Revised Commonwealth Fisheries Harvest Strategy Policy

Submission No.: 04

Submission by: WWF-Australia, TRAFFIC, the Australian Marine Conservation Society and Humane Society International

Submission:

INTRODUCTION

WWF-Australia, TRAFFIC, the Australian Marine Conservation Society and Humane Society International welcome the opportunity to provide a submission in response to the Commonwealth Fisheries Harvest Strategy Policy (HSP) DRAFT for Consultation: March 2017.

Our organisations collectively had significant engagement and investment in the 2012/13 HSP Review and express our alarm at the proposed weakening of the HSP both against the original 2007 version and against Review outcomes.

In summary, the key points identified in our submission relate to the need to:

- apply the precautionary principle to the revised HSP Policy;
- prioritise the environmental objective over the economic objective to ensure maximised long term net economic benefits to the Australian community without loss of environmental equity;
- strengthen management to ensure all categories of species are subject to the same standards and approaches applied to target species under the HSP and to that end are managed based on vulnerability and risk, rather than by commercial value;
- include an additional objective to minimise discards to as close to zero as possible;
- strengthen the requirements of the HSP in relation to rebuilding of overfished stocks;
- upgrade and amend the Policy to ensure that there is appropriate accountability and transparency around decisions taken under the Policy, especially where some level of discretion is available in the application of the Policy;
- address social license risks within the HSP to ensure industry and community confidence; and
- establish a comprehensive, transparent and inclusive process for monitoring implementation of the HSP and the performance of the Policy.

We wish to note with significant concern that the supporting guidelines to the HSP were not available for consideration in the development of this submission. We understand they will be subject to a separate consultation process. The 2012/13 review of this important Policy package included the Policy and the guidelines, necessarily given their strong links. Separating the review of the Policy from the guidelines in this instance significantly weakens all stakeholders' ability to contribute to the discussion on the Policy as many comments will be conditional on seeing the detail of application, which will be contained in the guidelines.

Given this situation, we request that our current submission to the HSP be considered an interim position only. This interim position could be used to refine the draft Policy and also inform the revision of the guidelines. Importantly, we suggest that both the Policy and guidelines document be formally referred to our organisations again for full review of the entire harvest strategy management framework. In addition, for all parts of the Policy that will be further articulated in the guidelines, we suggest that the Policy should state that, i.e. "in accordance with the guidelines", to ensure clarity over whether further prescription is expected

from the guidelines.

INDUSTRY AND COMMUNITY CONFIDENCE

The HSP clearly states in Section 1 para 2 "Harvest strategies consistent with this Policy provide industry and the Australian community with confidence that Commonwealth commercial fish stocks are being managed for long-term ecological sustainability and economic viability." This confidence can only be delivered if the process for setting the harvest strategies, their implementation and their success or otherwise is transparent, and that there are appropriate channels for engagement. There are a number of instances in the draft Policy

where the intent will not deliver this confidence, and to that end the following changes are recommended to strengthen the Policy:

- The precautionary principle is not stated directly or applied in the Policy. This is a fundamental principle that should be included in paragraphs 5 and 6 of Section 1 and tangibly applied in the Policy settings. At the moment it is not and we highlight the areas where additional work is required to do this in our detailed comments against each section of the HSP.
- There must be annual reporting against each Harvest Strategy (HS) and the HSP in general from the outset (Section 4.4 relating to review and reporting). This must be done through the establishment of KPIs set now together with agreed units of measurement and identification of thresholds (e.g. what will be measured, what is good and what is bad). A strategic review of implementation at the 3-year mark would be appropriate. Five years is too long for a strategic review of policy settings of this fundamental importance.
- As fisheries are a public resource, it is realistic to acknowledge that the public will form opinions and make decisions as to how fish resources should be managed and allocated. Under the *Fisheries Administration Act 1991*, Section 6 Objective (d) states that an objective of AFMA is "ensuring accountability to the fishing industry and to the Australian community in the Authority's management of fisheries resources." This objective refers to the social license responsibilities of AFMA to the Australian community and should not be ignored in the HSP.

Recent events with the Geelong Star and the Small Pelagic Fishery provide an example of the risk to being out of step with the expectations of the Australian community. It is unclear how the HSP seeks to address these issues and manage the risks associated with social licence. To create certainty for industry and the community, we would encourage the Australian Government to work with us to incorporate this important factor into the HSP. We also provide comment on this in our submission on the draft Commonwealth Fisheries Bycatch Policy.

CLIMATE CHANGE AND OTHER ENVIRONMENTAL EXTERNALITIES

Existing and potential non-fishing related impacts on the marine environment for factors such as climate change, ocean acidification and pollution are not yet well understood, especially at the level required for the application of any settings prescribed by the HSP. Regardless, the reality of climate change, together with the uncertainty about the nature and the extent of its impact on individual marine species/stocks, dictates the application of a precautionary approach.

The Australian marine environment is already changing because of climate change and current evidence has been associated with coral bleaching, the loss of kelp forests in southern Australia and the changing distribution of stocks of fished species on the east coast. This emphasises the need for fisheries management to be adaptive in a timely manner. It would be appropriate to consider if the current settings of the HSP are sufficiently precautionary to account for climate change and whether the right monitoring is occurring to detect changes that need to be considered. This does not appear to be reflected in the draft Policy document.

The review of international harvest strategy approaches, undertaken to inform the review of the HSP, provides some guidance on how these external influences are being accounted for in fisheries harvest strategies elsewhere in the world and how the HSP should respond. We strongly encourage the Australian Government to account for these externalities in the HSP.

We believe that there is a need to properly inform fisheries management of the nature and extent of these external influences on fish stocks and in particular, the distribution of these stocks. This will require additional research and data collection. This view is supported by the report, *Netting the benefits: An Inquiry into the role of science for the future of fisheries and aquaculture* by the House of Representatives Standing Committee on

Agriculture, Resources, Fisheries and Forestry (The Parliament of the Commonwealth of Australia, 2012), which recommended that "the Australian Government ensure there is a continued strong effort to monitor and analyse the effects of climate change on Australia's oceans and communities"; and that "the 2008 preliminary assessment of the '*Implications of Climate Change for Australian Fisheries and Aquaculture*' [Hobday *et al.*, 2008] be developed by the Department of Climate Change and Energy Efficiency into a more comprehensive study, to include broad strategic issues and localised impacts." Acknowledging the need for further research and data, as a precautionary measure the HSP must set the framework for this data to be accounted for in the process. The new HSP must also take account of all parliamentary enquiry outcomes.

Finally, the ongoing Senate enquiry into Current and Future Impacts of Climate Change on Marine Fisheries and Biodiversity is considering the recent and projected impact of climate change on fisheries and the management of this issue. While the enquiry will not report until September, the deliberations of the process are available and these should be taken account of in the new HSP to ensure that is able to best prepare and respond to the very real influences that climate change is having on fisheries and the mechanisms through which fisheries are managed.

SPECIFIC COMMENTS

INTRODUCTION, OBJECTIVES AND KEY PRINCIPLES (SECTION 1, PARA 1 AND SECTION 2)

Prioritisation of objectives

Well accepted contemporary fisheries management recognises that the goals of sustainable management extend beyond the management of target fish stocks. Ecosystem Based Fisheries Management (EBFM) takes into account the impacts of fishing on target, non-target, other dependent species, threatened and endangered species, and the ecosystems and habitats in which those species occur. EBFM is a generally accepted management framework and should not be considered an 'additional' element to address 'non-commercial' or conservation concerns. In fact, the sustainable management of fisheries is intended to protect the environment for the sake of the community that owns it, and to ensure that fisheries remain viable and productive, which depends in turn on environmental health. Any consideration of the costs of EBFM must be balanced against the significant value that EBFM delivers, not least in terms of the long-term productivity of fish stocks for harvest by present and future generations.

The capacity of any ecosystem to deliver long-term positive economic and social outcomes depends first and foremost on its ecological integrity. While it may be politically or financially expedient to compromise ecological integrity for the sake of economic and social gains (or cutting red tape) in the short term, such benefits will not be sustainable over the longer term. In order to protect marine resources and the communities that depend on them, EBFM objectives should be a cornerstone of all fisheries legislation. Moreover, because of the fundamental importance of ecological integrity to economic productivity, we believe that ecological objectives should be paramount. It is inappropriate for political, social or economic considerations to outweigh ecological requirements.

In pursuit of achieving Ecologically Sustainable Development (ESD) there are a range of objectives considered of importance, and these include environmental, economic and social. It is our strong view that the environmental objective must be prioritised over the other objectives in the HSP and for that matter for the AFMA Commissions decision making. This view is supported by the statement in the latest Commonwealth statement on Fisheries Policy (DAFF, 2003) that reads "...some objectives may be given an additional emphasis, if such a focus will ensure the long-term ecological sustainability of Commonwealth fisheries resources". Net economic returns can only be maximised in the long term by ensuring that all fisheries resources are managed sustainably.

Based on this, it is inconsistent with Commonwealth Fisheries Policy for the HSP to support an approach that allows some species to be managed at a level less than B_{MSY} on the basis that this is necessary to maximise the

net economic returns of the fishery as a whole. Further, the Ministerial Direction of 2005 clearly specified that fisheries management was to "cease overfishing and recover overfished stocks to levels that will ensure long term sustainability and productivity; and avoid further species from becoming overfished in the short and long term". This Direction applies to all species/stocks, not just those that deliver the greatest net economic return. The current draft HSP in relation to multi-species fisheries is inconsistent with this Direction. The HSP should be amended to remove the provision that allows for some species in multi-species fisheries to be maintained below B_{MSY} under the pretext of maximising net economic returns (Section 2 para 3).

Intent

Para 1 of Section 2 specifies "...implementation of harvest strategies that maintain commercial fish stocks at sustainable levels...". The use of 'commercial' fish stocks here is inconsistent with the 2005 Ministerial direction which at the objective level refers to 'commonwealth fisheries' not just 'commercial fish stocks'. This phrase in the HSP should be amended to 'fish stocks affected by commercial fisheries', which then brings in target, byproduct, discarded and bycatch species.

We believe there is a typo in para 1 of Section 2, line 3 where it should refer to maximising net economic returns, rather than just economic returns. Likewise, line 2 of para 2 refers to "maximum net economic returns". This should be "maximised".

Achieving the objective

To achieve the objective, the Policy states in Section 2 para 2 that there are 4 key ways it will do this. The first bullet, "*maintain key commercial fish stocks, on average, at a target biomass equal to the stock size required to produce maximum economic yield*" is a weakening from the previous Policy which required this for ALL 'commercial fish stocks' (see p4 of original Policy).

There is no basis in legislation or Policy to allow what the HSP defines as a 'secondary commercial' species to be managed at the lower level of BMSY; nor for 'byproduct' species to not be managed to a target. The *Fisheries Management Act 1991* requires, among other things, that "the exploitation of fisheries resources and the carrying on of any related activities are conducted in a manner consistent with the principles of ecologically sustainable development (which include the exercise of the precautionary principle), in particular the need to have regard to the impact of fishing activities on non-target species and the long term sustainability of the marine environment".

While we believe managing all species to BMEY should be the intent of the policy so as to be consistent with legislation, we do acknowledge the challenges of managing all species to BMEY and to that end we accept that two tiers of targets may be appropriate. However, the allowance that a category of species, defined as 'byproduct', would not be managed to a target is not appropriate and not supported.

We recommend the solution of:

- Establishing two categories of harvested species (primary and secondary) based on harvest, commercial value, ecological importance and biological vulnerability see Section 3.1 below
- Managing primary species to BMEY
- Aiming to manage secondary species to BMEY, in accordance with the legislation, noting that BMSY could be a necessary and reasonable concession. However, clear rationale must be provided where management to BMSY is required including justification that this will deliver sustainable management in a multi-species fisheries

Trading off one species over another within the primary species category should not be allowed.

Also, for species of low risk (based on biological vulnerability, ecological function and harvest levels) we support the use of appropriate proxies, i.e. not requiring advanced quantitative work. However, there must be

clear justification of why some species are managed to a lower measure, and for the proxies used, tied to the outcomes of the ERA. This should be provided for in the guidelines.

The Policy must also be more specific for all species about how 'on average' is defined. For highly variable fish stocks this need is even more important. It is possible and appropriate that the relevant period over which the average is determined varies between species. The HSP guidelines should define what 'on average' means and specify the factors to be taken into account when establishing the relevant period for highly variable species.

The second bullet refers to "maintain all commercial fish stocks, including byproduct, above a biomass limit where the risk to the stock is regarded as unacceptable (B_{LIM}), at least 90 per cent of the time." For highly variable species that may naturally (i.e. in the absence of fishing) breach B_{LIM} , the harvest strategy for these species must be consistent with the intent of the Policy. Stocks that fall below B_{LIM} due to natural variability must still be subject to the recovery measures as stipulated in the HSP. To not appropriately and carefully manage harvest at these low levels would create serious risk of overfishing regardless of whether the initial decline was due to natural variation or otherwise. It is important that this statement is included in the HSP to provide clarification.

The final bullet refers to "ensure that the exploitation of fisheries resources and related activities are conducted in a manner consistent with the principles of ecologically sustainable development." It is unclear to us what 'related activities' are and we would suggest that this be clarified in the guidelines.

We believe an additional objective should be added that captures the intention to avoid discarding and minimise discards to as close to zero as possible for all species managed under the Policy. Unless the HSP adopts, as an objective, the minimisation of discards to as close to zero as possible for all the species managed under that Policy, even if estimates of discards are incorporated into stock assessment processes, this approach will devalue one of the central current objectives of the Bycatch Policy i.e. avoidance of bycatch. From the perspective of building industry and community confidence (i.e. social license), this should also be a 'business as usual' position for the industry to reduce wastage, and improve fishing efficiencies.

Paragraph 4 of Section 2 notes that maximising the net economic return from a fishery to the Australian community may not always equate with maximising the profitability of a commercial fishery. We support this statement however would suggest that societal acceptance and awareness of fisheries impacts are changing and this needs to be taken account of e.g. Geelong Star and small pelagic fish stocks. Therefore, the examples provided with respect to sharing resources should also include ecosystem needs, including risks to TEP species.

Paragraph 5 of Section 2 states that *"harvest strategies will ensure fishing is conducted in a manner that does not lead to overfishing."* We suggest that "will" be replaced with "aim for" given the uncertainties around data for many species, particularly secondary and considering that some species have become overfished since the instigation of the last HSP. It is flawed to expect that any harvest strategy will absolutely ensure that fishing is conducted in a manner that does not lead to overfishing, but imperative that all are drafted to 'aim for' that target. In addition, clarity is required where it is identified that a stock is overfished. The Policy must stipulate that at that point targeted fishing must stop, with the guidelines providing further detail on how that should occur and what the action will be taken to recover overfished stocks to levels that will ensure long term sustainability and productivity.

Paragraph 6 of Section 2 states that "Harvest strategies will also ensure that for those stocks that are overfished, the fishery must be managed such that, with regard to fishing impacts, there is a high degree of probability the stock(s) will recover. For a stock that is assessed to be below the biomass limit reference point (i.e. overfished), a stock rebuilding strategy will be developed to rebuild the stock to the limit biomass level." There are two major deficiencies in these proposed policy settings, both of which represent inconsistencies with the precautionary approach and which are a significant weakening from the original HSP.

- Firstly, 'overfished' means below B_{Lim} at which point targeted fishing should simply stop NOT"be managed such that there is a high degree of probability that stocks will recover".
- Secondly, the statement that the rebuilding strategy will build the stock to B_{Lim} is totally insufficient the target of the rebuilding strategy must be to rebuild to the B_{Targ}. The policy should not allow a fish
 stock to ever be fished down to B_{Lim}, but rather the policy should drive harvest strategies that produce
 management decisions aimed at B_{Targ}. It is important stocks are managed with sufficient precaution
 to ensure this action does happen and that effective consideration to cumulative impacts of all
 fisheries on that stock are provided. There are a number of examples where cumulative impacts are
 not adequately managed for and recovery has not been satisfactory (school shark, eastern gemfish).
 This proposed approach in the HSP assumes that recovery will happen. We would question this
 assumption as it is not necessarily the case, however it reinforces the need for precaution.

Related to these points, we do not support the use of 'bycatch TACs' in rebuilding strategies without strong justification, strong supporting input controls (like is in place for school shark) and effective monitoring and compliance as without these additional aspects they have been a major barrier to rebuilding of overfished stocks to date.

Under the EPBC Act a fishery must be conducted in a manner that avoids mortality of, or injuries to, endangered, threatened or protected species and avoids or minimises impacts on threatened ecological communities. The wording in paragraph 7 *"to avoid fish species being listed as a threatened species…"* is weak and we suggest it be strengthened to ensure fishing activities do not pose a risk of unsustainable or unacceptable impacts on the marine ecosystem. The objective should be to avoid fishing pressure contributing to a species' deteriorating conservation status such that it would qualify for listing as a threatened species. The listing itself should be considered justified and necessary protection when a species qualifies for it and it is not responsible fisheries management to infer otherwise.

APPLYING THE HSP (SECTION 3)

Species Categorisation (Section 3.1)

The failure of the previous Policy arrangement to address sustainability of byproduct species was a serious flaw. We acknowledge that byproduct species have now been included, however we stress that the legislation makes no distinction between the sustainable management of target and byproduct species.

Having the categorisation based on some notion of level of harvest as the basis for most of the management is flawed. The level of management should be based on the factors of risk related to the biology of the species, ecological role and the proportion of the stock that is harvested. A species that is not caught often and therefore classed as byproduct under the draft Policy may have extremely vulnerable life history traits meaning that it should be managed at a higher level. Also regarding the harvest level, a species that is caught in high numbers may actually be part of a highly fecund large population, so the high harvest may not pose as significant a risk. Conversely a species may be caught in low numbers and from a small population (notwithstanding that population size is not the only consideration in judging risk). Under the proposed HSP these more vulnerable secondary species could have no target level offered to them and presumably no monitoring and/or other management. This is inconsistent with the Ministerial statement of 2005 which requires AFMA to *"avoid further species' from becoming overfished in the short and long term."*

To simplify management, we believe that rather than having a third category of byproduct species, there should be only two categories – primary and secondary species, and we suggest the Marine Stewardship Council approach for distinguishing between the two¹. A byproduct species may be secondary one trip, but

Refer Section GSA 3.1 of the MSC Fisheries Standard and Guidance 2.0 at https://www.msc.org/documents/scheme-documents/fisheries-certification-scheme-documents/fisheries-certification-requirements-version-2.0

primary on the next if higher value species are not landed, hence the guidelines must provide sufficient guidance about the timeframe of data over which the categorisations are made.

Paragraph 2 states that "The categorisation of each species (or group of species) in a fishery, along with the justification for that categorisation will be documented and made publicly available. Justification for any grouping of stocks or species will also form part of that documentation." It is unclear who the decision maker is that determines the justification. Is it AFMA via MAC and RAG processes? Further information should be provided in the guidelines to address this.

Paragraph 3 discusses the factors that would cause a fish stock to transition between the suggested categories in the draft HSP *"Factors such as consumer demand, changing cost structures, changes in regulation or changes in technology may require the transition of stocks in a fishery (based on definitions provided below) between categories."* While it is understood how these factors impact on the economic performance of a fishery, it is unclear to us how these change the environmental decisions made around a species. A species can be overfished whether it is in demand or not and management should react appropriately. Therefore, environmental factors, such as climatic variables, changes to sea temperatures and food availability and predator/prey relationships should also be included here in the Policy and further clarification provided in the guidelines. We suggest also that 'require' be changed to 'result in' in thatsentence.

We make the following comments in relation to the definitions of categories provided in Section 3.1.1, 3.1.2 and 3.1.3, not disregarding our comments above that we believe the categorisation as it stands is flawed:

- These definitions are loose and there is no link to the Environmental Risk Assessment process to define
 how species transition between categories. Phrases like 'almost always retained and landed', 'some',
 'minor', 'usually', 'often', 'rarely', 'occasionally' and 'significant contribution' are subjective and require
 defining. Again, we suggest the MSC standard should be referred to as a good approach to distinguishing
 between major and minor species.
- It is unclear why 'value' rather than 'volume' of the catch is being used to determine categories. This is
 not precautionary as it sets it up for species of low value to be afforded low management, even if the
 volumes of catch are higher, thereby creating the high risk. From a risk and vulnerability perspective, this
 is not appropriate. It appears that the economic objectives are being prioritised over the more important
 and underlying basis of the fishery environmental objectives.
- It is unclear in Section 3.1.1 what "Key commercial species also include those that have recently made a significant contribution to the value of the fishery" means. Does it mean if it was significant one or two years ago but is not this year it will still be considered a key commercial species 'for a while'? If that is generally the intent, there needs to be clear metrics and guidance to determine how this is applied.

Please refer to our marked up comments in the document relating to *Table 1 Species categorisation – Policy and management settings* in Annex A.

Accounting for all sources of fishing mortality (Section 3.2)

Section 3.2 refers to accounting for all known sources of fishing mortality. We support the inclusion of recreational and Indigenous fishing, and fishing under the management of another jurisdiction. This statement however MUST to be expanded to include reference to mortalities arising from discards and cryptic mortality from interactions with the vessel or gears, as these are also both known sources of fishing mortality. In addition, the HSP should be accounting for ALL forms of mortality – not just fishing – including natural mortality. Definitions also need to be provided for each type of mortality in the glossary.

Establishing and applying decision rules (Section 3.3)

Section 3.3 refers to establishing and applying decision rules that are necessary to achieve the ecological and economic management objectives for the fishery. Decision rules need to link beyond a fishery back to the HSP.

The sentence "Harvest strategies developed under this policy will specify any required management actions or considerations in a fishery for a species, at the stock or management unit level, necessary to achieve the ecological and economic management objectives for the fishery" should be amended to say "consistent with the objectives of the HSP" as the HSP is the guiding objective.

Balancing risk, cost and catch (Section 3.4)

There should be reference here to the *Fisheries Management Act 1991* and the *Environment Protection and Biodiversity Conservation Act 1999* and the requirement to be "precautionary", including any decisions needing to be taken into account. As a Policy, it needs to be guided by the requirements specified by Acts.

There is inconsistency within the HSP here that creates confusion. Under Section 2 the objective is to ensure stocks are at B_{Targ} and above B_{Lim} 90% of the time. Whereas here it states that "fishing mortality should always be constrained to levels at which scientific assessment indicates the species is not exposed to an 'unacceptable ecological risk' (that is the risk that stocks will fall below the limit reference point)".

Paragraph 3 states "The management decision to be taken in this context is whether investment of more resources in data collection and analyses and/or additional management will increase the understanding of the risk to a species or stock from fishing and provide confidence in the sustainability of a higher level of fishing pressure or catch". We believe paragraph 3 is pitched in the wrong way, putting the onus on and assuming the environment will be easy to monitor. The question should be: is there sufficient information to provide certainty that a given quota/effort is sustainable within the objectives of the HSP i.e. catch that is average around B_{Targ} and above B_{Lim} 90% of the time? If not, the fishery catch should be reduced. If there is not certainty, catch should be reduced acknowledging the uncertainty, rather than the reverse.

Reference points and proxies (Section 3.5)

Without the guidelines, it is very difficult to interpret this section.

Paragraph 1 line 2 states that the reference point should reflect acceptable levels of biological impact on a stock and the desired economic outcomes from a fishery. We suggest that this should be extended to include the ecological importance of a species e.g. top predator vs. lower trophic levels as well as biological vulnerability and the level of exploitation. Line 4 of that paragraph requires clarity as the current wording creates a different intent to that which is needed. We suggest rewording to *"be based on biological/ecological factors with other factors (more of a list of examples here would be good) a consideration."*

In principle, we do not oppose the use of a proxy for B_{MEY} that is less than B_{48} where the estimate of MSY is estimated to be less than B_{40} . However, we believe that the Policy should be strengthened to clarify the level of confidence required in that estimate of MSY. This will ensure that inappropriate and unfounded risks are not taken. Given the level of uncertainty in many estimates we anticipate that few would meet the level of confidence required. Even where the required level of confidence is met, we believe that fine scale adjustments (for example, within 5 percentage points of 40%) would be difficult to justify.

The Policy should also clarify what "on average" means (Section 2, first bullet) in relation to the B_{MEY} target. This clarification should ensure that year to year variations in costs and prices are smoothed over time. Fishery objectives as stated in harvest strategies should then be revised to reflect the definition of 'on average' in the HSP. It will be very difficult to prescribe what constitutes a 'major change' that warrants a review of the MEY target. To that end, we believe that fisheries, via the relevant Management Advisory Committee (MAC)/Resource Assessment Group (RAG), are best placed to assess when a change in the operating environment of the fishery is sufficient to warrant investment in re-estimation of MEY.

Paragraph 3 states that "It is important to ensure that the development of harvest strategies and reference points is practical and realistic in respect of the scale or nature of the fishery and the resources available to manage it. The cost of developing and implementing a harvest strategy should be considered against the likely value of the fishery." The Policy must approach this from the perspective it was intended – to ensure sustainability of our fish stocks. Hence the wording of paragraph 3 is inappropriate to state *"the cost of developing and implementing a harvest strategy should be considered against the likely value of the fishery"*. It should read, *"The necessity of developing a harvest strategy should be the risk to the stock based on level of exploitation combined with biological vulnerability and ecological significance"*. Should this point to the need for a harvest strategy which is costly compared to the value of the fishery, consideration should be given to whether the fishery is economically viable to persist (if it cannot support appropriate management cost) or whether it should persist at a lower level of effort/harvest to ensure that risk profiles are reduced to a point where a formal harvest strategy may not be necessary.

Paragraph 5 states "In cases where information to identify a reference point is not available, and an alternative proxy reference point is proposed based on more general information that is not consistent with the level indicated above, the reasons for this must be based on reliable information, documented and made publicly available.' This should apply only in exceptional circumstances and be further articulated in the guidelines. Any alternative proxy reference points not consistent with the level indicated above should require stakeholder consultation. Paragraph 6 goes on to require a justification to be developed, supported by technical evaluation. Further clarity is required in the guidelines in relation to the requirements and process for this. We would expect this to be specific, expert based and independently reviewed. Further, if the Policy provides AFMA with latitude on the adoption of alternative reference points, the Policy should also prescribe a process whereby such alternatives are clearly and publicly justified against the objective of the Policy.

The final paragraph of Section 3.5 requires clarification to remove inconsistencies and ambiguity. The first sentence states that the HSP does not cover this situation but then the second sentence seems to imply that it could. In addition, and of most importance, this paragraph does not align with a precautionary approach – it is unclear to us under what circumstances would fishing to below 0.2 be acceptable? In fact, there arecases where adopting a limit reference point of >0.2 would be justified as well e.g. some sharks. We do not support a B_{Lim} below 0.2 without some tangible examples of species where this would be appropriate with proven application that has demonstrated sustainable outcomes. We suggest that this paragraph be reworded. Line 2 refers to "should generally be used" and we would expect guidance to be provided on this in the guidelines.

Please refer to Annex A for our marked up comments on Table 2 Proxy reference points

Discarding (Section 3.6)

We suggest that this section be expanded to be more prescriptive as well as provide further details in the guidelines. For example, the Policy must explicitly require monitoring and recording of all discards as a priority and to be made publically available, with the guidelines specifying minimum recording and reporting requirements. The Policy should also identify the scope and outline how minimising discards will actively be implemented, noting that species groupings may be necessary for example.

With respect to how the Policy (HSP or Bycatch/discard) should actively seek to manage discards of commercial species the following principles should apply:

- Discarding of dead or live specimens of quota species and species subject to rebuilding plans should be prohibited E-monitoring may be required to enforce this;
- Discards of other commercial species should be subject to recording of discards by species, estimated weight/number and condition (life status) and e-monitoring; and
- Management measures to reduce interactions with species/specimens likely to be discarded should be introduced e.g. closed areas where there are high levels of interactions with under/oversize species etc, individual accountability etc.

We note that bans on discarding of commercial species are already in place in a number of fisheries around the world. We believe that the HSP should consider experience with discard bans elsewhere in order to inform consideration of this approach in Commonwealth fisheries.

Spatial and temporal management (Section 3.7)

We assume that further information will be provided in the guidelines with respect to this. We do not believe however, that there is a need for the guidelines to specifically address closed areas and spatial management approaches. These are management measures that will be relevant to the management of specific species. As a result, we believe that their use is best considered in the context of the fisheries involved rather than through generic guidelines. In our view, there is no additional reason why these measures would be considered specifically in the HSP than would measures such as TACs or gear controls. Within the settings of the HSP and other government policies, we believe that it should be up to the fishery to decide how best to achieve the objectives of the HSP.

However, we note that some of the species for which these measures are most likely to apply also demonstrate significant inter-annual variability in abundance. Specific issues about the application of the HSP to such species have been raised previously (in our submission in 2012). It may be necessary to provide guidance on how spatial management techniques can be used to deliver the objectives sought by the Policy.

We note that paragraph 2 refers only to the impact of any relevant Commonwealth or state marine reserves. This should be extended to also include any fisheries related closures introduced for a specific fishery, for example in relation to Australian sea lions, dolphins or gulper shark closures.

Technical evaluation of harvest strategies (Section 3.8)

Paragraph one states "Harvest strategies should be formally tested to demonstrate that they are highly likely to meet the objective and key principles of this policy. Outcomes of that testing should be made publicly available." This should be reworded from harvest strategies "should be tested" to "will be tested" as a matter of importance to demonstrate that they are highly likely to meet the objective and key principles of this Policy.

Jointly managed fisheries (Section 3.9 and Section 3.10)

We have underlying concerns about the approach adopted in the HSP with respect to jointly managed fisheries – both domestic and international.

Section 1.2 Scope paragraph 1 notes "Where overlap between domestic jurisdictional management exists (e.g. fisheries that are managed jointly by the Commonwealth and other Australian jurisdictions) the Commonwealth will seek to apply and encourage the adoption of this Policy in negotiating and implementing joint or cooperative management arrangements." A more definitive statement in the Policy that efforts will be made as a priority in joint management arrangements is required. If we work under the assumption Commonwealth policies are more robust than most of the States and the Territory, Section 3.9 requires stronger wording and the guidelines should provide an outline of what this would look like. In addition, clarity is required for what is meant by ...revisiting Offshore Constitutional Settlement agreements and Commonwealth fisheries legislation... Is AFMA considering undertaking a review of these arrangements? The intent is not clear here.

For international fisheries, the draft HSP states in Section 1.2 Scope "In the case of fisheries that are managed jointly by an international organisation or arrangement, the Harvest Strategy Policy does not prescribe management arrangements. However, it does articulate the government's preferred approach." It goes on further in Section 3.10 to say however "The government (including the Australian Fisheries Management Authority) must implement decisions taken by all relevant regional fisheries management organisations and other international arrangements that Australia is a party to, except where Australia has made a permissible reservation in relation to the decision. Through these forums, Australia will continue to pursue the adoption of measures that are consistent with this Policy and domestic management measures in order to achieve the long term sustainability of the stocks," and that "The Australian Fisheries Management Authority must determine a domestic catch level that is the same or less than that permitted under the relevant international arrangement.

The Australian Fisheries Management Authority may also impose additional constraints on fishing effort and/or biomass based recommendations or rebuilding targets."

Our interpretation of these sentences is if management action adopted at an international agreement is weaker than HSP then AFMA is not required to adopt stronger domestic measures to be HSP equivalent, but is certainly within its sovereign right to do so. We do not believe, just because an international agreement is in place, that Australia should be able to manage at a lesser requirement than the HSP. The HSP should "prescribe management arrangements" to guide Australia's implementation of any internationally agreed fisheries management measures and Australia should adopt stronger domestic measures, where those are needed to be compliant across the HSP. In addition, the position needs to be strengthened in the HSP Policy so that it clearly states that Australia will argue for *'the adoption of HSP equivalent fishing constraints'* in its negotiating in international agreements, rather than just be 'consistent with'.

In relation to Australia implementing internationally agreed measures the policy states "...except where Australia has made a permissible reservation in relation to the decision." Obviously, it is the sovereign right of Australia to take out a reservation within agreements that allow for them. The only such case we are familiar with is the recent reservations Australia took regarding CMS listed shark species. We believe the HSP should guide under what circumstances Australia can consider undertaking reservations. We believe in the example of the CMS reservations, this was not an action that would be consistent with the HSP and has left those species in a situation where Australia is implementing management at a much lower level than would have been obliged on Australia through its domestic legislation and lower than generally provided by the HSP. We consider the HSP should guide decisions that avoid undertaking reservations in international agreements if it is not consistent with HSP.

The Policy states "Where Australia is not a major harvester of the stock and no harvest strategy has been determined internationally, the key consideration will be Australia's negotiating position in bilateral, regional or international negotiations. If Australia is a major harvester of the stock, the Australian Fisheries Management Authority must develop and implement a harvest strategy consistent with the objectives of this Policy." The policy does not include a definition as to what constitutes Australia being a 'major harvester' of a stock. We consider that the determination of Australia prescribing management arrangements consistent with the HSP should not be determined by an arbitrary amount of catch, but should be guided by the HSP and be based on risk and vulnerability through the ERA process. Therefore the reference to being a major harvester should be removed and amended to "Where no harvest strategy has been determined internationally the Australian Fisheries Management Authority must develop and implement a harvest strategy consistent with the objectives of this Policy."

Regarding international agreements and bodies relevant to fisheries management, Australia is a member of organisations which do not specify management measures, but do provide guidance on what the activities responsible Flag, Port and Market States should undertake to be consistent with overarching international agreements such as Law of Sea etc. The HSP should look to some of this guidance, such as the FAO guidelines on responsible fisheries trade, which reinforce the need to be trading in sustainable and legal fish products and the requirements around traceability and other trade related measures to deliver sustainability. The HSP should specify the need to consider guidelines such as the FAO guidelines. In addition, the HSP international section should specifically give reference to MEAs such as CITES and CMS. These agreements both directly and indirectly support fisheries management. The HSP should give guidance to Australia's position to both implementing the requirements of these agreements, but should also provide advice on the position Australia should take in discussions with CMS and CITES to progress at an international level, fisheries management which is equivalent to that prescribed in the HSP. This would include advice around the attention to species of concern that are not internationally managed at equivalent HSP levels.

Traceability has been overlooked in the HSP with regards to shared stocks and otherwise. The most recent UN General Assembly call for action is directly relevant here *"Accelerate further work and strengthen corporation"*

on and coordination on the development of inter-operable catch documentation schemes and traceability of fish products". The finalisation of the HSP should thoroughly consider the role the HSP has in relation to traceability, particularly from the standpoint expectation that the HSP needs to provide confidence to the Australian public. It is especially noteworthy that this desired confidence will only come when consumers are able to have clear transparency on the fish they are eating. This transparency can only come from traceability systems which currently, are largely not operating in the Australian seafood market.

We are also concerned that there is no transparency around or information available to demonstrate whether Australia's involvement in management of 'international fisheries' has been in accordance with the approach outlined in the HSP. The following questions need to be answered to assess whether the HSP has been implemented as required and whether the approach is effective.

- In what ways has Australia advocated for adoption of management settings consistent with the HSP in each of the regional fishery bodies of which Australia is a member?
- How do the management settings for each key commercial species fished by Australia and managed by these bodies, compare to those of the HSP?
- Have the rebuilding plans adopted by these regional bodies been effective for those species depleted at the time of the introduction of the HSP?
- Have any species managed by these bodies become depleted since the introduction of the HSP?
- Have rebuilding strategies been adopted for these species and if so, are they consistent with the settings in the HSP?

In relation to the draft text of Section 3.10 of the HSP the following ambiguities should be addressed:

- The HSP talks in terms of "fisheries that are managed jointly by an international organisation or arrangement" in Section 3.10 whereas the HSP relates to species or stocks of species. It then refers to "In the case of highly migratory/straddling stocks" in the following paragraph. The HSP needs to be consistent with the language used and specific about the species/stocks to which this section applies.
- The Policy states "Australia will continue to pursue the adoption of measures that are consistent with this Policy." While it is acknowledged that Australia cannot guarantee that international bodies of which it is a member will adopt settings consistent with the HSP, it is critical that the Policy requires that the HSP settings are the starting point for Australia's negotiations in those fora. It is also important that it states that it will attempt to have the HSP Policy settings adopted.

In addition, the 2003 Policy statement on Commonwealth Fisheries (Department of Agriculture, Fisheries and Forestry – Australia (DAFF), 2003) committed to the development of a *"whole-of-government strategy with clearly identified goals and objectives, to better coordinate future engagement in regional and international fisheries forums."* The development of such a strategy, in consultation with stakeholders would provide a much improved level of confidence as a basis for Australia's participation in regional fishery management organisations (RFMOs).

Rebuilding overfished stocks (Section 3.11)

Paragraph 1 states *"If a stock that is managed solely by the Australian Fisheries Management Authority is identified as overfished, immediate action is required to cease overfishing and rebuild overfished stocks to levels that will ensure long term sustainability and productivity, while avoiding further stocks becoming overfished. For overfished stocks, the Australian Fisheries Management Authority must develop a rebuilding strategy to rebuild the stock to above its limit reference point, for agreement by relevant ministers." The changes proposed with respect to rebuilding overfished stocks outlined in paragraph 1 are a significant weakening from the previous Policy which committed to rebuild overfished stocks to B_{Targ} not B_{Lim}. It is unacceptable to allow a species that has been so poorly managed that its below B_{Lim} to recover to the point*

just beyond an unacceptable impact and then have it subject to the same processes that allowed it to fall below B_{Lim} in the first place. The requirement that a stock will be actively managed under a rebuilding strategy back to B_{Targ} if it is overfished is an important de-incentive to overfish and must remain.

While we remain committed to the outcome that overfished stocks must be rebuilt to B_{Targ} , it is also appropriate to point out the inadequacies of Sentence 3 in paragraph 1 which states that *"A rebuilding strategy will be required until the stock is above the limit reference point with a reasonable level of certainty."* Firstly, clarity would be required as to what 'a reasonable level of certainty' means. More importantly a 'reasonable' level of certainty that the stock is above B_{Lim} would be a thoroughly irresponsible point at which to abandon rebuilding. If rebuilding did occur only to the point of B_{Lim} , the onus should be at least to reach that point with a HIGH level of certainty, for example, 80% or above. Clarity is also required in the last sentence of paragraph 1 as to what "adequate" monitoring and data refers to. Again, we stress that we have the strongest level of opposition to the proposition that overfished stocks are abandoned from rebuilding strategies at B_{Lim} .

Paragraph 2 states that *"Incidental mortality on overfished stocks should be constrained as much as possible to levels that allow rebuilding to the limit reference point within the specified timeframe."* This sentence provides much ambiguity and requires tightening. The Policy should require that incidental mortality must be contained to below that which will impact on the recovery within the timeframes established. Then it is up to the industry and fishery managers to work out how to do that. If they are not able to control the level of incidental mortality to the defined level while still fishing in the relevant area, the fishing activity should cease. See our comments below also regarding bycatch TACs.

Paragraph 3 states "Once a stock has been rebuilt to above the limit reference point with a reasonable level of certainty, it may be appropriate to recommence targeted fishing in line with its harvest strategy, noting that the usual harvest strategy requirements regarding the risk of breaching the limit reference point will apply. If an overfished stock was previously considered to be a key commercial or secondary commercial stock, consideration should be given to whether it should be rebuilt to target levels designated for these stocks." We do not support this statement. Regardless of what 'category' a stock is in it should always remain under the rebuilding strategy and be rebuilt to B_{Targ}. No consideration is necessary.

We suggest further clarity is required in paragraph 4, in relating to *"Rebuilding strategies should note where sources of mortality exist that cannot be managed or constrained by the Commonwealth, and must take this mortality into account. Where practical and appropriate, the Commonwealth will work with other jurisdictions to ensure other sources of mortality from fishing are reasonably constrained consistent with any catch sharing agreement." For example, does "sources of mortality include non-fishing mortality? It should. It is also unclear what "other sources of mortality from fishing are reasonably constrained" in the last sentence means.*

Paragraph 6 should be expanded to require the Policy to direct that if rebuilding is not occurring in accordance with the agreed timeframes, stronger and additional management measures be introduced. It is important that the review encourages strengthened management rather than an extension of the timeframes as has been the case with respect to school sharks. This is to ensure weak management is identified and corrected to provide for sufficient reduction in fishing pressure to allow the stock to recover. Paragraph 6 should also require that the rebuilding strategy must be developed in consultation with stakeholder groups and be subject to independent peer review. Likewise, in the second sentence, for any review of the rebuilding strategy the Policy should require that it be undertaken in consultation with stakeholder and experts.

We strongly oppose the use of incidental catch/bycatch TACs for stocks subject to rebuilding strategies without strong peer reviewed justification, appropriate supporting input controls and effective monitoring and compliance (at least quarterly reviews) around those, such as occurs with the 20% rule in place for school sharks that helps to identify targeting. Rebuilding strategies for overfished stocks of school shark and eastern gemfish, both of which are listed as Conservation Dependent under the EPBC Act, have failed to deliver strong

signs of stock recovery (without the use of additional input controls and noting that the close kin study is underway for school sharks). Discards of catch over and above the TAC continue for eastern gemfish as does targeting of this species in some cases. While it is the intention that these species should not be targeted, any level of TAC provides some incentive for targeting, if not appropriately managed. AFMA acknowledges that some targeting of these stocks continues despite the introduction of 'bycatch" TACs. AFMA has relied heavily on these bycatch TACs to manage overfished stocks. This strategy has failed in many cases. The HSP must be more prescriptive about appropriate rebuilding strategies that reflect the failure of current management approaches. AFMA has shown for school shark that it can take compliance action against suspected cases of non-compliance with the '20% rule' and we would encourage this approach be adopted in the HSP for all companion species stocks that are under a rebuilding strategy. However, even if with the introduction of additional management measures there are no signs of rebuilding, then stronger management measures should be required under the HSP to ensure rebuilding strategies are achieved, ie, effectively by stopping fishing or reducing the quota of companion species to allow for rebuilding of the overfished stock.

Relationship between the Harvest Strategy Policy and the Environment Protection and Biodiversity Conservation Act 1999 (Section 3.13)

The rationale for the inclusion of this section in the HSP, and the contribution it makes to the pursuit of the HSP's objective, are unclear. We remain unconvinced that, since the listing processes are specific to the EPBC Act and the HSP pursues the objectives of the *Fisheries Management Act 1991*, there is any need to link the two. Listings under the EPBC Act are governed by that Act and the criteria/guidelines for listing. Those guidelines make no reference to B_{Lim} or any other HSP setting. Under these circumstances we see little value in attempting to link the two processes. In particular, we would not wish to see the HSP pursue an approach that implied that a species should not be listed if it is above B_{Lim} .

The intent of the section, and its role in the HSP should be reconsidered. If, following that consideration, the section is retained in the Policy, then the current text requires clarification.

In paragraph 1, examples should be provided for those commercial species currently listed as conservation dependent such as school shark, eastern gemfish etc. We suggest the second sentence be amended as follows: "Additionally, native species including, commercially harvested marine fish species such as school shark and eastern gemfish can be listed as threatened species, including in the conservation dependent category, which may have implications for the fishing activities of these species."

In paragraph 2, the Policy should not presume any particular outcome of the EPBC assessment processes. This paragraph should say *"It is expected that harvest strategies created in accordance with the Policy will be expected to be submitted in the applications for assessment under the Guidelines for the Ecologically Sustainable Management of Fisheries."* Where conditions are applied because a fishery has not met the guidelines, it should be interpreted that the fishery is not yet sustainable and this should trigger a review against the HSP and Bycatch Policy to ensure they meet this requirement in a two-year timeframe or not meet conditions. It is acknowledged that the EPBC guidelines pre-date HSP, and therefore there is a need to review the HSP guidelines against EPBC guidelines to ensure consistency.

It is unclear what the last sentence means in paragraph 3 "This includes that variations in the extent of acceptable decline depend on the biology of the individual species and for commercially harvested marine fish species, declines of up to 60 per cent from pre-fishing biomass levels are considered acceptable under the Harvest Strategy Policy where depletion is a management outcome." Clarity is required as to what role the removal of 60% plays with respect to the wellbeing of the broader ecosystem and impacts on predator/pretty relationships with TEP species.

IMPLEMENTATION AND REVIEW (SECTION 4)

Harvest strategies (Section 4.2)

Further clarity is required in this section to reduce confusion in the following areas:

- Who are the relevant advisory groups and other relevant experts in paragraph 1? How will the consultation take place? What does 'regular' for the review of harvest strategies mean? A maximum period should be specific, for example, 'regularly as necessary but at least every 3 years or more regularly if fishing intensity changes or new knowledge if available'.
- In paragraph 2, which Commonwealth fisheries are not considered to be 'significant' and how is this defined economic value, environmental impact etc?
- In paragraph 3, "infrequently" needs to be defined. It is unclear why the Policy needs to include this sentence. We would suggest deleting this sentence and allowing each review process to determine the extent to which amendments are required.
- In paragraph 4, how often will reviews of harvest strategy settings occur and who will undertake this review? We would expect there be a requirement for annual comprehensive reporting on each HSP based on agreed KPIs, agreed measurements and reporting.

Roles and responsibilities (Section 4.3)

There is no mention made of the role and responsibility of industry in the management of Commonwealth fisheries. With the introduction of individual accountability and the steps taken by some sections of the industry to move to co-management models there is a clear need to include the role and responsibility of industry.

Reporting and Review (Section 4.4)

Further clarity is required to strengthen this section. Without the guidelines it is difficult to comment in detail.

As a part of good governance, the Policy must require annual reporting from the outset against each harvest strategy and the HSP in general. This must be done through the establishment of KPIs set now prior to the endorsement of the HSP with agreed units of measurement and identification of thresholds (e.g. what is good and what is bad). A strategic review of implementation at the 3-year mark is more appropriate.

The lack of monitoring and reporting of implementation of harvest strategies against the specific requirements of the HSP has been a significant failing. We propose that the implementation of the HSP be overseen by a small group charged with developing a framework for assessing the consistency of harvest strategies and their operation with the requirements of the HSP (see for example the questions identified below). The outcomes of this assessment, together with a summary should be reported in ABARES' annual status reports of Commonwealth fisheries. We believe that the outcomes of the HSP, reflected in the status of stocks should continue to be assessed through those status reports. Changes in the status of stocks will, inevitably, be influenced by factors outside the influence of the HSP.

While we acknowledge that it can be difficult to isolate the effects of specific policies and that it is not possible to separate the effects of the various measures taken on any change in fishery conditions since the current Policy's release we do not accept that this means that there are no measures by which an assessment of the implementation of the current HSP can be made. We have previously identified (*NGO Statement of Key Issues, submitted to the Review Advisory Committee, June 2012*) the need to provide information on specific requirements of the HSP, as opposed to overall 'change in fishery conditions', for example:

- 1. To what extent do the strategies in place meet the following specifications of the HSP:
 - a. set out management actions that monitor and assess biological and economic conditions in a given fishery to control the fishing intensity in order to achieve defined biological and economic objectives;
 - b. express management decisions as pre-agreed, unambiguous management responses 'linked directly to the biological and economic status of the fishery relative to reference points';
 - c. manage species 'on a whole stock basis" and take into account mortality resulting from all types of fishing';
 - d. express objectives in the 'form of quantifiable reference points'; and
 - e. manage species to a B_{MEY} target?
- 2. How many harvest strategies relate to 'highly variable species' and by whom has the decision been made as to whether the harvest strategies are consistent with the 'intent of the Policy'?
- 3. Has AFMA determined 'alternative reference points' that it considers 'better pursue the objectives of the Policy'? If so, in relation to which stocks and on what basis was the decision made that these reference points were more appropriate?
- 4. Have there been any situations where 'exceptional circumstances' as envisaged in the guidelines have been invoked? If so where? And who agreed the 'pre-agreed' criteria?
- 5. Have the 'criteria for invoking exceptional circumstances and the response to them' been 'clearly specified and agreed ahead of the need to apply them' in all harvest strategies?
- 6. Have harvest strategies currently in place adequately taken into account 'mortality resulting from all types of fishing, including state managed and recreational fisheries'? Where mortality from these fisheries is unknown, how is mortality accounted for in setting harvest strategy reference points?

We consider that analysis of the implementation of the HSP at this level of detail to be of paramount importance in understanding the existing strengths and weaknesses, and operational challenges that have arisen from the current Policy and guidelines.

GLOSSARY

There are a number of key phrases or terminology used throughout the draft Policy that require definition, for example "net economic returns", "on average", "ecological sustainable development", "precautionary principle", "high degree of probability". In addition, clarification is required in the glossary to remove the subjectivity with the language used, such as 'occasionally', 'rarely', 'significantly', 'often', 'some', 'usually', 'valuable', 'minor'. The term "cryptic mortality" is not used in the HSP, but should be referred to and defined in the Glassary.

The definition for B_{LIM} "Biomass limit reference point: the point beyond which the risk to the stock is regarded as unacceptably high" is normally referenced against recruitment failure – why the difference?

CONCLUDING COMMENTS

The HSP released in 2007 was a major step forward in management of Commonwealth fisheries. Implementation of the Policy has demonstrated some deficiencies in the Policy and highlighted areas where additional clarification and guidance is required. The draft HSP as proposed however significantly weakens the current position. We have identified a number of matters that we feel must be addressed in the revised HSP in order to ensure that it represents a best-practice approach. Further, we note the linkages between the HSP, the draft Commonwealth Fisheries Bycatch Policy and the review of Commonwealth fisheries legislation. We have been actively engaged in each of these three review processes and believe that there are some

overarching issues that need to be considered to inform and ensure consistency between the responses to these three processes:

- 1. The objectives across the bycatch and harvest strategy policies must be complementary and together reflect all of the legislative objectives and in particular the ESD and economic efficiency objective in relation to all species.
- 2. The circumstances under which additional weighting can be given to the ESD objective should be clarified.
- 3. The expectations of the Government and the community in relation to the application of 'ecosystembased management' in Commonwealth fisheries management must be articulated clearly and this guidance provided in a timeframe that allows for its incorporation in the revised HSP and bycatch policies.

REFERENCES

- Department of the Environment and Water Resources (2007). *Guidelines for the Ecologically Sustainable Management of Fisheries*. Available at: <u>http://www.environment.gov.au/coasts/fisheries/publications/guidelines.html</u>
- Department of Agriculture, Fisheries and Forestry Australia (2003). Looking to the future. A Review of Commonwealth Fisheries Policy. AFFA, Canberra.
- Hobday, A. J., E. S. Poloczanska, and R. J. Matear (eds) (2008). *Implications of Climate Change for Australian Fisheries and Aquaculture: a preliminary assessment*. Report to the Department of Climate Change, Canberra, Australia. August 2008.
- Hobday, A. J., Smith, A., Webb, H., Daley, R., Wayte, S., Bulman, C., Dowdney, J., Williams, a., Sporcic, M., Dambacher, J., Fuller, M., Walker, T. (2006). *Ecological Risk Assessments for the Effects of Fishing: Methodology*. Available at:<u>http://www.wcpfc.int/doc/eb-wp-14/ecological-risk-assessment-effects-fishing-methodology</u>
- Parliament of Australia (2012). *Netting the benefits: An Inquiry into the role of science for the future of fisheries and aquaculture.* Canberra.
- Sainsbury, K. (2008). Best Practice Reference Points for Australian Fisheries. Available at: (http://www.afma.gov.au/wp-content/uploads/2010/06/R2001-0999.pdf

Annex A: Comments on Table 1: Species categorisation – policy and management settings and Table 2 Proxy reference points from the draft HSP

	Harvest Strategy Policy (Commercial)			Bycatch Policy (Non-commercial)			
Category	Key commercial	Secondary commercial	Byproduct	Bycatch	Protected		
Definition	A species that is targeted and is usually retained.	A species that is usually retained.	A species that is occasionally retained. May include species that are rare and usually retained through to species that are frequently encountered but rarely retained.	A species that is not usually retained.	A species listed under Part 13 of the EPBC Act (excluding listing as conservation dependent).	1	Comment [A1]: Ecologically its likely that all species are contributing to the overall sustainability of the marine ecosystem from which products are being harvested
	Significant contribution to	Some contribution to the	Minor contribution to the value of	No birect financial contribution to the		1	Comment [A3]: Unless the environmental objective is given preference, ESD is not possible if the economic objective is given the top priority.
	value of the fishery.	value of the fishery.	the fishery.	economic value of the fishery.		····· }	Comment [A2]: This should be net
Policy objective	through the implementation of harvest strategies that both maintain commercial fisheries at ecologically sustainable levels and maximise economic returns to the Australian community			Minimise fishing-related impacts on bycatch species—in a manner consistent with the principles of ecologically sustainable development and with regard to the structure, productivity, function and biological diversity of the ecosystem.		/	Comment [A4]: The latter should be preference over Broay.
	from the use of the resource.			Den an hast an elia anna de la Barra de la anna de la alla de la anna de la anna de la anna de la anna de la a		Y	Comment [A5]: See earlier commen
Target	B _{MEY}	B _{NEY} , or an alternative target to achieve B _{NEY} for the fishery		Draw on best-practice approaches to avoid or minimise bycatch, and minimise the mortality of bycatch that cannot be avoided.	Ensure fishing operations take all reasonable steps to avoid the mortality of, or injury to, protected species recognising that there may be a need to recover populations of species listed in these categories.	11	about legislative basis for managing byproduct species to a lower standard
						£	Comment [A6]: How is risk level defined? How do you do this for byprodu species when there is very limited data?
Limit	Remain above a biomass le	vel where the risk to the stoc	k is regarded as unacceptable at least	Manage fishing-related impacts on	Consistent with the requirements of	1	Comment [A7]: How do you measure this?
reference point	90 per cent of the time.			bycatch species to ensure that populations (i.e. discrete biological stocks) are not depleted below a level where the risk of recruitment failure is	the EPBC Act a limit reference point is not set.		Comment [A8]: What level if risk is suitable for what species? For example, SBT is at 4% of virgin biomass. Is that acceptable?
Discarding	minimise discarding	minimise discarding	minimise discarding	regarded as unacceptably high minimise discarding	<u>0</u> 9		Comment [A9]: How is this measurable 3 years on?
4 9	1		10	40 1		2	Comment [A10]: So does this mean you should retain all Bycatch, which woul mean its always retained and hence the principle is to move from being a Bycatch species to a Secondary Commercial?

Table 2 Proxy reference points

Reference point	Definition	Proxy	
Key commercial and secondary commercial species or stock- target reference point	The biomass level at maximum economic yield (B _{MEY})	0.48 of unfished biomass or 1.2 of biomass at maximum sustainable yield.	
Secondary commercial species in a multispecies fishery where necessary to maximise economic return from the entire fishery- target reference point	Sustainable Yield (B _{MSY}), or an	(0.4)of unfished biomass	
Limit reference point-all stocks	The biomass level where the ecological risk to the population is regarded as unacceptable (at least 90 percent of the time) (B _{LIM})	sustainable yield or 0.2 of the	

Comment [A11]: During the HSP discussions, CSIRO raised the fact about concerns with setting population % as it differs for every species and this can be very large differences. Applying the precautionary principle, it would need to be set at a very low reduction of population in the absence of data.

Comment [A14]: Why not 0.48? Why is greater risk acceptable for secondary species? The proxy should be the same at 0.48.

Comment [A13]: We believe that the policy should be strengthened to clarify the level of confidence required in that estimate of MSY

Comment [A12]: Byproduct species should be included in this and must have a target to which they are managed.