



# SARA and the DFO SARA Science Advice Framework

CEA – DFO MOU National Workshop  
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## Section 73 preconditions

**73(3)** The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that:

- (a) all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted;
- (b) all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and
- (c) the activity will not jeopardize the survival or recovery of the species.



## **SARA Section 73 Permitting Science Process – 3 Phases**

DFO Science led, with participation by Management, Industry, Academia, ENGOs:

- Phase I - Can the species recover if human-induced mortality is greater than zero?
- Phase II – What are sources of harm currently, and how do they relate to answer from Phase I?
- Phase III – What are options which satisfy the three pre-conditions set out in Section 73 (3)?



## The Permitting Framework— to date

Includes 12 questions (steps) in three phases:

**Phase I** (Steps 1 to 4)— is survival or recovery of the species in jeopardy if human activities affecting the species continue?

**Phase II** (Steps 5 to 8)— what are the important activities affecting the species and how does the aggregate harm compare to what is allowed?

**Phase III** (Steps 9 to 12)— if mitigation measures or alternative activities are required, what are the options for those activities?



# **DFO SARA Permitting Framework**

## **Phase I**

1. What is the present/recent species trajectory?
2. What is the present/recent species status?
3. What is the expected order of magnitude / target for recovery?
4. What is the expected general time frame for recovery to the target?
5. What is the maximum human-induced mortality which the species can sustain and not jeopardise survival or recovery of the species?

**Is there scope for human-induced harm?**



# DFO SARA Permitting Framework

## Phase II

6. What are the major potential sources of mortality/harm? — Conduct a qualitative evaluation of likelihood of harm from each activity:
7. For those factors NOT dismissed as unlikely, quantify the amount of mortality or harm caused by each activity
8. Aggregate the total mortality/harm attributable to all human causes and contrast that to answer to Phase 1.

**Do some human activities need to be altered or terminated, in order to ensure survival or recovery is not jeopardised?**



## **DFO SARA Permitting Framework Phase III**

9. Developing inventory of reasonable alternatives; document their potential for harm; assess cost:benefits
10. Developing inventory of feasible measures to minimise impacts; document their effectiveness; assess cost:benefits
11. Determining expected mortality under various scenarios to assess extent that survival or recovery is jeopardised
12. Prepare formal recommendations regarding listing, permits, including rationales for meeting pre-conditions; performance measures

**What are options which fulfill the preconditions?**



## **Required Science Advice**

- Analysis of status and trends, trajectory, recovery targets
- Analysis of harm from human activities
- Analysis of possible mitigating measures, alternative measures, and impact of these on survival and recovery of the species
- Continual improvement to methods for assessing “allowable harm”
- All to be compiled in Regions and peer reviewed in a national setting



## Process to date

- Assessments required for Schedule 1 species to issue Section 73 permits
- Regional Advisory meetings were held to assess potential allowable harm for Inner Bay of Fundy Salmon, Leatherback turtle, and two wolffish species with Management and Stakeholder participation
- Each assessment resulted in varied experiences
- Wolffish assessment most positive due to existence of a Recovery Plan and paucity of data to deal with



## Up coming

- Assessments will now be used to inform the Minister's decision on legal listing
- NAP this fall in the Maritimes to discuss allowable harm for two cod populations, cusk, and bocaccio
- NAP in Pacific to discuss Interior Fraser coho
- Many others still need to be scheduled (e.g. porbeagle, white sturgeon, beluga whales – spring 2005?)



## **Areas Requiring Clarification**

- Is it possible to assess all 3 phases of the Framework in one meeting?
- Ideally, Management would identify potential mitigation measures and/or alternative activities in consultation with Industry/Stakeholders and Science would then analyse their effectiveness in reducing harm.
- Who leads the socio-economic analysis of proposed measures?
- How should the process work in the future?



## Conclusions

- The common goal is to ensure that the right people contribute the right information, at the right time, and that this information is utilized to inform listing decisions and permitting in the most effective manner possible.
- The mechanisms for providing science advice in support of allowable harm continue to evolve as we gain experience with the most effective methods.



**Thank you**

**Merci!**