



**38<sup>th</sup> ANNUAL MEETING – SEPTEMBER 2016**

**Recommendation relating to 3LN Redfish from the FC-SC Joint Working Group on Risk-based Management Strategies (WG-RBMS) forwarded to FC**

The WG-RBMS met on 4-6 April 2016 in Tórshavn, Faroe Islands and agreed on the following recommendation (FC/SC Doc. 16/01):

The Working Group **recommended that:**

**Fisheries Commission adopt supplementary guidance to the 3LN Redfish conservation plan and Harvest Control Rule (HCR) as presented in Annex 1. It is further recommended that the HCR (Annex I) be incorporated into the NAFO Conservation and Enforcement Measures.**

**Annex 1. 3LN Redfish Conservation Plan and Harvest Control Rule –  
Supplementary Guidance**  
(FC-SC RBMS-WP 16/02 Rev.2)

*Noting that a Harvest Control Rule for 3LN Redfish was adopted by NAFO in 2014 that reflected the advice of the Scientific Council for this stock;*

*Recognizing at the time the Harvest Control Rule was developed the biomass was estimated to be greater than  $B_{msy}$ , and evaluated against a range of conservation focused performance statistics;*

*Noting that a full review and evaluation of the HCR will occur on or before 2020 and that in the interim, NAFO will continue to monitor trends in the survey indices for this stock, as well as, conduct periodic assessments (beginning in 2016);*

*Recognizing that the long-term objective of this Conservation Plan is to maintain the biomass in the ‘safe zone’, as defined by the NAFO Precautionary Approach framework, and at or near  $B_{msy}$ ;*

*Recalling that at the 2015 Annual Meeting the Working Group on Risk-based Management Strategies was tasked with the development of supplementary guidance for Fisheries Commission to respond to any unforeseen performance in the stock (FC WP 15/16);*

*Consistent with the structure and key principles of the Framework on the General Framework on Risk-based Management Strategies, as adopted by NAFO in 2014;*

*Consistent with the parameters agreed upon by Fisheries Commission for development of the harvest strategy;*

It is proposed that following supplementary guidance be adopted as an addendum to the existing Risk-Based Management Strategy for 3LN Redfish (Annex I):

The context, objectives and performance statistics for this Risk-Based Management Strategy remain as stated Annex 3 to the 2014 Annual Meeting Report of the Fisheries Commission (FC-SC RBMS WP 14/4 Rev 3).

**1. Objectives:**

The long-term objective of the Redfish 3LN Conservation Plan is to maintain the biomass in the ‘safe zone’, as defined by the NAFO Precautionary Approach framework.

**2. Reference Points (as identified by NAFO Scientific Council - NAFO SCS Doc. 14/17 Revised):**

- a) Limit reference point for biomass ( $B_{lim}$ ): 30% of  $B_{msy}$
- b) Limit reference point for fishing mortality ( $F_{lim}$ ):  $F_{msy}$

**3. Performance Statistics (levels of risks that apply to section 4):**

- a) Very low (< 10%) probability of biomass declining below  $B_{lim}$ .
- b) Low (< 30%) probability of fishing mortality  $>F_{msy}$
- c) Less than 50% probability of declining below 80%  $B_{msy}$  on or before 2021

**4. Supplementary Guidance to the 3LN Redfish Harvest Control Rule (Annex 1):**

- a) When biomass is below  $B_{lim}$ :
  - i. No directed fishing
  - ii. By-catch should be restricted to unavoidable by-catch in fisheries directing for other species
- b) When biomass is between  $B_{lim}$  and 80% of  $B_{msy}$ 
  - i. TAC's should be set at a level(s) to allow for growth to above 80% of  $B_{msy}$  or to avoid or mitigate further decline in biomass consistent with explicit rebuilding objectives<sup>1</sup>
- c) When biomass is above 80% of  $B_{msy}$ 
  - i. TAC's should be set at a level(s) to maintain biomass above 80% of  $B_{msy}$  or to avoid or mitigate decline below 80% of  $B_{msy}$
- d) If fishing mortality is above  $F_{msy}$ 
  - i. Fishing mortality should be reduced to a level below  $F_{msy}$ .

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<sup>1</sup> Tolerance for short-term preventable decline is reduced as biomass approaches  $B_{lim}$

**Annex I.**  
**NAFO – Risk-Based Management Strategy for 3LN Redfish<sup>1</sup>**

**Management Strategy/Harvest Control Rule:**

A stepwise biannual catch increase reaching 18 100t by 2019-2020. (18 100t is the equilibrium yield in the 2014 assessment under the assumption of an MSY of 21 000t).

2015 TAC:	10,400t
2016:	10,400t
2017:	14,200t
2018:	14,200t
2019:	18,100t
2020:	18,100t

**Review/Monitoring:**

1. Scientific Council will monitor the performance of the HCR by examining the trends in the survey indices and by conducting a full assessment every 2-3 years and for the first time in 2016.
2. Conduct a full review/ evaluation of the management strategy at the end of the 7 year implementation period.

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<sup>1</sup> Adopted by NAFO in September 2014 for implementation effective January 1, 2015