

SIOFA Ecological Risk Assessment Working Group Workplan 2017-18

The following workplan was devised for 2017–18.

Objective

The goal of ecological risk assessment is to develop an understanding of priority species within a fishery. Comparisons between fisheries with these methods are less valid, as these are relative risk – care must be taken in making comparative decisions based on different fishery results. The outcome from an ERA is to develop a set of actions that would ultimately reduce or demonstrate a reduction of risk to satisfactory levels (sustainable fishery where no species is at risk of recruitment overfishing).

The workplan is to:

1. Develop PSA and SAFE assessments for four fisheries/gear types in SIOFA
 - a. Obtain data on
 - i. Catch distribution for each fleet and nation (ABARES)
 - ii. Depth distribution for each fishing gear (ABARES)
 - iii. Species distribution maps for species (ABARES)
 - iv. Biological attributes for species gathered (JCU)
 - b. Load the data into the assessment tool
 - i. Calculating attributes and overlaps (CSIRO)
 - ii. Provide access to tool for each nation/SIOFA
 - c. Draft a report
 - i. Include examples of responses that might be considered by the SC in response to high risk species.
 1. Observer efforts
 2. Gather more data
 3. Check records
 4. Undertake sensitivities
2. Seek feedback from SIOFA nations
 - a. Workshop SC – Reunion meeting (March 2017)
 - i. Preliminary PSA discussion
 - b. Workshop 1 ERAWG – Oct 2017 – Hobart - Agenda
 - i. Discuss results
 - ii. Check scoring
 - iii. Develop residual risk methods – false positives with rationale. Use Australian ERAEF and apply these to the “high” risk species.
 1. Residual risk guidelines can account for limitations in Level 2 Ecological Risk Assessment (ERA) process. In particular, residual risk guidelines were developed to better account for existing management arrangements that mitigate certain risk and additional information on

direct mortality not appropriately considered by Product Susceptibility Analysis (PSA) or SAFE. In response, nine residual risk guidelines were developed to account for these limitations, improving the assessment of risk for species that interact with each fishery. Once completed, ERA and residual risk assessments will determine priorities and allow fisheries managers to better make informed and consistent decisions about the future management of each fishery. These 9 guidelines are:

- a. Risk rating due to missing/incorrect information
- b. Additional scientific assessment
- c. At risk due to missing attributes
- d. At risk with spatial assumptions
- e. At risk but with a zero or negligible level of interaction/capture
 - i. And needs to be for a reasonable observer coverage (>10%?) to be able to be used as an override.
- f. Effort and catch management arrangements for target and byproduct species
- g. Management arrangements to mitigate against the level of bycatch
- h. Limits on associated species through other management arrangements
- i. Management arrangements relating to seasonal, spatial and depth closures.

3. Out of session

- a. Video hook-up with all nations to explain the tool. Summary presentation for members unable to attend ERAWG workshop 1.
 - i. There are some remaining questions here around how to display fishing effort overlap with species' distribution maps – confidentiality restrictions may prevent this being done visually but there may be other options.
- b. Methods development
 - i. Scoring rubric
 1. PCM – 2 (and ask for opinion on “3”)
 2. Sizes (JCU providing update)
- c. SIOFA nations – we expect they will
 - i. Use the tool to explore risk
- d. Add some more detail to the tool (CSIRO)
 - i. Reference set for attributes
 - ii. Remove SAFE explore option.
 - iii. Add SAFE equations (or a count for how many used for F)
- e. Develop a list of “issues” in existing species list and seek explanation for issues.
 - i. Back and forward

- ii. Do residual risk – where data are available and “easy” – if not, gather that data outside this workplan
 - iii. Invite SIOFA review of these issues
- f. Finalise a list of priority species for consideration by the SIOFA SC
 - i. Draft Final Report for WG