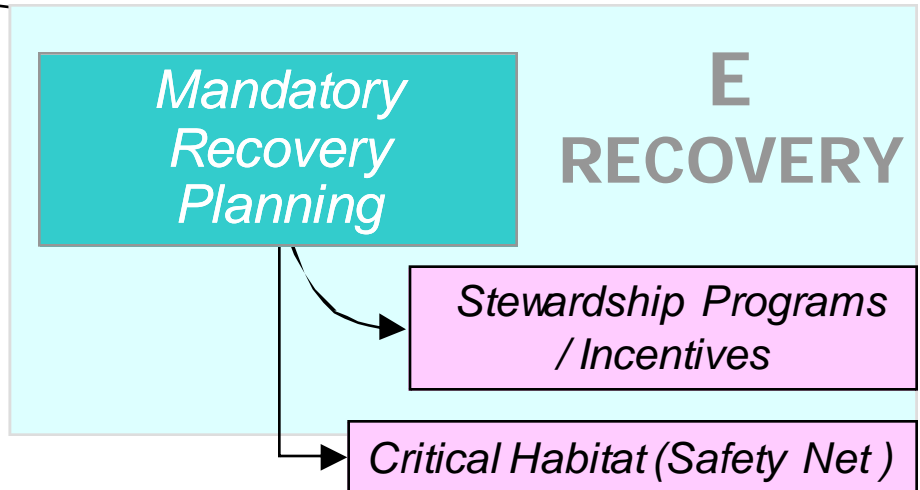
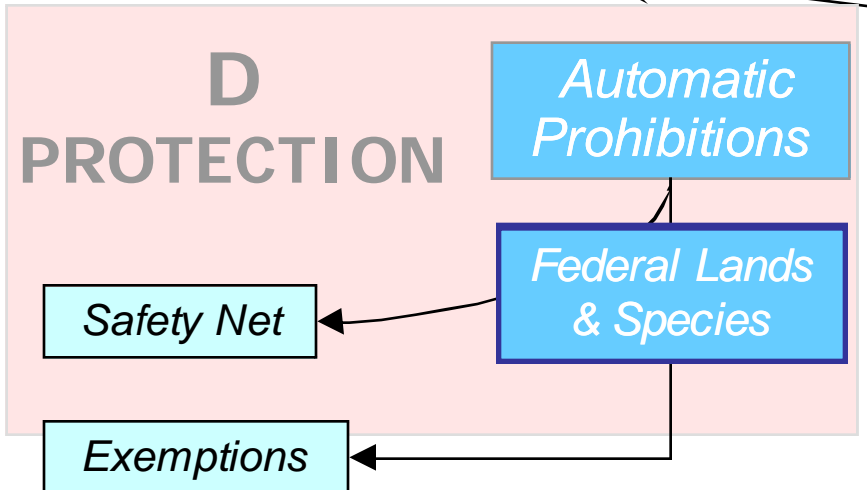
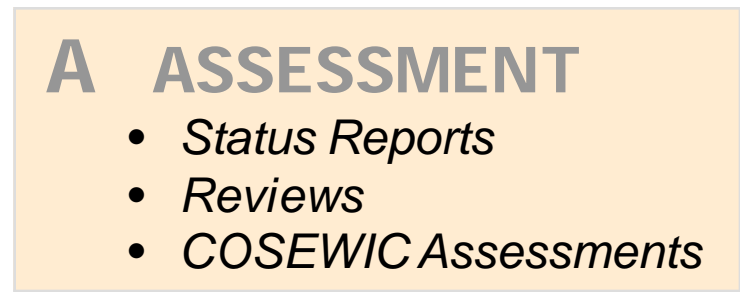
E RECOVERY

Stewardship Programs / Incentives

Critical Habitat (Safety Net)

Lake Sturgeon (Great Lakes - Western St. Lawrence popn):

- ◆ Threatened: Nov 2006
- ◆ Response Statement – Nov 2007?
- ◆ Consultations – Nov 2007?



Northern Brook Lamprey (Great Lakes - Upper St. Lawrence popns):

Special Concern: Apr 2007

- ◆ **Response Statement – Nov 2007?**
- ◆ **Consultations – Nov 2007?**

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Silver Lamprey:

- ◆ **Out for bids - To be assessed ?**
- ◆ **Response Statement – ?**
- ◆ **Consultations – ?**

B RESPONSE STATEMENTS

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- *RIAS*

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Critical Habitat (Safety Net)

Aquatic Species at Risk



Canada's *Species at Risk Act*: Implications to Great Lakes Management:

- ◆ 47 aquatic species/popns in ON considered at risk by COSEWIC
- ◆ 24 aquatic species/popns in ON already listed under the SARA & 23
- ◆ 23 more aquatic species/popns in ON being assessed or considered
- ◆ Most of these species found in the Great Lakes or watersheds



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Aquatic Species at Risk



Canada's *Species at Risk Act*: Implications to Great Lakes Management:

- ◆ Automatic Prohibitions on killing, harming, harassing, etc. for EX, EN or TH species upon listing and subsequently on their Critical Habitat once identified in a Recovery Strategy or Action Plan
- ◆ Could impact activities such as fishing, development, etc. but:
 - ◆ Exemptions possible through agreements
 - ◆ Exceptions also possible if permitted by a Recovery Strategy, Action Plan or Management Plan, including directed fisheries



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