2024 New England SOE Reviews

Kristan Blackhart (PopDy)

Notes on NEFMC SOE:

1. p. 7, last paragraph needs updated references for Figs 3/4; some additional figure references missing throughout
2. p. 8, last paragraph has a couple of write to pdf errors [ B\textsubscript(MSY) ]; another one on p. 21 (protected species header)
3. p. 8, last paragraph, interested what Tammy thinks about idea to compare TAC/attainment - this reflects economic factors as much or more than management factors, so just looking at attainment could be difficult to interpret
4. p. 26, Risks to Spatial Management - changes to depth distribution can also change species and fishery interactions; I see this addressed in the indicator section below, but maybe worth adding here?
5. p. 28 and following species-specific references - have these been flagged and reviewed with PDB species experts? (i.e. yellowtail flounder, haddock, scallop, longfin squid)

Phoebe Woodworth-Jefcoats

My biggest recommendation is to move the section about how to read the figures from the end of the document to the beginning.  This information is essential for making sense of all the information that's shown.  I'd also recommend comprehensive figure keys that include all the information shown in each figure.  This will be a bit redundant, but it'll allow people to skim to their area of interest and make sense of what they find.

These reports are really impressive.  They gave me a few ideas for our ocean and climate indicators.  They're also so much more digestible than our SAFE reports, which are hundreds of pages long.

Please don't hesitate to reach out with any questions, including additional review requests.

Tammy:

**Tammy Murphy**

**02/25/2024**

**Comments on 2024 State of the Ecosystem Reports**

New England -

Page 1 - Commercial Profits of GB - I’d lead off with “Inflation-adjusted revenue on GB has only exceeded 1982 levels twice in the time series, with price effects driving

dynamics over the past decade.” Then, go onto scallops as an example of lower revenue being driven by price effects (price decreases): Despite high landings of scallop, lower prices drew total revenue down in 2022. I find that leading with the statement about scallops confusing, since the indicator is for all commercial species. The way “commercial profits” is addressed on page 2 for the GOM makes more sense to me — start with the overall level for the EPU, then get into specific species.

Page 1 - I wish there was a better way to present the indicator for “Social and Cultural”, but I defer to Lisa’s expertise on that for now. I’ll think about it though.

Page 6 - Title on Figure 1 - Maybe I am missing something, but I don;t see any open circles iiin the Figure, so the notation in the caption of the figure “Open circles represent years that are lacking NAFO (foreign) data” is confusing.

Page  8 - “Aquaculture production is not yet included in total seafood landings” - may want to give an indication of why not, though perhaps not necessary for the main audience for this document.

Page 8 (Bottom): “To better address the role of management in future reports, we could examine how the total allowable catch (TAC) and the percentage of the TAC taken for each species has changed through time” - Seems awkward/ambiguous. Seems like either you will or you won’t — are you looking for NEFMC feedback on this?

Page 13 - Figure 13 - Wondering if there should be an explanation of “Effective Shannon” prior to the placement of Figure 13 or a hyperlink to explain the index

Page 17 - Note the Y axis title is chopped off for Figures 17 and 18

Overall Comment on “Environmental Justice and Social Vulnerability” section - I am finding this really difficult to read — probably because of the error that was found at the late stage. Happy to review this once it is updated. The implications section reads OK.

* Page 18 - Under “Indicators: Environmental Justice and Social Vulnerability in commercial and recreational fishing communities”

For the first sentence, I would change the start to “Social vulnerability **indicators measure…**”. (Social vulnerability is a condition that the indicator measures

* Second paragraph, 4th line, note typo for “Stonington, CT”
* For Figure 19, I am surprised at the Commercial Reliance Index for New Bedford, MA, but that is possibly one of the errors identified.
* Page 21: It looks like the header for “Protected Species” got caught up  under “Implications”

Page 27: Figure 31 - Double Check title to make sure it should be “Mean sea surface temperature across the **entire Mid-Atlantic shelf**” in the NE report. Could be right. But it caught my eye.

Action Items

General

* Move figure formatting/orientation to top of document
* Adding colors for trends in figure captions
* Add space after superscripts in plot functions (e.g. commercial landings)
* NARW should be spelled out in figure titles

Summary

* NARW bycatch status

Performance

* NARW abundance – confirm with Dan Linden
* Rec Shark Landings – add space before coastal in key
* Not a fan on how table overplot for stock status
* Bennet plot – Caption should be clearer. “Value in millions USD (2022)”
* Bennet guild – Recommending line plot with total. Stacked bars not reading clearly
* Commercial engagement plot – “MedHigh” to “Medium-high”
* Porpoise bycatch – How does rolling mean have CI but not annual estimates

Risks

* Thermal transition – Title should read “New England”
* Fish productivity – Bar plots are difficult to read. Alternative approach?
* Don’t introduce Arag saturation in figure.

Wind

* Wind Revenue Port – Limit X axis to ~40$ to allow more discernment from rest. NO shading for non-wea revenue. Also no comma between city and states in Y axis