

ATTACHMENT 2.5B

Department of the Environment, Water, Heritage and the Arts (DEWHA) draft conditions and recommendations to the Protected Zone Joint Authority (PZJA) for the Torres Strait Bêche-de-mer Fishery (TSBDMF)

The material submitted by the PZJA demonstrates that the management arrangements for the TSBDMF meet most of the requirements of the Australian Government's *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition* (the Guidelines).

The TSBDMF is a hand collection fishery operating in the Torres Strait Protected Zone (TSPZ) targeting several species of holothurians (approximately 16) also commonly referred to as bêche-de-mer. Although the fishery is low value compared to other Torres Strait fisheries it provides an important source of income to traditional inhabitants. There has been little activity in recent years owing to the prohibition on the most valuable species in the fishery including sandfish (*Holothuria scabra*), black teatfish (*Holothuria whitmaei*) and surf redfish (*Actinopyga mauritiana*). Harvesting of these species within the TSBDMF was prohibited due to marked declines in abundances as a result of fishing activities. Prohibitions on these species remain in force following a recent abundance survey of these and other bêche-de-mer species in 2006.

Management arrangements in the TSBDMF include input and output controls in force under the *Torres Strait Fisheries Act 1984* (TSF Act), *Torres Strait Fisheries Regulations 1985* (TSF Regulations) and managed through Fisheries Management Notices (FMNs) and conditions on licenses. There are an estimated 178 Traditional Inhabitant Boat (TIB) licences with bêche-de-mer endorsements currently issued, in addition to a single Torres Strait Commercial Fishing (TVH) license.

In the TSBDMF, bêche-de-mer is taken by divers working from dinghies less than seven metres in length, by hand or with hand held mechanical devices. The use of hookah or SCUBA equipment is not permitted. There are Total Allowable Catches (TACs) for all target species in the fishery (four species have individual TACs and 12 species have a combined TAC of 80 tonnes) as well as minimum size limits on all high and medium value species and two low value species.

DEWHA considers that the overall management regime aims to ensure that fishing is conducted in a manner that does not lead to overfishing and for fishing operations to be managed to minimise their impact on the structure, productivity, function and biodiversity of the ecosystem.

However, DEWHA has identified a number of risks and uncertainties that must be managed in the TSBDMF to ensure that impacts are minimised in the short-medium term:

- uncertain stock status for many target species in the TSBDMF and the lack of information on biology of key target species;
- compliance risks in the TSBDMF in particular illegal foreign fishing associated with high value commercial species and low domestic compliance coverage; and

- lack of robust data collection in the fishery owing to the voluntary nature of fishery dependant data collection (docket books).

DEWHA is satisfied that the TSBDMF will not be detrimental to the survival or conservation status of the taxa to which it relates in the short-medium term. Similarly, it is not likely to threaten any relevant ecosystem in the short-medium term.

To contain and minimise the risks in the longer term, conditions and recommendations have been made. The immediate key challenges for this fishery are to: complete the harvest strategy for the fishery in conjunction with appropriate research that permits the setting of sustainable TACs; improve compliance measures in the fishery including accurate recording of commercial catch levels; and continued collaborative management with other jurisdictions exploiting similar species and/or joint stocks of bêche-de-mer.

DEWHA considers that until it can be demonstrated that these issues have been adequately dealt with, a three year Wildlife Trade Operation (WTO) declaration is appropriate for the TSBDMF.

DEWHA considers that the operation of the TSBDMF does not, or is not likely to, adversely affect the survival in nature of a listed threatened species or population of that species, the conservation status of a listed migratory species, cetacean or listed marine species or a population of any of those species. DEWHA also considers that under the management regime operators are required to take all reasonable steps to avoid the killing or injuring of protected species¹, and the level of interaction under current fishing operations is low.

Due to an oversight during the drafting of the EPBC Act, the accreditation of fisheries managed under the TSF Act was not provided for in the 2005 assessment of the TSBDMF. The then Department of the Environment and Heritage (DEH) contended that it was not the intention of the Parliament to treat Torres Strait fisheries differently from all other fisheries. Therefore, it was recommended that the then Minister for the Environment and Heritage make a statement so that fishers may be given some level of assurance that actions provided for and taken in accordance with the TSF Act would not be expected to contravene the offence provisions of Part 13 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The EPBC Act now allows for the accreditation under Part 13 of fisheries managed under the TSF Act. Given the legislation in force in the Torres Strait, DEWHA considers that all reasonable steps are being taken to prevent the killing or injuring of any listed or threatened species. The submission provided by the PZJA states that there have been no interactions with any protected species in the TSBDMF. Considering the selective nature of the TSBDMF (hand collection or hand held mechanical devices) and the management arrangements in place, DEWHA believes it appropriate to accredit the management regime for the fishery under Part 13 of the EPBC Act.

¹ For the purposes of this document 'Protected species' means all species listed under Part 13 of the EPBC Act, including whales and other cetaceans and threatened, marine and migratory species.

Unless a specific time frame is provided, each condition or recommendation must be addressed within the life of the declaration (three years). Note that a standard condition of a WTO is an annual reporting requirement.

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**DRAFT CONDITIONS ON THE APPROVED WTO DECLARATION FOR
THE TSBDMF**

1. Operation of the fishery will be carried out in accordance with the TSBDMF management regime in force under the TSF Act and TSF Regulations.
2. The PZJA to inform DEWHA of any intended amendments to the management arrangements that may affect the assessment of the TSBDMF against the criteria on which EPBC Act decisions are based.
3. The PZJA to produce and present reports to DEWHA annually as per Appendix B to the Guidelines.

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The following comments and recommendations are provided for consideration in the preparation of the final documentation relating to the assessment of the TSBDMF. Any advice prior to any assessment decision is without prejudice to the final assessment.

DRAFT RECOMMENDATIONS – Torres Strait Bêche-de-mer Fishery

ISSUE	DEWHA Recommendation	AFMA Response	Final Recommendation
<p>1. Finalise Harvest Strategy Recommendation 3 from the 2005 DEH assessment of the TSBDMF, required the PZJA to develop fishery specific objectives, performance measures and performance indicators for the fishery relating to target species and ecosystem impacts within two years.</p> <p>In its 2008 submission the PZJA indicated that this recommendation was ongoing, and that the Hand Collectables Working Group (HCWG) had recommended to the Torres Strait Fisheries Management Advisory Committee (TSFMAC) that a harvest strategy be developed for the TSBDMF. The submission indicated the harvest strategy will enable the PZJA to satisfy this recommendation.</p> <p>In addition it was indicated several other recommendations from the 2005 assessment of the fishery would be able to be progressed following completion of the harvest strategy. These recommendations include:</p> <ul style="list-style-type: none"> • The PZJA to investigate and progressively implement measures to minimise localised depletion in the fishery; and 	<p>Recommendation 1: <i>PZJA to develop and finalise the harvest strategy for the TSBDMF with objectives, performance indicators and performance measures appropriate to the fishery by 30 June 2010. The harvest strategy should also implement measures to prevent localised depletion and incorporate a recovery strategy for overfished species.</i></p> <p><i>In the interim, PZJA to closely monitor catch levels in the TSBDMF until the harvest strategy is formally implemented. PZJA to take immediate action if the total catch is likely to be higher than the TAC for any target</i></p>	<p>Could DEWHA please provide example of recovery strategies for other fisheries.</p> <p>Are there any catch reporting requirements for DEWHA?</p>	

<ul style="list-style-type: none"> • PZJA to develop and implement, within three years, a precautionary recovery strategy for overfished species that specifies reference points, management actions and timeframes for implementation. <p>It is anticipated the harvest strategy will be presented in draft form to TSFMAC and the PZJA towards the end of 2008.</p> <p>DEWHA considers the harvest strategy a key step in addressing issues in the TSBDMF. Several of these issues were raised in the 2005 assessment, and it is anticipated that the harvest strategy will provide additional support for other future management measures developed in the fishery.</p> <p>The harvest strategy should incorporate elements defined in the Commonwealth Fisheries Harvest Strategy Policy released in September 2007.</p> <p>The harvest strategy should take into account removals from all sectors including illegal foreign fishing.</p>	<p><i>species.</i></p> <p>[continuation of 2005 recommendations 3, 9 and 11]</p>	<p>The draft harvest strategy will need to wait until the outcomes of proposed research which will be unlikely to be completed until mid to late 2009.</p> <p>Accounting for illegal foreign fishing will be difficult and potentially costly. AFMA will need to investigate a cost effective method of estimating catches.</p>	
<p>2. Research and monitoring for bêche-de-mer stocks in the Torres Strait</p>	<p>Recommendation 2: <i>PZJA to undertake appropriate research on</i></p>	<p>Research on the biology of beche-de-mer has been undertaken extensively in</p>	

<p>Without reliable data collection and analysis, it is difficult to estimate the absolute risk to stocks of target species in the TSBDMF. DEWHA acknowledges that lack of effort and low overall value of the TSBDMF means the ability to allocate resources to research is limited; however a better understanding of target species is an important step towards the ecological sustainability of the fishery.</p> <p>The 2006 Bureau Rural Sciences (BRS) status report for the TSBDMF classifies stocks of the three most important target species as overfished. Stocks of the remaining target species in the fishery were classified as uncertain.</p> <p>DEWHA acknowledges previous management initiatives to address the status of these species including the closure of those species classified as overfished and precautionary TACs for other species.</p> <p>In March 2008 TSFMAC made a recommendation to the PZJA to note the HCWG recommendation that research regarding uncertainties in trochus and bêche-de-mer stocks should be considered a priority by the Torres Strait Scientific Advisory Committee (TSSAC).</p>	<p><i>target species in the TSBDMF to inform the setting of sustainable catch levels through the harvest strategy. Research should also:</i></p> <ul style="list-style-type: none"> • <i>address key gaps in the understanding of the biology and ecology of bêche-de-mer;</i> • <i>provide reliable biomass estimates; and</i> • <i>provide an assessment of the ecosystem impacts of the fishery in the Torres Strait.</i> <p>[continuation of 2005 recommendations 6 and 7]</p>	<p>other fisheries both in Australia and overseas. Given the lack of research resources AFMA does not see the benefit in undertaking biological research when we do not have a basic understanding of the biomass of the species. AFMA would prefer that resources be firstly utilised on standing stock estimates. Other work conducted on ecosystem impacts has suggested that BDM are not keystone species and that removing them from an ecosystem has no known impact on other marine communities (Skewes pers com).</p>	
<p>3. Compliance risks in the TSBDMF The 2008 submission indicates that there are considerable compliance risks due to the nature of the TSBDMF (large number of operators over remote areas). DEWHA acknowledges the efforts of the PZJA to address these risks, in particular the intensification of patrolling efforts at</p>	<p>Recommendation 3: <i>PZJA to develop and implement measures to address compliance risks in the TSBDMF. This should include improvements in</i></p>	<p>There is an issue with the cross jurisdictional nature of Torres Strait Fisheries. QB&FP is undertaking a risk assessment for all Torres Fisheries. The ability for AFMA to seek</p>	

<p>Warrior Reef. The submission states that due to inactivity in the fishery, current domestic compliance resources are limited to two dedicated days per year from the Queensland Boating and Fisheries Patrol (QB&FP).</p> <p>At its first meeting in October 2007, the HCWG raised concerns over the significant illegal fishing on the Warrior Reef complex for bêche-de-mer and recommended to TSFMAC that additional compliance resources need to be committed to the TSBDMF. DEWHA recommends the development of management initiatives to address this issue.</p> <p>In addition there is evidence that while no catch was reported through the docket book system in 2006 and 2007, there are anecdotal reports of some level of catch in the fishery.</p> <p>DEWHA acknowledges the efforts of the PZJA to improve the reporting of catch in the TSBDMF by making docket books compulsory as part of proposed legislative amendments and suggests the implementation of these amendments should be completed as a matter of priority.</p> <p>The fishery would also benefit from additional efforts to improve domestic compliance and DEWHA recommends the PZJA explore other ways of improving domestic compliance within the TSBDMF. This may be achieved through community based management or increasing the compliance resources utilised in the fishery.</p>	<p><i>domestic compliance and reliable recording of catch from all sectors (commercial, recreational, indigenous and illegal).</i></p> <p>[continuation of 2005 recommendations 4 and 5]</p>	<p>improvements will be dependant upon lengthy consultation.</p> <p>It is expected that a community based management approach would negate some of the requirements for domestic compliance.</p>	
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<p>The 2008 submission states that while illegal fishing for several high value species is thought to be a significant problem in the TSBDMF there are currently no estimates as to the amount of biomass removed as a result of this type of fishing.</p> <p>DEWHA recommends that in monitoring high commercial value species recovery, an assessment of the extent of illegal fishing and the impact this is having on target species should be incorporated in order to improve estimates. Estimates of all removals from the fishery should be incorporated into future stock assessments and management arrangements for target species.</p>			
<p>4. Collaborative management – shared stocks</p> <p>Although stocks of bêche-de-mer are thought to be subject to localised recruitment and fine-scale spatial structure there is little information on the genetic structure of species exploited in the TSBDMF.</p> <p>Several fisheries adjacent to the TSBDMF exploit the same or similar species, including the Coral Sea Fishery (managed by AFMA) and the East Coast Bêche-de-mer Fishery (managed by the Queensland Department of Primary Industries and Fisheries). The 2006 Commonwealth Scientific and Industrial Research Organisation (CSIRO) project examining the sustainability of Torres Strait bêche-de-mer states that it is likely the Torres Strait and Papua New Guinea (PNG) sandfish stocks are shared between the two jurisdictions.</p>	<p><i>Recommendation 4: PZJA to continue to cooperate with other relevant jurisdictions to pursue complementary management and research of shared stocks for all target species, which may be affected by cross-jurisdictional issues.</i></p>	<p>The CSIRO study which states that it is likely the Torres Strait and PNG sandfish stocks are shared between the two jurisdictions is mainly due to stocks being on the one reef system (warrior reef) which is divided by the international boundary. As nearly all TS sandfish are exclusively found on this reef this would suggest recruitment is on a fine spatial scale. Therefore the Coral Sea Fishery is unlikely to</p>	

<p>DEWHA considers that although the interrelationship of stocks in the TSBDMF and other jurisdictions is uncertain fisheries management will benefit from a co-operative approach with other agencies responsible for nearby bêche-de-mer fisheries.</p> <p>The PZJA has continued to promote complementary management arrangements, primarily through bilateral fisheries meetings with PNG. DEWHA recognises the efforts of the PZJA in collaborating with other jurisdictions and encourages continued cooperation to enable complementary management of shared stocks.</p>		<p>have any impact on TS stocks.</p>	
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