**Revised Commonwealth Fisheries Bycatch Policy**

**Submission No.:** 12

**Submission by:** CSIRO

**Submission:**

Below are CSIRO comments on the draft Commonwealth Fisheries Bycatch Policy. CSIRO has had an extensive involvement in bycatch assessment and mitigation measures such as exclusion devices. Together with AFMA, CSIRO developed the ecological risk assessment for the effects of fishing (ERAEF) and recent enhancements and extensions to the approach.

We appreciate the opportunity to comment but keep these to a technical nature as far as possible.

**1 Introduction**

**1.1 What is bycatch?**

The definition needs to be clarified so it does not unintentionally preclude technical solutions to bycatch mitigation such as exclusion devices or mesh sizes for example (as discussed on page 14). A specific comments about this in the paragraph starting “Bycatch is often characterised by …” might prevent giving the appearance that bycatch reduction devices have no value.

**3 Applying the Bycatch Policy**

**3.1 Species categorisation**

Table 1 shows the policy and management settings for each species category and the comparisons are useful. However, the “targets” for general bycatch and protected species are not targets in the same formal sense as the target reference points identified in the HSP. To avoid confusion it may be better to leave these sections blank and refer to them in the text. They would be better described as objectives.

**3.3 Risk equivalency**

It is agreed that biomass estimates will often be unknown and fishing mortality reference points are useful alternatives. However, for many species, the level of fishing mortality will not be known either. We presume the guidelines will describe alternative approaches such as ERAs?

**3.4 Balancing risk, cost and catch.**

Page 13 1st paragraph. It is difficult to see how there can be evidence of an adverse effect but with little data on the species. Perhaps this could be re-worded. This paragraph could also consider reference that the “adverse impact” is attributable to fishing as alluded to in the next section.

**3.6 The management toolbox**

“Bycatch management should consider opportunities for applying quantitative approaches, such as decision rules based on indicators such as catch rates and trigger limits”

Decision rules (or harvest control rules) a formal parts of harvest strategies that explicitly link the outputs of assessments to the management response, for example a RBC. It is unlikely that such decision rules could be developed for general bycatch species. To avoid confusion with the HSP, this line could be redrafted:

“General bycatch management should consider opportunities for applying quantitative approaches, with management responses being based on indicators such as catch rates and trigger limits where appropriate”

We note, however, that formal decision rules could be developed for some protected species.

**4.2 Bycatch strategies**

**4th dot point**

Similar to the above, to avoid confusion with HSP, this could be re-drafted to read:

“Management approaches for areas of identified risk, including relevant indicators, triggers or other responses”