



**Western
Pacific
Regional
Fishery
Management
Council**

May 23, 2014

Dr Rick Methot
Northwest Fisheries Science Center
2725 Montlake Blvd E,
Seattle, WA 98112

Dear Rick:

Thank you for the opportunity to review the document Prioritizing Fish Stock Assessments. The Council applauds the attempt to develop a coherent methodology to develop priorities for fish stock assessments nationally. That said, we do have a number of concerns which are articulated in this letter and in the attached list of comments. These comments come in the main from an SSC Subcommittee set up to review the prioritization document.

It was very difficult to understand the algorithms that were being used to score various aspects for fisheries for target setting and prioritization. The Fishery Importance methodology and its scaled logarithmic scoring system was not well understood. Given the general sense of confusion, it was thought that a detailed worked example of the target setting and prioritization exercises should have been given up front, with the rationale for the scoring system following this, so that the reader gets to see how the engine works under the hood, so to speak.

Further, it was thought useful if the proposed system could be groundtruthed by running an exercise with the scoring system with federally managed stocks to see how this would compare with the way stock assessment resources are currently allocated to the regions.

There was much concern in the SSC about fisheries importance gauged in pounds versus dollars. As an example, Honolulu ranks well down the list of US ports in terms of the volume of fish landings, but consistently ranks among the top 5 nationally in terms of landed value of the catch. The document does mention on page 13 that catch value will supersede catch as the common metric but the first application of the prioritization exercise will, we understand, be based on catch

Moreover, there are aspects of valuation that concerned the Subcommittee. Some fish stocks such as marlins or reef fish have high contingency values other than their worth in terms of sales. The Subcommittee felt that this needs to be taken into account when developing a value score for these kinds of fish.

The Subcommittee felt that the composition of the group that would conduct the prioritization exercise was fundamentally important, since any scoring system may be vulnerable to being manipulated.

Lastly, the Subcommittee felt there was not enough emphasis on data within the prioritization process (although data poor are addressed). Data quality is key to the evaluation of stock assessment quality in terms of retrospectively comparing fishery performance several years after a stock assessment has been conducted.

We hope you will take the comments given here in the spirit in which they are given, not to be needlessly critical, but to assist you in your task of developing a sound methodology for stock assessment prioritization. If you have any comments on the SSC Subcommittees comments, please contact our Senior Scientist Paul Dalzell (paul.dalzell@noaa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Kitty M. Simonds', written in a cursive style.

Kitty M. Simonds
Executive Director

cc: Richard Merrick
Sam Rauch

SSC Subcommittee Comments on Prioritizing Fish Stock Assessments

- Overall, it was difficult to follow the proposed prioritization system as outlined in the document. A system that is difficult to follow is more likely to be difficult to implement. Further, it is not entirely clear whether the scaling for landed value will have the additional factors added on as a raw score or will be similarly scaled by division. The example must be workable and comprehensible.
- The document is unclear about how the regional bodies that make the "target" and "prioritization" evaluations will be constituted. The only reference is to "NMFS Science Centers and their regional partners." Much depends on the Council's role and involvement and influence with PIFSC.
- The language in the executive summary suggests that regions will be responsible for developing the schemes, but will other stakeholders be involved in the process? Presumably, the regional SSCs will be central to this process and the regions can define who else would participate.
- Proposed prioritization scheme is presented on one hand as regional in nature, but on the other hand requires cross regional standardization and national reporting of the results. In reality the scheme enhances the ability of headquarters to justify the allocation of Assessment funding between regions (and internationally).
- Prioritization is based on five factors: fishery importance, ecosystem importance, stock status, stock biology, history of assessments. The first factor, fishery importance, is weighted by an overly prescriptive and difficult to comprehend formula, while the weightings of the other four factors involve a large degree of subjective judgment.
- Ranking calculations with regard to "fishery importance" are difficult to understand. regional standardization, and thus meaningful national ranking is thwarted because the scheme does not seem to provide a standard unit of measure for "importance"
- Regarding "fishery importance," the value of a fishery to the nation should be measured in monetary units (dollars) not weights (pounds). In general the total market value of landings reflects the relative national contribution of that fishery. However, there are additional regional "multiplier" impacts and nonmarket values that should be accounted for as "importance modifiers," for example, lobsters to New England, shrimp to Louisiana, bigeye sashimi to Hawaii.
- It's good to use the phrase "maximum net benefit to the nation". The ranking/scoring should include community factors and community dependence and go beyond landed value to the importance of the lifestyle associated with all parts of the system, processing,

harvesting, distribution, cultural factors, community dependence and consumption, including support for tourist economies

- The score for subsistence value should be greater than the score for non-use values like fish watching.
- "Importance" can only be measured nationally in terms of dollar value; yet, this proposed scheme seems to comingle units in pounds of catch for some fisheries with units of dollar value for other fisheries. The difficulty of ranking high value verses high volume fisheries seem to remain a matter of regional judgment.
- With regard to "fishery importance modifiers" ie socio economic factors, why are fishery importance modifiers limited to an arbitrary +1 or 0 (given so little relative influence and flexibility)? The fishery importance scale ranges 1-5, the ecosystem importance scale ranges 1-3, and the stock status scale ranges 2-9
- There should be an additional category added to account for a multi-gear fishery of a single stock, where for one gear type the stock is a bi-catch and for the other gear type the stock is the target species, i.e. longline/purse seine bigeye.
- Data availability and quality will have a BIG influence on stock assessment prioritization, and we have some fisheries where large volumes of fish are caught (mahi, wahoo etc) but for which the data, especially non-commercial is highly suspect.
- Needs to be some way that culturally important stocks and those fisheries which may have low net economic value (but may be locally important to the economies of the individual islands in the Pacific) can be ranked accordingly.
- Assessment level is not clearly defined, although one can gather from the examples that high level assessments are more comprehensive and more sophisticated, with greater data requirements.
- The document states that ecosystem rankings are very preliminary. Is there sufficient understanding of ecosystem structure and dynamics and should forage species be ranked equally to predator species that structure communities?
- The best stock assessment in the world can be fooled by natural or man-made events, but if we have collected appropriate data, we then have the chance to go back to see what upset our stock assessment. The draft document does speak of the types of data needed in relation to the various types of stock assessments, but in addition to that, I think there should be high priority for collection of some basic catch-at-size and effort data for every stock regardless of what type of stock assessment is anticipated.