Seafood Watch® Wild Fisheries Standard

Overview of proposed updates

The following summarizes the proposed updates to Seafood Watch Wild Fisheries criteria. For the detailed, revised criteria, please visit our website at http://www.seafoodwatch.org/seafood-recommendations/standards-revision.

Criterion 1: Impacts on the Species Under Assessment and
Criterion 2: Impacts on Other Capture Species

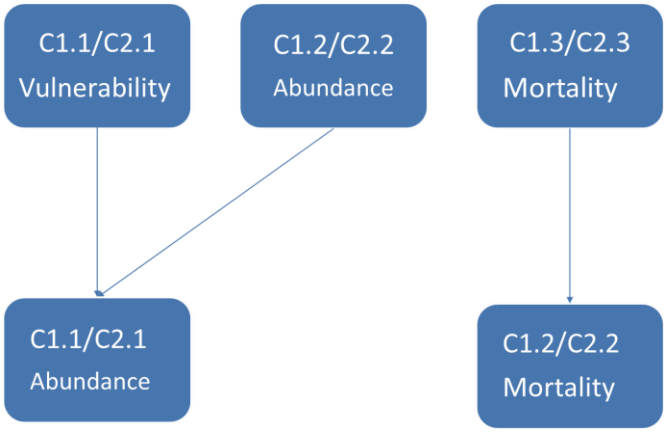

Figure 1. Proposed organizational updates to Criteria 1 and 2. Vulnerability and abundance will be streamlined and simplified by integrating them into one factor.

Factors 1.1 and 2.1: Abundance

- Conduct a PSA for data-poor species – for stocks of unknown abundance, we will assess the inherent vulnerability to fishing using a Productivity and Susceptibility Analysis used by the Marine Stewardship Council (https://www.msc.org/documents/scheme-documents/fisheries-certification-scheme-documents/fisheries-certification-requirements-version-2.0)
- Combined high and very high conservation concern to simplify and streamline the scoring because we have found that in practice it is very difficult to support the differential scoring.
- Added guidance for data-limited fisheries – In the current criteria, species are either scored according to a full stock assessment if available, or according to their vulnerability. We have found that the current criteria do not account well for cases where there may be some data or evaluations regarding the stock status, but not a full stock assessment. We are proposing adding guidance to allow for the use of data-limited assessment methods in scoring.

- Added guidance based on the Lenfest Forage Fish Taskforce - We are incorporating the guidance from the Lenfest Forage Fish Task Force (LFFTF report) that was published since the last version of our criteria as guidelines for appropriate biomass levels for forage species. This is incorporated into low and very low concern; where reference points must be appropriate given the species' ecological role[1].

Table 1. Summary of proposed updates to scoring for Factors 1.1 and 2.1. Proposed updates are in red. B=biomass, TRP=target reference point, LRP=limit reference point.

Score	Data
Very Low Concern	B > TRP[1] w/ high certainty
Low Concern	B > TRP[1] (uncertain or out of date) Or **LRP[1] < B < TRP[1] & B ≥ 0.75 TRP[1]** Or **Not highly vulnerable & ≥ 2 appropriate data-limited assessments indicating stock is healthy**
Moderate Concern	B is unknown (with caveats) **LRP < B < 0.75 TRP**
High Concern	B < LRP Or Overfished Or **Endangered/threatened**

[1] SFW added the qualifier for very low and low concern that reference points must be appropriate given the species' ecological role.

Factors 1.2 and 2.2: Mortality

- Combined very low and low concern - Currently, the probability that overfishing is not occurring is used to distinguish "very low concern" from "low concern." In practice, this information often is not available and it can be difficult to distinguish between "low" and "very low" concern. Overall, however, in combination with the revised scoring proposal for the abundance factor, this suggested change does not result in less conservative scoring.
- Removed critical concern (removed management requirement) – Depleted status and whether management is in place when overfishing is occurring are accounted for in other criteria (abundance and management, respectively). Including those criteria here double-counts these issues and makes

[1] For forage fisheries with an intermediate level of information, there must be at least 40% of virgin or unfished biomass (B_0) left in the water, and fishing mortality should be no higher than 50% of F_{MSY}. Low information fisheries should leave at least 80% of B_0 in the water. High information fisheries may exceed these reference points if justified by the science, but in no case should fishing mortality exceed 75% of FMSY or biomass fall below 30% of B_0.

this factor unnecessarily complex. We have checked that these considerations are adequately addressed in the other factors.

- Added guidance based on the Lenfest Forage Fish Taskforce – See description in 1.1 above[1].
- Added guidance to factor in all sources of fishing mortality (including commercial, recreational, subsistence and ghost fishing where applicable)

Table 2. Summary of updated scoring for Factors 1.2 and 2.2. F=fishing mortality rate, F_{msy}= maximum rate of fishing mortality ultimately resulting in a population size at its maximum growth rate.

Score	Data
Low Concern	$F < F_{msy}$[1]
Moderate Concern	$F=F_{msy}$[1] Or F unknown
High Concern	$F > F_{msy}$[1]

[1] **SFW added the qualifier for very low and low concern that reference points must be appropriate given the species' ecological role.**

Criterion 2: Impacts on Other Capture Species

- Simplified main species filter - The only main species criterion that is being removed is, "the species is >1% of that fishery's catch and the fishery causes >5% of the species' total mortality across all fisheries," because we found this criterion is very rarely applied in practice due to a lack of data, and the remaining criteria adequately capture the important species. Otherwise, the thresholds for the filter remain the same, and it is expected that this will not impact which species are considered for assessment, but will increase the ease of use.
- Increased robustness of the Unknown Bycatch Matrix for sharks, sea turtles, seabirds, and marine mammals – revisions for these taxa incorporate a regional component, information from new scientific literature (54 reports and peer-reviewed publications), and expert opinion.
- Evaluate unassessed species using the Unknown Bycatch Matrix - this will simplify the scoring process for known bycatch species for which there is little or no stock status information. We are allowing for the possibility of overriding the score where fishery-specific data indicate it is appropriate.

Factor 2.3 – Discards plus bait use

- Simplified the discards plus bait use modifier – The simplified ratio will increase consistency with the Aquaculture Standard. This change also increases the weighting of this modifying factor by allowing it to influence the color rating of Criterion 2, therefore affecting the overall recommendation in more cases.

Table 3. Current scoring for bait use+ discard rate modifier.

Ratio of bait + discards/landings	Factor 2.4 Score
< 20%	1
20-40%	0.95
40-60%	0.90
60-80%	0.85
80-100%	0.80
>100%	0.75

Table 4. Proposed updated scoring for bait use + discard rate modifier.

Ratio of bait + discards/landings	Factor 2.3 score
< 100%	1
≥100%	0.75

Criterion 3: Management Effectiveness

Factor 3.1 – Management strategy and implementation of harvested species

- Combined Factors 3.1.1, 3.1.2, 3.1.4, and 3.1.6 into one factor (3.1) – this criterion has been streamlined and restructured to reduce the number of factors exactly as was discussed at the TAC meeting (Figure 2)

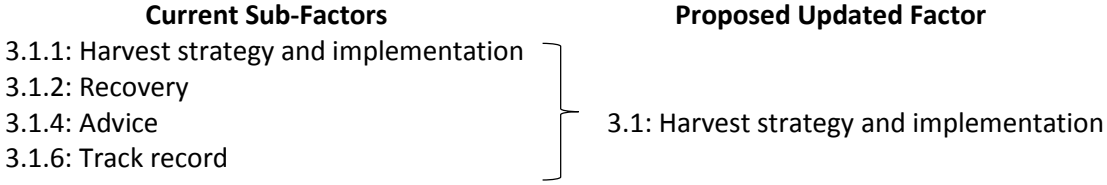

Figure 2. Proposed restructuring and streamlining of Factor 3.1.

- Critical scoring category - We propose some specific language for the "critical" category for Factor 3.1 that would ensure that fisheries that catch species that are overfished with overfishing occurring, and do not have management in place to end overfishing and rebuild the stocks, are scored as a "critical." This addition is considered to be equivalent to the language previously in Factor 1.3 that scored fisheries as "critical" in these cases.

Factor 3.2 – Management strategy and implementation of bycatch species

- Combined subfactors 3.2.1 and 3.2.3 into one factor (3.2) - the bycatch management criterion (3.2) is included as its own factor, and is assessed for all fisheries but receives a highly effective score for fisheries with no bycatch. Management of ghost fishing impacts is now considered in this factor.

Current Sub-Factors	Proposed Updated Factor
3.2.1: Bycatch strategy and implementation 3.2.5: Advice 3.2.5: Track record	3.2: Bycatch strategy and implementation

Figure 3. Proposed restructuring and streamlining of Factor 3.2.

Factors 3.3 and 3.4– Scientific Research and Monitoring and Enforcement

- Combined research and monitoring management factor and enforcement management factor of harvest and bycatch species into one factor each: Rather than dividing these subfactors between harvest and bycatch species, we combined the management strategies of each of these subfactors to include both harvested and bycatch species (Figure 4).

Current Sub-Factors	Proposed Updated Factor
3.1.3: Scientific research and monitoring – harvest species 3.2.2: Scientific research and monitoring – bycatch species	3.3: Scientific research and monitoring
3.1.5: Enforcement – harvest species 3.2.4: Enforcement – bycatch species	3.4: Enforcement

Figure 4. Proposed restructuring and streamlining of Factors 3.3 and 3.4.

- Scientific Research and Monitoring: The research and monitoring subfactor has been edited to incorporate the new guidance on data-limited assessment methods provided in Appendix 8, as determined with our data-limited assessment working group (and also referenced in Criteria 1 and 2).

Criterion 4: Impacts on the Habitat and Ecosystem

- Minor restructure of Factors 4.1 and 4.2 - To emphasize that these two factors combine to create the score for impact on the habitat, we propose to rename these as subfactors 4.1a and 4.1b and to assign a category (based on corresponding numerical scores) only for Factor 4.1 as a whole (the sum of 4.1a and 4.1b).

Factor 4.1.a – Physical impact of fishing gear on the habitat/substrate

- Added new categories for trampling on coral reefs and dredging in mud or sand - We propose the addition (under a score of "2") of guidelines for fisheries that use hand gear, but are known to result in tramping of coral reef habitat by fishermen. This represents a situation that has been encountered in our assessments but was not considered in the table under Factor 4.1a previously.

Factor 4.1.b – Modifying factor for mitigation of gear impacts

- Eliminated "minimal mitigation" - this level was not found to represent a meaningful level of mitigation, and are proposing some minor language changes to Factor 4.1b in accordance with

public comments received. This change would help to ensure that trawl fisheries must have a limited footprint with no expansion into untrawled areas to receive enough mitigation credit to score a "moderate concern."

Factor 4.2: Ecosystem-Based Management

- Language modified to focus on more comprehensive ecosystem-based management strategies – This will avoid double counting with the revised Lenfest Forage Fish guidance in Criteria 1 and 2 and applies to all fisheries regardless of whether or not it catches "exceptional species."

- Slightly adjusted scoring to focus on policies currently in place - both science and management best practices have advanced significantly in the four years since developing the current criteria and this change emphasizes existing plans rather than commitments to implement EBFM.