



Serial No. N5956

NAFO/FC Doc. 11/22
(Adopted)33rd ANNUAL MEETING – SEPTEMBER 2011**Interim 3NO Cod Conservation Plan and Rebuilding Strategy
(NCEM Article 9)****1. Objective(s):**

- a) **Long-term Objective:** The long-term objective of this Conservation Plan and Rebuilding Strategy is to achieve and to maintain the 3NO Cod Spawning Stock Biomass (SSB) in the 'safe zone', as defined by the NAFO Precautionary Approach framework, and at or near Bmsy.
- b) **Interim Milestone:** As an interim milestone, increase the 3NO Cod Spawning Stock Biomass (SSB) to a level above the Limit Reference Point (Blim). It may reasonably be expected that Blim will not be reached until after 2015.

2. Reference Points:

- a) Limit reference point for spawning stock biomass (Blim) – 60,000t¹
- b) An intermediate stock reference point or security margin BISR² – [120,000t]
- c) Limit reference point for fishing mortality (Flim = Fmsy) – 0.30
- d) Bmsy – [248,000t]

3. Re-opening to Directed Fishing:

- a) A re-opening of a directed fishery should only occur when the estimated SSB, in the year projected for opening the fishery, has a very low³ probability of actually being below Blim.
- b) An annual TAC should be established at a level which is projected to result in:
 - i. continued growth in SSB,
 - ii. low⁴ probability of SSB declining below Blim throughout the subsequent 3-year period, and
 - iii. fishing mortality < F0.1

4. Harvest Control Rules:

Noting the desire for relative TAC stability, the projections referred to in items (a) through (d) below should consider the effect of maintaining the proposed annual TAC over 3 years. Further, in its application of the Harvest Control Rules, Fisheries Commission may, based on Scientific Council analysis, consider scenarios which either mitigate decline in SSB or limit increases in TACs as a means to balance stability and growth objectives.

- a) When SSB is below Blim:
 - i. no directed fishing, and
 - ii. by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

¹ The Fisheries Commission shall request the Scientific Council to review in detail the limit reference point when the Spawning Stock Biomass has reached 30,000t.

² A 'buffer zone' (Bbuf) is not required under the NAFO PA given the availability of risk analysis related to current and projected biomass values; however, SC has advised that an additional zone(s) between Blim and Bmsy could be considered. An intermediate stock reference point (BISR) is proposed to delineate this zone. The proposed value is set at a level equivalent to twice Blim. Should the SC review of the limit reference point (Blim) result in a change to that value then the intermediate stock reference point (BISR) should also be re-evaluated.

³ 'very low' means 10% or less

⁴ 'low' means 20% or less

Before SSB increases above Blim, additional or alternative harvest control rules should be developed, following the Precautionary Approach, to ensure the long-term objective is met, such as:

- b) When SSB is between Blim and Bisr:
 - i. TACs should be set at a level(s) to allow for continued growth in SSB consistent with established rebuilding objective(s),
 - ii. TACs should result in a low probability of SSB declining below Blim throughout the subsequent 3-year period, and
 - iii. Biomass projections should apply a low risk tolerance

- c) When SSB is above Bisr:
 - i. TACs should be set at a level(s) to allow for growth in SSB consistent with the long term objective, and
 - ii. Biomass projections should apply a risk neutral approach (i.e. mean probabilities)

- d) When SSB is above Bmsy:
 - i. TACs should be set at a level of F that has a low probability of exceeding Fmsy, and
 - ii. Biomass projections should apply a risk neutral approach (i.e. mean probabilities)

5. Ecosystem Considerations:

Considering the importance of capelin as a food source, consistent with the ecosystem approach, the moratorium on 3NO capelin will continue until at least December 31, 2013.