ABORIGINAL LAND RIGHTS (NORTHERN TERRITORY) ACT 1976

Review of detriment issues - Lower Daly Land Claim No. 68

Submissions on behalf of the Claimants

1 **Report No. 67 – Lower Daly Land Claim (No. 68)**

The comments concerning detriment in the Report were modest, recording a lack of evidence to support matters recorded in submissions from AFANT and the Northern Territory.

2 **Submissions to the review**

The following submissions have been provided –

(i) AFANT on behalf of recreational fishermen;
(ii) Shannon Latham, Fishing Tour operator;
(iii) Daly River Barra Resort;
(iv) Tipperary Group and NTCA with respect to pastoral interests; and
(v) the Northern Territory.

3 **Recreational fishing**

The popularity of the area for recreational fishing is acknowledged. This is presumably why the area is now closed to commercial fishing. The amount of fishing undertaken in the claim area is undifferentiated within the figures recorded by the Survey of Recreational Fishing in the Northern Territory 2009-2010 (Survey) for an area that includes the claim area. The Survey is referred to by both the NT and AFANT but has not been specifically provided to the Review by any party. The Review is Exhibit A12 in the Legune Land Claim No.188/Gregory NP/Victoria River Land Claim No. 167.

Paragraphs 15 and 16 of Mr Ciaravolo's statement dated 8 March 2018 record that -

15. Recreational Fishing is currently permitted in the Claim Area without the need to obtain a permit or individual permission. Future fishing access is agreed and ensured by a 20-year agreement between the Northern Territory Government and the Daly River Port Keats Aboriginal Land Trust.

16. The Southern Bank of the Lower Daly River is vested with the Daly River Port Keats Aboriginal Land Trust. It appears likely that if Land Claim No.68 is granted, the current access agreement will no longer be sufficient to provide open, permit-free access to recreational fishers.

This is one of the agreements referred to in the NT submissions at Part 1 paragraph (o). The Settlement Deed was executed by the NLC and the Land Trust in August 2014, and by the Northern Territory on 12 November 2014, and is known as the

Anson Bay Deed. As mentioned by Mr Ciaravolo the agreement, is for a 20 year term. The term commenced on 1 January 2013.

Given that both AFANT and the NT submissions refer to the agreement it is a matter of some importance in the context of the claimed detriment that the Commissioner should be informed of some details of the arrangements under the agreement:

(i) The area covered by the agreement is the Tidal Aboriginal Land owned by the Daly River/Port Keats Aboriginal Land Trust from the boundary with Elizabeth River Pastoral lease to the mouth of an inlet on the west side of the peninsula where Cape Ford is located;

(ii) The Licence Deed grants licences for recreational use such as fishing, snorkelling, boating, etc., fishing tour operators, and commercial (although there is presently no commercial fishing in the Daly River, there is in Anson Bay which is also covered by the agreement);

(iii) The licences permit access while waters over lie the Aboriginal land and to take fish from those waters;

(iv) The licences are non-exclusive but provide for the Land Trust to notify the Territory prior to the grant of a third party interest to allow the Territory to reject or consent to the interest;

(v) The settlement deed provides for general review of the deed at regular intervals during the term, and for specific review on notice in years that do not include a general review;

(vi) Clause 3 of the Licence Deed provides for the term of 20 years, but also provides –

"(b) At least 5 years prior to expiry of the Term the Parties will meet and negotiate in good faith for a further agreement or other appropriate arrangements to commence upon expiry of the Term."

(vii) The Settlement Deed provides for compensation to be paid to the Land Trust as consideration for the grant of the licences.

4 The traditional owners who approved the terms of the Anson Bay Deed included the persons found to be the traditional owners of the claim area, as well as other groups associated with the coast south of the Daly River mouth. A separate agreement executed on 12 November 2014 was entered into by the Malak Malak Aboriginal Land Trust to enable licensing of access on the same terms to the Daly River as it traverses the area owned by that land trust.

5 The NLC has recently met with the group found to be the traditional owners of the claim area. The group has advised that it would be comfortable with an agreement that would permit access to and fishing in the claim area. Alternatively, the NLC is presently developing a permit system with one objective being provision for applicants to obtain a permit and licence online for areas that are popularly used for recreation, such as the Daly River, based on standing instructions from the traditional land owners. Given the goodwill demonstrated by the making of the two agreements referred to above this is also a realistic option to provide ongoing access for recreational fishing in the claim area.

6 The Northern Territory has observed [Submission Part 1 paragraph o.] that the agreements "are of limited duration". With one exception they are all for a term of 20 years and their provisions are identical as to review and the inclusion of clause 3(b). The NT also noted in the same paragraph that the negotiation process has been time consuming and resource intensive for Land Councils. Even if true the NLC does not make any complaint about that. It is a core function for Land Councils to consult with traditional owners and negotiate agreements concerning 3rd party use of Aboriginal land. It may be anticipated that now that the basic terms of such agreements are agreed, any subsequent agreements should be documented more readily.

7 Another concern expressed in the NT Submission refers to the ongoing cost of the agreements for the NT Government and taxpayers[1]. This submission overlooks that the Northern Territory government has available to it an obvious way to raise revenue to defray at least some of those costs – through licensing of recreational fishing, fees for registration of powered boats used for recreational fishing and fees for recreational boat operator licences. Its comments concerning the ongoing costs of agreements need to be read in light of its choice to forgo this source of revenue.

8 The potential revenue foregone may be gauged by reference to arrangements in the Australian states. In four of the states a recreational fishing licence is required and the average annual cost for such licences (while it varies between the states) is around $35.20 if the high fee for the Tasmanian inland fishery licence is excluded, or $45 including the Tasmanian licence fee. Victoria and NSW allow for short-term or visitor licences for periods of three days and 28 days, for modest fees of about $10 and $20 respectively. Licences are not required for fishers under 14 years of age, and concessional licence fees may apply for pensioners and so on.

9 It appears that all states require powered recreational boats to be registered. The registration fees are generally based on boat length and rise as boat length increases. They vary substantially among the states. Western Australia seems to have the highest fees: for example the fee for a vessel less than 5 metres is $117.60 p.a. and between 5-10 metres $249.80. In South Australia the fee for a boat 3.5 to 5 metres is $106 which includes a 'facilities levy' of $50, and for a boat 9 to10 metres in length it is $257, including a facilities levy of $103. The fees recovered by the states are substantially applied for the benefit of the recreational fishing sector.

10 The data in the Survey contains substantial information about the numbers of NT residents who fish, and about boat ownership including length and power source. It appears on the basis of that information that the Northern Territory, by not requiring licences or boat registration as in the states, is almost certainly forgoing substantial annual revenue, probably in the region of $4 to $5 million per year.

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[1] While the NT meets the costs from its revenues – its questionable whether much of this cost is borne by NT taxpayers as the following passage from chapter 6 of the 2018-2019 NT Budget Strategy Budget Paper No.2 shows –

> Territory own-source revenue predominantly comprises taxes and mining revenue but also includes fees and charges, rent and tenancy income, interest and dividend revenue, and profit and loss on the disposal of assets. It comprises **33 percent of the Territory's total revenue in 2018-19**.*(emphasis added)*

In other words one way or another, the taxpayers in other parts of Australia will provide two thirds of NT Government revenues in 2018-2019, and arguably two thirds of the cost of any agreements.

11 For example, Mr Curnow, Director of Fisheries in the Northern Territory, in his statement in the Fitzmaurice Land Claim dated 17 January 2017 [Exhibit NT9] referred to the large number of visitor recreational fishers to the NT [at paragraph 24]. He notes that in 2000-2001 national survey found that over 50,000 visitors annually fish at least once during their stay, and that on-site surveys in conjunction with the Survey indicated that visitor fishing effort had more than doubled in catchments compared to 2000-2001. If from that it could be deduced that 100,000 visitors went fishing each year, fishing licence revenue for short term licences could easily exceed $1,000,000 per year.

12 The Northern Territory government has for its own reasons chosen to forgo a revenue stream that has been accessed by all the Australian states. In our submission the statement about the ongoing cost of the access agreements for taxpayers, apparently adduced as part of the Territory's argument that access agreements are an inferior response to provide access, should be read in that light.

AFANT Submission

13 Given the acknowledgment that recreational fishing in the Daly River is undoubtedly a popular activity, it is not accepted that the AFANT community consultation (so-called), reproduced as Appendix A to the statement of Mr Ciaravolo dated 8 March 2018, demonstrates sufficient design or statistical rigor, to provide reliable information to inform the Review. In contrast to the lengthy explanation in the Survey of the methodology supporting it, there is no evidence of any controls to provide an assurance of the accuracy or reliability of the responses to the AFANT survey.

14 For example, if the AFANT survey is taken literally only 17 respondents [Q.8 "Do you plan to fish the Lower Daly?"] plan to fish there. The other 728 respondents skipped the question. The inelegant drafting of Question 7 does not assist in understanding the responses to question 8. Subsequent questions and responses in the AFANT survey suggest that an intention of fishing activity in the Lower Daly area is probably held by more than 17 people, but that is not an issue of which there is any doubt and the AFANT survey serves no purpose with that aspect, It is not apparent from the document how the anomalous result occurred. In this submission the "results" of the survey should be regarded with considerable circumspection and accorded little weight. To the extent that Mr Ciaravolo's statement relies upon or repeats information sourced from the AFANT survey this submission repeats the caution about the reliability of the survey and the weight that should be accorded to it.

15 Hesitant as this submission is to rely on Mr Ciaravolo's Appendix A it may be noted that of the respondents to Question 13, 32% or 217 people, launched their boats at Channel Point to access the claim area. Some of these may have launched from Channel Point community, but it's more likely most launched from the boat ramp constructed at the Channel Point Reserve. We have information from another source[2] that visitors are required to book 12 months in advance to obtain permits for vehicle

[2] Statement of Lincoln Wilson, A/Director, Northern Australian Parks, Parks, Wildlife & Heritage Division, Department of Tourism and Culture, dated 14 March 2018 in the Peron Islands Area Land Claim, at paragraph 22.

access to the reserve, thus a considerable degree of foresight is required to gain access to the ramp at the reserve.

16 Attention is drawn to that aspect because it indicates a level of planning by fishers for fishing trips and acceptance of the need to obtain a permit for entry to the reserve [pursuant to *Territory Parks and Wildlife By-laws* Part 4B By-laws 34L and 34M] that stands in marked contrast to paragraphs 47-49 of Mr Ciarovolo's statement.

17 Paragraphs 15 to 17 and 51 of Mr Ciaravolo's statement mention the access agreements made with the Malak Malak and Daly River/Port Keats Land Trusts. Without endorsing the reliability or accuracy of the AFANT survey, the 80% odd of survey respondents who have launched boats at the Woolianna ramp to travel to the claim area have enjoyed the benefit of the Malak Malak agreement – c.f. Question 13. 30% of the respondents to the same question launched a boat at Channel Point. The only road access to Channel Point is also enabled by an agreement with the Delissaville Wagait Larrakia Aboriginal Land Trust for an easement that allows the road to pass over part of the Land Trust[3]. However, the agency of traditional owners in these highly beneficial enabling agreements is not recognised as informing the likelihood that a future access agreement in this area, or an acceptable permit access regime, could readily be achieved. In this submission the report should note those positive prospects.

18 Paragraphs 39 - 41 of the statement neatly illustrate the 'Catch 22' nature of some aspects of the submissions about cumulative detriment. Words and phrases such as 'iconic' (it seems every fishing spot is 'iconic'), 'special', 'the experience as a whole', 'social and lifestyle values of recreational fishing experiences', 'enjoying space on water', 'social and amenity values', are very subjective and are essentially unanswerable. In that sense they are virtually meaningless to support a claim of 'detriment'. Being unanswerable because they cannot be quantified they should be disregarded.

19 Paragraphs 52 and 53 of Mr Ciaravolo's statement refer to co-operation with the Malak Malak Land and Water Rangers on a recent study into potential fishing related erosion and on a Code of Conduct. Both the erosion study and the Code of Conduct were mandated by Schedule 1 Part B clauses 3 and 4 respectively of the Malak Malak Deed referred to in paragraph 4 above and reflect concerns of the traditional owners expressed in the original negotiation process. AFANT's involvement with the erosion study is consistent with paragraph 9 of its 2003 submission to the Land Claim and demonstrates the mutual interest it shares with the claimants on that issue.

Fishing Tour Operators.

20 Since the two agreements referred to earlier were entered into the number of Fishing Tour Operators active in the Daly River has increased from 1 to 4. This suggests that contrary to the NT Submission [p.4 paragraph r.] the agreements do provide certainty and security for commercial development. Of course, should a particular Fishing Tour

[3] See Mr Wilson's statement referenced in footnote 2 supra.

Operator (or similar) seek greater commercial security the avenue of an agreement pursuant to sections 11A or 19 of the Land Rights Act is also available.

21 A separate part of the NT Submission, Part 3 records advice from the Department of Tourism and Culture that "There are approximately 28 tour operators that utilise the area under claim." (See paragraph 67 below).

Fisheries Management

22 This section addresses the NT Submission Part 1 paragraphs s. to dd. under the heading "Importance of whole of fishery approach to fisheries management".

23 Paragraph t.: A sea closure under section 12 of the *Aboriginal Land Act* could only be effected by a decision of the Administrator of the Northern Territory under NT legislation. This is not a detriment matter.

24 Paragraphs u. to w. reproduce sections 4.2 and 4.3 of the document titled "Northern Territory Fisheries Harvest Strategy Policy" (2016), ['Policy'] a copy of which is attached to these submissions [Attachment A]. Paragraph y. reproduces section 4.5 from the same document. Paragraph x. is the odd-man-out in this context. Paragraph x. is not drawn from the Policy. However, an explanation for paragraph x. may be found in a separate closely related document "Guidelines for implementing the NT Fisheries Harvest Strategy" (2016) ['Guidelines'] which is also included with these submissions [Attachment B].

25 The preface to the Policy (p.2 section 2.) says that it should be read in conjunction with the Guidelines. Section 2.3 of the Guidelines, headed - " Identify relevant legislation and over-arching policy objectives", lists examples of overarching legislation, policy and codes of practice, one of which is the *Aboriginal Land Rights (Northern Territory) Act* 1976. These are described as 'high-level', and Section 2 about conceptual management objectives notes that conceptual objectives are needed to translate the high-level objectives into specific individual fishery management objectives. Ownership of a high proportion of the inter-tidal zone around the coast under Land Rights Act title is unique to the NT and, unlike other Australian jurisdictions, must be incorporated into actions pursuant to the Policy and Guidelines, no matter that there may be different access arrangements for different parts of the coastline.

26 Importantly in terms of this inquiry, the same section of the Policy also records –

> "When developing the conceptual management objectives, the trade-offs between the ecological, economic, social and customary outcomes being sought should be considered at the beginning of the harvest strategy design process, preferably in consultation with all key stakeholders."

There can be no doubt that post-Blue Mud Bay the owners of 78% of the inter-tidal zone of the NT including tidal rivers on Aboriginal land would be key stakeholders.

27 Paragraphs x. and z.: There is no argument that it is important that the impact of reduced or modified access is understood. Such understanding a pre-requisite for developing conceptual management objectives (see Guidelines at Section 2). Access

is a factor in, not a matter of detriment impeding, development of a Harvest Strategy and management of a fishery. The objects set out in section 2A of the *Fisheries Act* are reproduced as 'objectives' in section 4.1 of the Policy, which makes the dubious assertion "the first objective having legal primacy over the remaining objectives". The section 2A(b) object is –

> to maintain a stewardship of aquatic resources that promotes fairness, equity and access to aquatic resources by all stakeholder groups, including:
> (i) indigenous people; and ...(other groups)

28 From that it is clear that "fairness, equity and access to aquatic interests" will require achievement of a complex balance. It may be imperfect but it can be adjusted. In our submission "fairness (and) equity" requires meaningful, not nominal, recognition that the claimants have proven that they are the traditional owners of the area. In the broader context of existing Land Rights Act title over a high proportion of the tidal waters of the NT, a stewardship of aquatic resources that is perceived as unfair and does not promote equity, that e.g. enters into access agreements and then complains about the negotiation process, the terms of the agreements, including the ongoing costs, may not be consistent with the Policy and the Guidelines, as well as the Objects of the *Fisheries Act.*

29 Paragraph z.: The claim made in this paragraph is that should claimed areas be granted it would amount "in a cumulative sense to an additional management regime over Territory waters". This assertion is not accepted in the context of the Policy and Guidelines because they anticipate the need for adaptation to incorporate into the objectives factors arising from the *Aboriginal Land Rights (Northern Territory) Act* 1976 – it is already allowed for, or should be. Complex as it may be the Harvest Strategy pursuant to the Policy and Guidelines needs to take that tenure into account, and to be sufficiently flexible to adapt when provisions for access change. Of course, the *Fisheries Act* would continue to apply to all waters.

30 Paragraphs bb. and cc.: The adoption of the Policy and the Guidelines is a substantial change since the Report was written and since the reports in the McArthur River Region Land Claim No.184 and Lower Roper River Land Claim No.70 were written in 2002 and 2003. Aboriginal Land Commissioner Olney did not have the benefit of the Policy or Guidelines when completing the two Reports. The Policy and Guidelines provide for a fisheries management regime that can (and under the Guidelines should) incorporate adaptation to factors arising from the ownership of a substantial area of intertidal land by land trusts pursuant to the Land Rights Act. The development of objectives and Harvest Strategies pursuant to the Guidelines and Policy should to a substantial extent meet the concerns of Commissioner Olney at page 82, paragraph 169 of the McArthur River Region Land Claim Report.

31 The Introduction to the Guidelines records that they are consistent with ...information contained within the National Guidelines to Develop Fisheries Harvest Strategies (Sloan et al 2014). Sloan at p.31 –

> **5.3.7 Adaptive**
> Adaptive management practices are well documented as a fisheries management tool (Hilborn and Walters 1992). For Australian Commonwealth fisheries, and for a number of State and Territory managed fisheries, harvest strategies are now central to the adaptive management process that constitutes fisheries management (Smith et al. 2013). A key function of harvest strategies is to provide for increased certainty and

predictability in the management of fisheries. However, this must also be balanced with the need for flexibility to allow for changing circumstances and for new information to be considered (Hilborn and Walters 1992). To this end, the process and methodology described in these National Guidelines reflects an adaptive management approach.

32 In the broad Australian context this paragraph acknowledges that Harvest Strategies need flexibility to allow for changing circumstance such as, for example, if new information about the fishery becomes available. In the same sense a variation to access of a part of a fishery is not much different as a cause to amend or adapt the Harvest Strategy. The Guidelines and Policy should enable the Northern Territory to develop conceptual management objectives that adapt to the unique Northern Territory circumstances due to the private ownership of most of the intertidal zone as Aboriginal land under the Land Rights Act. The Policy and Guidelines enable the Northern Territory to deal with management of marine resources in a way that meets the concerns of the then Aboriginal Land Commissioner reproduced at NT Submission at paragraph bb.

33 The Policy and Guidelines are the basis for the development of a harvest strategy for a fishery and do not assist or detract from the separate consideration of whether the grant of a particular area that may result in restriction of access to a part of a fishery will give rise to 'cumulative detriment'. The re-location of fishing effort should not be regarded as a detriment per se. It is not necessarily a matter of detriment that increased numbers of fishers frequent a particular location. Something more should be demonstrated, whether it be issues of sustainability of yield, restriction (rationing) of access or something of that nature.

34 The NT, tourism industry and amateur fishing organisations all actively promote fishing (NT submission at Part 3, statement of David Ciaravolo at paragraphs 6-10 including the link in paragraph 7) with the intention of increasing fishing effort. The publicly advertised Million Dollar Barra is specifically designed to attract or encourage more fishing through chasing the elusive tagged fish. If more fishing in a given area was to amount to detriment per se the Northern Territory and other bodies should desist from promotional efforts to increase fishing effort in the Northern Territory. The claim of detriment arising from displacement of fishing effort, i.e. to increase fishing effort elsewhere, should be moderated by having regard to these official efforts to increased fishing effort regardless.

35 Detriment may occur if some fishers have to travel markedly further to fish, for example. For the Daly River it appears that most fishers come from the Darwin area and so it is likely that it will take less time for them to travel to an alternative fishing spot.

36 The heading to the section of the NT submission under discussion includes the phrase"Whole of fishery approach to fisheries management". Paragraph dd. also mentions "whole-of-fisheries management". Neither the phrase 'whole of fishery' nor anything similar is used in the Policy or Guidelines or the *Fisheries Act,* or any of the management plans under the Act. The phrase is unobjectionable where the area of operation of the 'fishery' to which it refers is clear [see Appendix A – Part 10 – Glossary] but that is not the case here. The phrase is used in paragraph dd. to support a claim that displaced fishing effort may be displaced to areas where access may be conditional or denied. Leaving aside that fishing effort could not occur where access

is denied, the claim is that such displacement could create (in effect) "regional level disruption of fisheries management (i.e. the Harvest Strategy) rather than localised (sic)". No attempt is made to explain what would comprise 'disruption of fisheries management'. Read in light of the Policy and Guidelines this paragraph does not support a claim of cumulative detriment. "Whole of fisheries management" whatever the term is taken to mean is not disrupted because in accordance with the Guidelines and the Policy the Harvest Strategy objectives need to allow restrictions on access that may arise.

37 With respect to paragraph 112 of the Lower Roper River Land Claim Report cited at NT submission Part 1 paragraphs bb., it is noted that it includes the passage "...if by reason of a grant of title access .... is prohibited or restricted...". In this submission it would be appropriate to qualify any comment on that aspect by reference to the probability of access by agreement, particularly in the circumstances of this land claim mentioned above. When Commissioner Olney authored that report and others with similar comments, anticipatory of but before Blue Mud Bay, he had not had an opportunity to see how access could be achieved by methods such as the existing agreements, because none had been necessary at that time.

38 Summary:

(i) access is a factor that must be incorporated into a Harvest Strategy not a detriment to development of the strategy or fisheries management;

(ii) displacement of fishing effort per se should not be regarded as detriment – something more that is quantifiable should be required;

(ii) the alleged effects of displacement should be seen in the light of increased fishing effort being promoted by the NT government, the tourism industry and amateur fishing bodies; and

(iv) on the basis of current agreements, including an agreement approved by the claimants in this land claim (the Anson Bay Agreement) there is a genuine prospect that access could be provided through agreement or permits on acceptable conditions.

Mineral Resources

39 There are no current mineral interests in the claim area. The mineral interests referred to in the Northern Territory Submission at Part 2 paragraph t., are on land above the mean high water mark, in an area owned by the Daly River/Port Keats Aboriginal Land Trust. Should the claim area be granted as Aboriginal land, Part IV of the Land Rights Act sets out procedures to administer future exploration applications. The prospect of installation of a pipeline for transport of hydrocarbons in or across the Daly River within the claim area must be regarded as extremely remote and the requirement for an agreement under s.19 of the Land Rights Act, for such a remote prospect should not be regarded as a possible detriment. The NT submission notes that area of the land claim "is not considered the most prospective part of the (Bonaparte) basin". This statement could also mean that the same area is completely un-prospective, which may be why it has never been explored.

40 In this submission there is no basis to record any potential detriment with respect to petroleum or minerals.

Pastoral.

41 Three submissions address issues relating to pastoral activity on land adjoining the claim area comprising Litchfield Station on PPL – the Northern Territory, Tipperary Group of Stations Pty Ltd for Litchfield Station, and the NTCA.

42 The Northern Territory submission records a number of matters under this heading that are standard or 'generic' to its detriment submissions. However, they are not necessarily entirely accurate, nor the complete picture. The inaccuracies either assert a detriment where there is none, or in some way serve to exaggerate an asserted detriment. It is assumed that all matters addressed in the NT submissions are intended to be included as possible detriment and for that reason they are responded to in detail below, perhaps in greater detail then they warrant

43 The 'generic' aspects of the NT submission are as follows –

- Prevention of land degradation..
- ..control of feral animals
- ..weed control
- Station access under the *Pastoral Land Act*
- Public access to waterways under section 79 of the *Pastoral Land Act*
- Future diversification requiring access to a waterway
- Rights of access for adjoining landowners under the *Water Act*

44 NT Submission at 2.b. Rangelands b ii says:

> "The object of the PLA requires a pastoral lessee to prevent of minimise degradation or degradation or other damage to the land and its native flora and fauna."

It is not merely splitting hairs to note that the relevant object expressed in section 4 of that Act is "to provide for -

> (ii) the prevention or minimisation of degradation of or other damage to the land and its indigenous plant and animal life; and …

There is no direct requirement on a pastoral lessee to observe that object - it is not even one of the conditions of a pastoral lease. Achievement of the object falls to the Pastoral Land Board under s.29(e) & (f) and Part 5 of the Act. The Pastoral Land Board has no functions with respect to Crown land adjoining a pastoral lease.

45 NT Submission - at 2.b. Rangelands b iii.: where declared feral animals are located on the lease area the Pastoral Land Board *may* direct the leaseholder to control them (*Pastoral Land Act* s.73), but only on the lease and there is no specific obligation to control feral animals in the absence of a direction. Any direction would not apply to adjoining land owned by the Crown or a 3rd party. The lessee is not required to control feral animals on Crown land not forming part of the lease area.

46 Alternatively, where the area of a pastoral lease is within a feral animal control area declared under s.48 of the *Territory Parks and Wildlife Act,* under s.49 of the same Act, the Director may give notice to the owner or occupier to take measures for the

control or eradication of a feral animal on the land. Presumably, most lessees will undertake feral animal control voluntarily as an aspect of sound management both to protect the health of the cattle and maximise grazing potential on the pastoral lease. A direction under s.49 could not require a pastoral lessee to undertake control or eradication measures on adjacent Crown land of which it is not the occupier.

47 Pursuant to *Crown Lands Act* s.99(2) unbranded buffalo at any time remaining or feeding on Crown lands are the property of the Territory. The Territory may contract any person, including a neighbouring landholder, to undertake control measures, but there does not appear to be any entitlement in a neighbouring landowner to enter Crown land voluntarily and undertake those measures. Tipperary Group say that feral animal control activity has been undertaken on the claim area, but that would be on a voluntary basis. *Crown Lands Act* s.101(2) enables the Minister to authorise a person to destroy pigs trespassing on Crown land.

48 NT Submission – at 2.b.Rangelands b. iii: contrary to the assertion in this paragraph the lessee of a pastoral lease is not required to control weeds on the beds and banks of any waterways (outside the area of the lease). The *Weeds Management Act* imposes the obligation to control weeds on the landowner or occupier (section 9). The owner of the area under claim is the Crown and thus it is responsible for weed control.

49 NT Submission – at 2.b. Rangelands b.v. and vi: records that the lessees, their staff and visitors may access the waterways etc., for recreational purposes. The right of the owner or occupier of land (this includes a pastoral leaseholder) including family and employees, but not visitors, of land immediately adjacent to the banks of a waterway, to access the banks and waterway, derives from section 13 of the *Water Act.* The public's right, to access waterways within and adjoining, and the sea adjoining, a pastoral lease, which probably includes the visitors referred to by the NT in its submissions, derives from s.79 *Pastoral Land Act.*

50 NT Submission – at 2.b. Rangelands b.vii & viii: While it is possible that future diversification activities may require the use of the beds and banks of a river the assertion of detriment on this basis is not accepted. The issue has not been raised by the only pastoral leaseholder affected by the land claim. Indeed the correspondence on behalf of the leaseholder rather suggests the opposite, with its emphasis on biosecurity and restricting access to the station (addressed below). The Land Claim Report records [p.23 paragraph 90(e)] that the whole of the section of the river under claim is salt water.

51 Part 7 of the *Pastoral Land Act* provides for permits for non-pastoral use of pastoral land. The current provisions in Part 7 date from 2013. Prior to that non-pastoral use permits were limited to a term of 5 years, were personal to the permittee and were not transferable on sale of the pastoral lease.

52 The possible availability of a permit for a non-pastoral use is presumably the 'diversification activities' referred to in the NT submission. Part 7 at section 85A provides –

85A Permit

(1) The Board may, on application by a pastoral lessee, grant the lessee a ***permit*** to use

all or part of the land the subject of the lessee's pastoral lease for a purpose that is not a pastoral purpose (a ***non-pastoral purpose***).

The Board may only grant permits for land included in a pastoral lease. The maximum term of a permit is 30 years. The permittee may apply to the Board for an extension of the permit, the decision being at the discretion of the Board. Permits may be suspended or revoked.

53 The lessee can gain no rights to use adjacent Crown land from such a permit. For example, if the lessee wished to undertake irrigated agriculture dependent on the use of surface water, a separate application for a licence to take and use surface water would need to be made under section 45 of the *Water Act*, involving a separate decision by the Controller of Water Resources. Such a licence would be required whether the water source lay within the pastoral lease or the adjoining waterway. Unless in the opinion of the Minister there are special circumstances the maximum term of such a licence is ten years.

54 The examples provided at paragraph b.viii. include tourism and fishing tours, the latter a subset of 'tourism'. To the extent such activities made use of the adjoining beds and banks or inter-tidal zone they would be conducted on Crown land if the land was not granted to a land trust. This necessarily raises the issue of use of Crown land for commercial purposes. The inference is that Crown land is public land permanently available without restriction to any person who wishes to use it for a commercial purpose, and to all such persons as members of the public. If that is the inference the Northern Territory is inviting, and it appears to be the only logical inference that could support the claimed detriment, it should be clearly stated. If the Northern Territory disagrees with the inference then it should clearly set out how Crown land would be or is administered under the *Crown Lands Act* to enable and regulate the use of it by 3rd parties for commercial purposes.

55 This is not a novel point. On 26 January 2017, in the Legune/Gregory NP Victoria River Land Claims we advised the NT Solicitor, in reference to the NT's Outline of Detriment Issues dated November 2016 provided pursuant to the Commissioner's request dated 27 October 2016, that we would appreciate evidence of inter alia –

> Pastoral Activities
>
> Paragraphs 51, 61-63
>
> We require statements to verify all of the matters referred to in these paragraphs. In particular as whether there is any current use of the freshwater of any of the rivers for watering livestock, and whether that is by way of pumping water or direct access by livestock to the rivers.
>
> **Bullo River is using Crown land for commercial activities. What would be the NT position on such commercial use of public land if there was no claim over the area?** *(emphasis added)*

No evidence was provided.

56 NT Submission – at 2.b. Rangelands b.ix: It is uncontentious that the lessee has the right to graze and water cattle on 'his land' (the pastoral lease area) adjoining waterways. That right arises from the *Pastoral Land Act* and the lease, not the *Water Act*.

57 Watering livestock and water extraction: the water in the river in the claim area is saline. It is most unlikely that the leaseholder would wish to either water cattle in the

river or pump saline water onto the lease for any purpose. It has not been raised on behalf of the leaseholder.

Tipperary Groups of Stations Pty Ltd on behalf Litchfield Station partners.

58 No submission was made to the land claim hearing by the then proprietors of Litchfield Station. It may be assumed that they were aware of the land claim. The Land Claim Report at p.3 paragraph 11 records that the land claim was widely advertised and notice was given to the owners of all adjoining land. The then proprietor of Litchfield Station did not participate in the land claim.

59 In letters dated 5 February 2018 and 8 March 2018, Tipperary Group has raised the following matters: fencing, stock recovery, weed control, feral animal control and the potential for increased access to the pastoral lease (all but the first two items under the general heading 'biosecurity'). It has not raised any issue of future diversification for non-pastoral uses.

60 Fencing and livestock recovery: it is acknowledged that it would be impractical for the lessee to fence the bank of the river on the basis of cost and local topography, and that the station may require access to the claim area from time to time to recover livestock.

61 It is not clear whether weed management activities have taken place in the claim area, nor whether there has been or is currently any weed issue in the area. The management has apparently undertaken feral animal control in the claim area. Undertaking weed management and control of feral animals on Crown land is not the responsibility of a pastoral lessee but it is apparently common practice, being done to protect the interests of the lessee.

62 During the recent consultation with the traditional owners/claimants the prospect of providing a non-exclusive licence over the bank to Litchfield Station was discussed and well received subject to details being agreed. The proposal is for a licence to be provided to the station (and this could apply for pastoral lessees elsewhere in similar circumstances) that would reflect the current usage of the claim area by the adjoining pastoral lessee include the following essential features (this is not an exhaustive recitation of the elements of a proposed licence):

(i) To permit those pastoral activities presently undertaken in the claim area – access for mustering (replacing s.27 *Livestock Act*), repair and maintenance of fencing (if any);
(ii) Feral animal control;
(iii) Assume obligations to comply with the *Weeds Management Act*, and other legislation relating to the environment;
(iv) Term will run with the pastoral lease;
(v) Fully transferable on sale of the pastoral lease without further consent (but on notice to the Land Trust);
(vi) No licence fee (peppercorn);
(vii) Non-exclusive;
(viii) Replicate current rights of an adjoining landowner under s.11 of the *Water Act*.

63 Future access to the pastoral lease: the pastoral lease is subject to the reservation permitting Aboriginal access in accordance with *Pastoral Land Act* s.38(2). The submission on behalf of the station refers to an arrangement with the Daly River community. The lease is also subject to the requirement to provide for public access to waterways in accordance with Part 6 of the *Pastoral Land Act*.

64 The claim area is not presently subject to any restrictions on public access. Accordingly, there is no potential for increased public access arising from the land claim. On the contrary, should the claim area be granted to a land trust it should be possible, as it is not possible at present, to develop conditions for public access that would respect valid concerns of the station.

Submission by the NT Cattlemen's Association

65 The NTCA submission pre-dates the correspondence on behalf of Litchfield Station. It records the general position of the NTCA in response to beds and banks land claims. There is no need to further address those matters already dealt with above.

66 To the extent that the NTCA (under the heading 'Conclusion') expresses the political stance of the organisation with regard to this and similar land claims, this is not the appropriate place to respond. It does not raise a detriment issue in this land claim.

Tourism

67 Part 3 is a brief submission on behalf of the department of Tourism and Culture. The numbers in Part 3 paragraph e. are regional to the Katherine Daly Region (which includes other major attractions such as Nitmiluk/Katherine Gorge) and do not apply to the claim area as such. The claim that 28 'tour operators' use the area under claim should not be accepted in the absence of further details, particularly in light of the table at page 3 of the submission referring to 'Fishing Tour Operators'.

David Avery

Solicitor for the Claimants

8 June 2018

DEPARTMENT OF
PRIMARY INDUSTRY AND RESOURCES

Northern Territory Fisheries Harvest Strategy Policy

December 2016

Courtesy of NT Seafood Council

www.dpir.nt.gov.au

NORTHERN TERRITORY GOVERNMENT

Contents

1. Title

Northern Territory Fisheries Harvest Strategy Policy

2. Preface

This policy describes what a harvest strategy is, where it fits within the broader fishery management context, and outlines the core principles that must be applied to harmonise their development in the Northern Territory. It should be read in conjunction with the Guidelines for Implementation of the Northern Territory Fisheries Harvest Strategy Policy.

This policy is consistent with, and utilities text and information contained within the National Guidelines to Develop Fishery Harvest Strategies (Sloan et al. 2014). Adopting and applying the national guidelines will facilitate more consistency across borders so that the use of fishery resources at the stock level can be better coordinated.

3. Policy objectives

The objective of this policy is to provide an overarching framework for the development of consistent harvest strategies for Northern Territory fisheries, to:

1. provide clarity and certainty to all users regarding management decisions; and
2. further the objectives of the NT *Fisheries Act 1988*.

4. Introduction

4.1 Objectives of the Northern Territory Fisheries Act 1988

The Northern Territory Fisheries Act requires the long term sustainable management of aquatic resources. Whilst managing aquatic resources, the Act sets out clear objectives, with the first objective having legal primacy over the remaining objectives. Those objectives are:

(a) to manage the aquatic resources of the Territory in accordance with the principles of ecologically sustainable development, whether managing a single fish species or an ecosystem, to ensure the promotion of appropriate protection of fish and fish habitats;

(ab) to protect the environment, people and economy of the Territory from the introduction and spread of aquatic pests and diseases;

(b) to maintain a stewardship of aquatic resources that promotes fairness, equity and access to aquatic resources by all stakeholder groups, including:

  (i) indigenous people; and

  (ii) commercial operators and aquaculture farmers; the commercial fishing, aquaculture and fishing tourism industries; and

  (iii) amateur fishers; and

  (iv) others with an interest in the aquatic resources of the Territory; and

(c) by means of a flexible approach to the management of aquatic resources and their habitats, to promote the optimum utilisation of aquatic resources to the benefit of the community.

4.2 What is a harvest strategy?

Harvest strategies integrate the ecological, social and economic dimensions of fisheries management into a single operational framework for decision making. In its simplest form, a harvest strategy provides a framework to ensure that fishery managers, fishers and other stakeholders have a shared understanding of the objectives of using a specific resource and work together to consider and document responses that will be applied to various fishery conditions (desirable and undesirable) before they occur. This provides greater certainty and avoids ad-hoc decision making (Sloan et al. 2014).

4.2.1 Definition

To enable a common understanding among key stakeholders of the scope and purpose of harvest strategies in the Northern Territory, the following national definition is adopted, based on Sloan et al. (2014):

"A harvest strategy is a framework that specifies pre-determined actions in a fishery for defined species (at the stock or management unit level) necessary to achieve the agreed ecological, economic and social management objectives".

4.3 Benefits

Harvest strategies are considered to represent a best-practice approach to operational fisheries management and they have been widely adopted nationally and internationally (FAO 2011; McIlgorm 2013; Smith et al. 2013; Sloan et al. 2014). Harvest strategies identify clear objectives of how a given fishery resource is to be used to optimise benefit. They put in place measurable indicators of performance to ensure the fishery moves towards meeting the objectives and specific management actions that will be implemented if reference points are met to ensure that the fishery stays on track.

The adoption of a consistent approach to the development of a harvest strategy is expected to lead to better managed fisheries and encourage responsible fishing, as decisions on harvest levels are forecast and will be made in a more transparent, predictable and timely manner. Harvest strategies will also provide adaptability to social, economic and ecological change and create a level of transparency and reporting that will foster greater community confidence in the way fisheries are managed.

4.4 Where does a harvest strategy fit?

To understand the role of a harvest strategy, it is important to consider how they fit into the broader fisheries management framework. At the higher level, fisheries management is guided by international obligations, national and jurisdictional legislation, and broad policy frameworks directed at addressing issues such as ecologically sustainable development (ESD), inter-sector resource allocation and integrated ecosystem-based fisheries management (Figure 1).

Sitting beneath these higher-level legislative and policy arrangements, each individual fishery has a specific management framework to provide a set of management controls, which are usually described in fisheries regulations, a fishery management plan or a fishery management policy. The focus of the management frameworks is on the broader set of controls needed to manage a fishery, which may include quota or effort management systems, gear and area controls, allocation arrangements, co-management arrangements, research strategies and compliance monitoring.

In the Northern Territory, the process for preparing a harvest strategy is incorporated into the process for developing a management framework to provide for a high level of certainty and accountability. A harvest strategy forms an integral part of the management framework and describes how the resource will be used operationally from within the context of what is allowable.

To ensure their effectiveness at achieving the wider policy objectives that relate to ESD, as well as optimal and equitable resource use, harvest strategies should integrate the full set of biological, customary, economic and social objectives relevant to a fishery, where they relate to operational harvest.

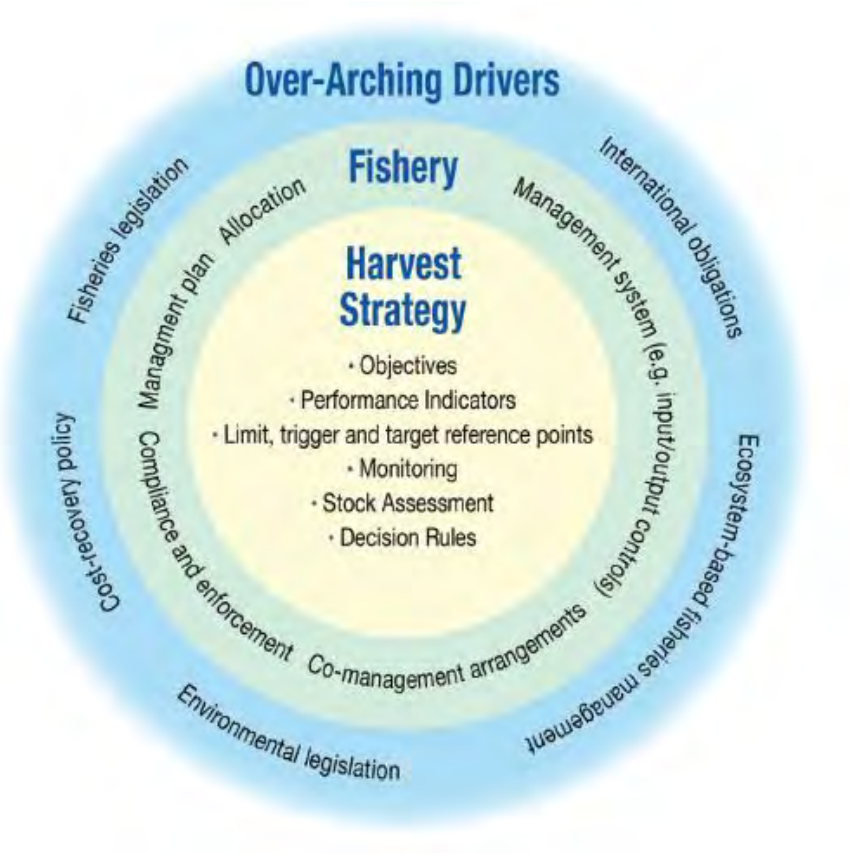

Figure 1: A schematic representation of how a harvest strategy fits within the overall fishery management framework (Sloan et al. 2014).

4.5 Prerequisites

There are a number of requirements that should be defined and agreed upon by key stakeholders prior to development of a harvest strategy for a fishery managed under the NT *Fisheries Act*. These include:

1. A fishery specific management framework that contains:
   1.1. Long term conceptual objectives including ecological, and where appropriate, economic, social and customary objectives that define how the fishery is carried out to the benefit of the community; and
   1.2. Resource access and allocation arrangements between sectors to maximise the benefit of resources shared among all users (commercial, recreational, customary and fishing tourism).
2. An ESD risk assessment to identify and prioritise the full suite of ecological, economic, social and customary issues in the fishery

5. Core policy principles

This policy outlines several core policy principles that must be addressed when a harvest strategy is developed for a fishery managed under the NT *Fisheries Act*.

Harvest strategies must be developed and adapted to suit an individual fishery (either for individual species or at the fishery level). Depending on how the fishery is managed, it is likely that sector-based

harvest strategies will be appropriate to ensure that the resource allocated to that sector is used for maximum benefit.

5.1 Precautionary

The precautionary principle should be applied to help guide how risk is managed in the development of harvest strategies, particularly when a high degree of uncertainty exists or when stocks are recovering from overfishing. The precautionary principle requires that if there is a threat of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason to postpone measures to prevent environmental damage. The precautionary principle can also help to guide the development of limit reference points to mitigate the risk of fish stocks becoming overfished.

5.2 Defined operational objectives

A set of clear and concise operational objectives must be established for defined species in the fishery and explicitly translated from the ecological, and where appropriate, economic, social and customary conceptual objectives articulated within the fishery management framework. The operational objectives must be precise and formulated in a way that they can measure fishery performance (i.e. must be linked to the performance indicators and reference points of the harvest strategy) and should clearly identify the fish stock or fisheries management unit to which they apply.

5.3 Fishery performance indicators related to operational objectives

Performance indicators must be established for each operational objective. These performance indicators will be used to measure fishery performance with respect to achieving the objectives (by comparing where the indicator sits in relation to a reference point) (see Figure 2).

5.4 Reference points for performance indicators

Three types of reference points are used to assess the ecological, and where appropriate customary, economic and social performance of the fishery:

1. **Limit Reference Points** define the value of a performance indicator for a stock or management unit that are considered unacceptable and when a stock or management unit has become recruitment overfished or environmentally limited.
2. **Trigger Reference Points** define the value of a performance indicator for a fish stock or fisheries management unit at which a change in the management is considered or adopted. Trigger reference points may be used to determine staged management responses to different stock levels or to define when a stock or management unit is transitional-depleting or transitional-recovering.
3. **Target Reference Points** define the values of a performance indicator for a fish stock or management unit that are desirable or ideal and at which management should aim.

Appropriate limit, trigger and target reference points should be considered for each performance indicator. All harvest strategies must include a biological limit reference point and trigger reference point to ensure appropriate management responses are implemented in response to changes in fish stock abundance.

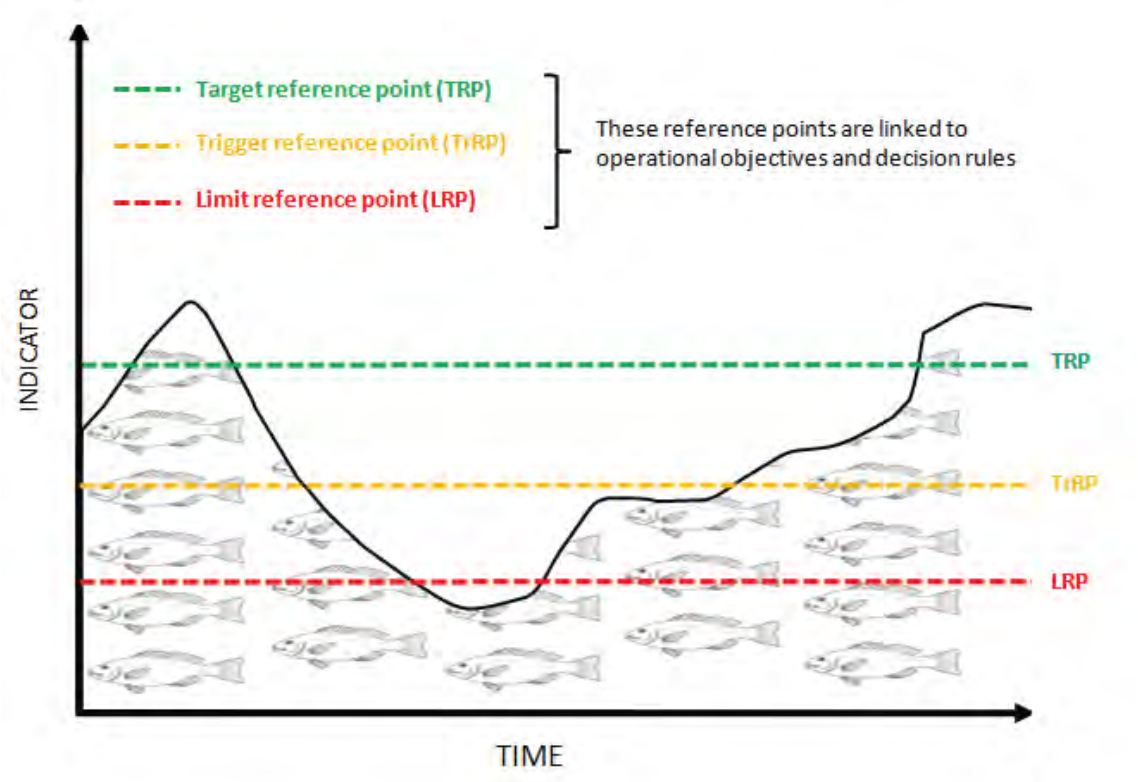

Figure 2 The relationship between a performance indicator (e.g. biomass shown as the solid line on the graph), the different types of reference points, operational objectives and decision rules (Sloan et al. 2014).

In this policy the criteria for classifying stock status is based on the follow those given in the "Status of key Australian fish stocks reports" (Flood et al. 2014), which assesses fisheries against the definition of 'recruitment overfished'. If a stock is harvested to the point where the spawning stock biomass has been reduced so that average recruitment levels are significantly reduced, the stock is considered to be recruitment overfished. The stock status categories described by Flood et al. (2014) include:

Sustainable stock – Biomass (or biomass proxy) is at a level sufficient to ensure that, on average, future levels of recruitment are adequate (i.e. not recruitment overfished) and that fishing pressure is adequately controlled to avoid the stock becoming recruitment overfished.

Transitional-recovering stock – A recovering stock-biomass is recruitment overfished, but management measures are in place to promote stock recovery, and recovery is occurring.

Transitional-depleting stock – A deteriorating stock-biomass is not yet recruitment overfished, but fishing pressure is too high and moving the stock or management unit in the direction of becoming recruitment overfished.

Overfished stock – Spawning stock biomass has decreased through catch, so that average recruitment levels are significantly reduced (i.e. recruitment overfished). Current management is not adequate to recover the stock, or adequate management measures have been put in place but have not yet resulted in measurable improvements.

Environmentally limited stock – Spawning stock biomass has been reduced to the point where average recruitment levels are significantly reduced, primarily as a result of substantial environmental changes or disease outbreaks (i.e. stock is not recruitment overfished). Fisheries management has responded appropriately to the environmental change in productivity.

Undefined stock – Insufficient information exists to determine stock status.

5.5 A statement defining acceptable levels of risk

All harvest strategies must ensure that there is at least a 90% probability that the ecological objectives designed to avoid a stock or management unit becoming recruitment overfished or recruitment overfishing occurring will be achieved (i.e. those that are linked to biological limit reference points). This is an explicit recognition of the need for precaution regardless of the level of uncertainty in fishery performance assessments.

In practice, this means that there should be no more than a 10% chance that a stock or management unit will fall below the established biological limit reference point under the application of the harvest strategy. This translates to no more than 1 year in 10 that it would fall below this limit. This is consistent with the risk standard applied in the Commonwealth Harvest strategy Policy (Australian Government 2007).

For any fish stock or management unit that is classified as overfished, there should be a high probability of stock recovery to levels above the limit reference point, within specified timeframes related to the generation time of the species. Depending on the fishery data and assessment available, the probability of achieving objectives could be determined by various quantitative, qualitative or empirical methods available to evaluate a harvest strategy and show if it will meet the risk criterion (Sloan et al. 2014). Further information on these methods is provided in the section titled 'Testing the robustness of the harvest strategy' in the accompanying Guidelines.

5.6 Monitoring strategy to collect data to assess fishery performance

A monitoring strategy must be developed to collect the ecological, economic, social and customary data that will inform how the performance indicators are tracking relative to the reference points. The form of monitoring required will depend on the choice of indicators and reference points used in the harvest strategy, as well as the scale and intensity of the fishery. The costs of different monitoring strategies will be relevant to the choice of performance indicators. The level of acceptable risk determined, in relation to breaching reference points, will also influence the extent of monitoring and data required.

An assessment is required to determine fishery performance. Fishery performance is measured by comparing where the performance indicators sit in relation to the reference points and achieving the operational objectives. Assessments will have varying levels of precision and accuracy, and it is important that this is factored into the selection of the performance levels that are used as limits, triggers and targets. It is also important for an assessment to be able to estimate or describe the uncertainty in an assessment to inform the decisions made. For example, the more uncertainty in the assessment of biological stock status, the more precautionary the biological reference points and decisions rules should be to meet the required 'acceptable level of risk' to achieve the objectives.

5.7 Decision rules that control the intensity of fishing activity/catch

All harvest strategies must contain clear decision rules that are designed to achieve the biological, economic, social and customary objectives of a fishery. Decision rules specify pre-determined management actions that will be taken to influence fishing activity or catch according to the reference point met. Meeting a target reference point may provide for growth and development (e.g. via a controlled increase in total allowable catch). Reaching a trigger reference point, or breaching a limit reference point, will result in preventative measures to protect the resource. These decision rules must be explicitly linked to quantifiable performance indicators and reference points.

When a stock or management unit is classified as overfished, transitional-depleting, transitional-recovering or environmentally limited, the decision rules must enable the stock or management unit to begin or continue to rebuild towards a sustainable level within specified timeframes. Adjustments to fishing intensity for a stock classified as overfished must be more intensive, put in place promptly and

target a shorter timeframe for resource rebuilding than those classified as transitional-depleting. The rate of rebuilding for a stock classified as transitional-depleting shall be determined in a way that considers the appropriate balance between short term losses and longer term gains.

In some circumstances, a graded management response is appropriate as a fish stock size reduces. This may involve a series of progressively more stringent actions as a sequence of trigger reference points is exceeded. The intent of a graded response is to take appropriate measures to prevent drastic management action.

5.8 Cost-effective and feasible

An analysis of the costs and benefits of alternative approaches and the explicit recognition of the ongoing and future data and monitoring requirements associated with a particular approach (i.e. the catch/cost/risk trade-offs) must be considered during the development process of a harvest strategy. This analysis should involve fishers and key stakeholders as it will allow choices to be made about the level of required investment in monitoring and assessment. In general, higher investment in monitoring and assessment will allow higher catch levels to be maintained because the biological stock status, and its response to management changes, will be monitored with greater precision.

5.9 Transparent, inclusive and easy to understand

The process used to develop a harvest strategy and the steps involved in their implementation and ongoing application must involve fishers and key stakeholders. Having a transparent and inclusive process to inform the development, implementation and application of a harvest strategy will give all stakeholders a better understanding and ownership of the harvest strategy and confidence in the decisions made. This is likely to result in harvest strategies that are respected and applied willingly by fishers and key stakeholders (Matic-Skoko et al. 2011; Sloan et al. 2014).

5.10 Unambiguous

Harvest strategies must avoid being ambiguous. This requires a thorough examination of the possible scenarios that may emerge so that they are factored into the design of the harvest strategy. A balance must be struck between the harvest strategy being too rigid and providing for a level of flexibility necessary to allow for adaptation to issues that are not anticipated and for new information to be considered. One way to achieve this balance is to identify “exceptional circumstances” that may trigger a review, or a departure from, or even suspension of, the harvest strategy such as a major mortality event through a disease outbreak.

5.11 Adaptability

Harvest strategies must be adaptive enough to allow for improvements and to address deficiencies or exceptional circumstances. Periodic amendments to ensure optimal decisions are being made are necessary to accommodate for new information that changes the understanding of the fishery, problems identified in the application of the harvest strategy or when uncertainties that were not previously understood arise. Adaptability should not be confused with flexibility in interpreting the results of assessments and applying the harvest decision rules, which will undermine the application of the harvest strategy (Smith et al. 2008).

5.12 Technical evaluation of harvest strategy

All harvest strategies must be tested for their robustness prior to implementation in order to demonstrate that they are likely to meet the core principles of the policy. Methods such as management strategy

evaluation can be used to test both model-based and empirical harvest strategies (Butterworth and Punt 1999). Such testing of management strategies is particularly important when information is incomplete and imprecise, and when the relationship between the decisions rules and management arrangements is complex.

5.13 Reporting and periodic review

All harvest strategies must be periodically reviewed, particularly in their early implementation, to ensure they are up to date and take into account the best available information, knowledge and understanding of a fish stock or fishery. The frequency of review must be stipulated in the management framework (regulations or management plan) for that fishery. A formal review of a harvest strategy should be planned and undertaken on an agreed time frame with fishers and key stakeholders (for example, every three to five years).

6. Addressing resource recovery

Harvest strategies must incorporate recovery strategies that can be actioned rapidly to prevent unsustainable depletion. Recovery strategies are necessary to stop the depletion issue exacerbating and/or accelerating, as well as avoid prolonged uncertainty to stakeholders. A recovery strategy should form an integral part of the pre-determined management action of a decision rule linked to biological limit reference points within the harvest strategy.

7. Roles and responsibility

The Northern Territory Fisheries Division is the government agency responsible for the implementation of this policy. The commercial, recreational and indigenous fishing sectors, along with other key stakeholder groups, have a key role to play in implementing the policy, through co-management arrangements.

Fishery management advisory committees and advisory groups will be responsible for the provision of advice to the agency. The main avenue for engagement of key stakeholders will be through the existing peak sector bodies.

8. Implementation

The Northern Territory Fisheries Harvest Strategy Policy comes into effect from the time of its approval by the Director of Fisheries. Harvest strategies consistent with the policy will be implemented in all key NT fisheries through fishery regulations or management plans developed under the Fisheries Act.

The harvest strategies developed under the Fisheries Act will be refined over time to ensure they are consistent with the Northern Territory Fisheries Harvest Strategy Policy when their respective fishery regulations or management plan is next reviewed.

The *Guidelines for Implementation of the Northern Territory Fisheries Harvest Strategy Policy* and *National Guidelines to Develop Fishery Harvest Strategies* (Sloan et al. 2014) will provide direction on how to the implement the policy.

9. Review of this policy

A review of the Northern Territory Fisheries Harvest Strategy Policy will be conducted five years after its inception. Any new ideas or initiatives developed during this time will be considered for inclusion in the revised policy.

10. Glossary

Allocation: The distribution of the opportunity to access fisheries resources, within and between fishing sectors.

Biomass (B): The total weight of a stock or a component of a stock; for example, the weight of spawning stock biomass is the combined weight of sexually mature animals.

Co-management arrangements: An arrangement in which responsibilities and obligations for sustainable fisheries management are negotiated, shared and delegated between government, fishers, and other interest groups and stakeholders.

Commercial fishing: Fishing undertaken for the purpose of trade or business.

Decision rule: Pre-determined actions, linked directly to performance indicators and information about current status, and designed to maintain fishery performance in line with operational objectives. These management actions may also be linked to reference points.

Ecologically sustainable development (ESD): Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased. ESD principles require that:

- decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equity considerations
- if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
- the principle of inter-generational equity: that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations
- the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making and
- improved valuation, pricing and incentive mechanisms should be promoted.

Ecosystem: A dynamic complex of plant, animal, fungal, and micro-organism communities and the associated non-living environment interacting as an ecological unit.

Environmentally limited stock: A state where spawning stock biomass has decreased to the point where average recruitment levels are significantly reduced, primarily as a result of substantial environmental changes or disease outbreaks (i.e. the stock is not recruitment overfished). Fisheries management has also responded appropriately to the environmental change in productivity.

Fishery: A term used to describe the collective enterprise of taking fish. A fishery is usually defined by a combination of the species caught (one or several), the gear and/or fishing methods used, and the area of operation.

Fish stock: A discrete population of a fish species, usually in a given geographical area and with negligible interbreeding with other biological stocks of the same species.

Fishery management unit: Defined in terms of the area of water or seabed that is fished, the jurisdictional boundaries that exist, the people involved in the fishery, the species caught, the fishing methods and the types of boats used.

Harvest strategy: A framework that specifies pre-determined actions in a fishery for defined species (at the stock or management unit level) necessary to achieve the agreed ecological, economic and social management objectives (see Sloan et al. 2014).

Limit reference point: Defines the values of a performance indicator for a fish stock or fisheries management unit that are considered unacceptable.

Management framework: A framework that contains the broad set of controls needed to manage a fishery usually described in fisheries regulations, a fishery management plan or a fishery management policy.

Management strategy evaluation: A qualitative or quantitative procedure where alternative management strategies are evaluated and compared before implementation.

Operational objective: An objective that has a direct and practical interpretation in the context of a fishery and against which performance can be evaluated (in terms of achievement) (Fletcher et al. 2002).

Overfished stock: A state where the stock is recruitment overfished and current management is not adequate to recover the stock, or where appropriate management measures have been implemented but have not yet resulted in measurable improvements.

Performance indicator: A quantity that can be measured and used to track changes in an operational objective.

Precautionary principle: A concept that asserts that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.

Recreational fishing: Fishing other than commercial fishing or traditional fishing, where the catch is either released or retained.

Recruitment overfished: A state where the spawning stock biomass for a stock or management unit has been reduced through catch, so that average recruitment levels are significantly reduced.

Stock assessment: An assessment that produces information on the biological status of a stock.

Stakeholder: An individual or a group with an interest in, or connection with, the conservation, management and use of a resource.

Sustainable stock: A state where stock biomass (or a biomass proxy) is at a level sufficient to ensure that, on average, future levels of recruitment are adequate (i.e. not recruitment overfished) and that fishing pressure is adequately controlled to avoid the stock becoming recruitment overfished.

Target reference point: Defines the values of a performance indicator for a fish stock or fisheries management unit that are desirable or ideal and at which management should aim.

Total Allowable Catch (TAC): In relation to a fishery, means the total quantity of aquatic resources of a particular class that may be taken from the waters of the fishery during a particular period.

Traditional fishing: Fishing for the purposes of satisfying personal, domestic or non-commercial communal needs, including ceremonial, spiritual and educational needs and utilising fish and other natural marine and freshwater products according to relevant Aboriginal custom.

Transitional-depleting stock: A state where stock biomass is not yet recruitment overfished, but fishing pressure is too high and moving the stock towards an overfished state.

Transitional-recovering stock: A state where stock biomass is recruitment overfished, but management measures are in place to promote stock recovery, and recovery is occurring.

Trigger reference point: Defines the values of a performance indicator for a fish stock or fisheries management unit at which a change in management is considered or adopted. Undefined-indicates that insufficient information exists to determine stock status.

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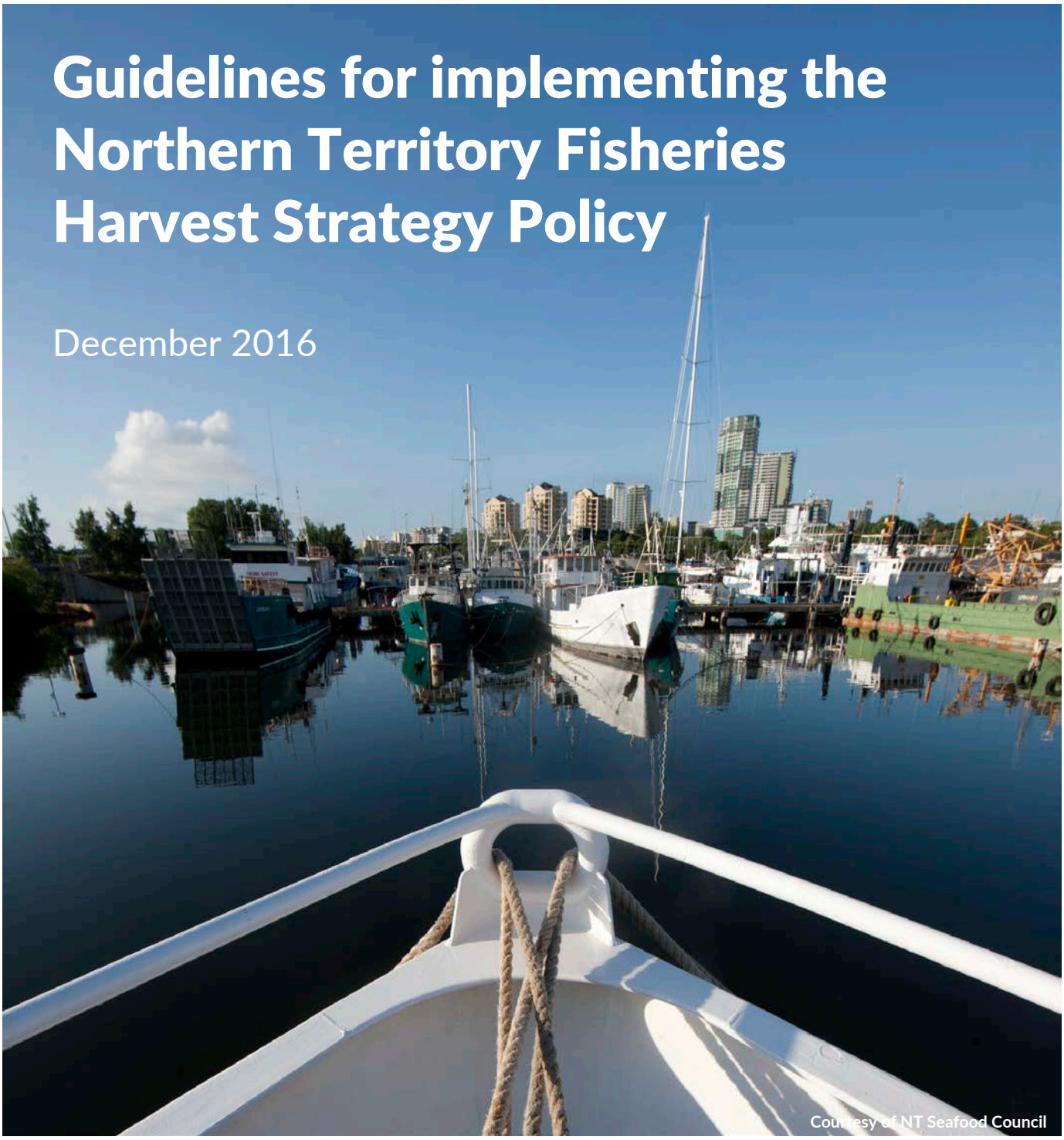
DEPARTMENT OF
PRIMARY INDUSTRY AND RESOURCES

Guidelines for implementing the Northern Territory Fisheries Harvest Strategy Policy

December 2016



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NORTHERN TERRITORY GOVERNMENT

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1. Introduction

The Northern Territory Fisheries Harvest Strategy Policy (the Policy) provides an overarching framework for the development of consistent harvest strategies for Northern Territory fisheries, to provide clarity and certainty to all users regarding management decisions and further the objectives of the NT *Fisheries Act 1988*.

The Guidelines for implementing the Northern Territory Fisheries Harvest Strategy Policy (the Guidelines) have been developed to assist with the implementation of harvest strategies under the Policy and provide guidance on applying the Policy in various fishery circumstances. The Guidelines are intended to support harvest strategy development across the full range of Northern Territory fisheries and are consistent with, and utilities text and information contained within the National Guidelines to Develop Fishery Harvest Strategies (Sloan et al. 2014).

2. Key steps in developing a harvest strategy

The Policy provides the core principles of a harvest strategy. Using those principles, the Guidelines aim to provide an overview of the key steps that should be followed, as a guide to help fishery managers, fishers and other stakeholders during the process of developing a harvest strategy. These steps may vary depending on whether comprehensive management arrangements already exist at the individual fishery level.

2.1 Define the fishery

The initial step in developing a harvest strategy is to define the fishery. Having an agreed and clear definition of the fishery makes it easier to identify which objectives are of most relevance to the fishery. This is important because objectives will vary depending on the individual fishery and its characteristics. This step involves compiling and reviewing all available information on the fishery. Some of the information that should be considered includes:

- Identify the target species, geographical (management unit) and biological stock boundaries;
- Life history characteristics for each species;
- Determine all sources of mortality;
- Method of fishing such as gear type, vessel numbers and vessel type;
- Location of fishing, taking note whether there have been spatial changers over time;
- User groups, including any information on catch shares;
- Identify any ecological impacts caused by fishing, including any TEPS interactions;
- Identify any environmental effects on the fishery; and
- Existing management arrangements currently in use (whether input or outputs controls are used, including any spatial management), the jurisdictions involved, any regulations, compliance arrangements and what management levers can be used to constrain fishing mortality.

2.2 Stakeholder engagement

An important step in the design of a harvest strategy is to establish or renew the relevant fishery management advisory committee or advisory group to engage stakeholders in the process. The roles of stakeholders need to be clearly stated in the harvest strategy design process because priorities often vary between different stakeholder groups. Unless there is a mutual understanding of the different stakeholders' priorities, there will be no clarity on how the fishery should be operated in terms of addressing ecological and where appropriate, economic, social and customary performance outcomes.

2.3 Identify relevant legislation and over-arching policy objectives

It is important at the beginning of the process to identify the high level over-arching legislative and policy objectives that will influence and shape the nature of the harvest strategy for each fishery. The high level objectives need to be taken into account when developing the conceptual management objectives for each fishery (see next section).

Some examples of overarching legislation, policy and codes of practice to consider here include international, Commonwealth and Territory legislation and overarching policies related to the ecologically sustainable development (ESD) of fisheries. International obligations are contained in treaties such as the United Nations (UN) Convention on the Law of the Sea (1982), the UN Straddling Fish Stocks Agreement (UNCLOS 1995) and the FAO Code of Conduct for Responsible Fisheries (FAO 1995). Relevant conservation-focused international obligations include the Convention on Biological Diversity, Convention on Conservation of Migratory Species of Wild Animals and Convention on International Trade in Endangered Species (CITES) of Wild Fauna and Flora. Relevant Commonwealth legislation includes the *Environment Protection and Biodiversity Conservation Act 1999*, the *Fisheries Management Act 1991* and the *Aboriginal Land Rights (Northern Territory) Act 1976*. Within the Northern Territory the relevant legislation is the *Fisheries Act 1988*. Administration of this Act and related broad policy frameworks lies within the Department of Primary Industry and Fisheries.

The management objectives of the legislation and overarching policies described above are 'high-level' and frequently expressed in broad terms, such as 'maximise benefit for the community' and are not designed to be used as actual operational targets for a harvest strategy.

2.4 Develop defined conceptual management objectives

The formation of an effective harvest strategy depends heavily on having well defined conceptual management objectives that determine the overall outcomes that the harvest strategy will work to achieve. Conceptual objectives are needed to translate the high-level objectives into specific individual fishery management objectives and should be contained within a fishery management framework. They form the link between the high level objectives and the operational objectives needed for the purposes of harvest strategy development (see Box 1 for an example taken from the South Australian Pipi Fishery).

Conceptual objectives should relate to the species, fish stock or fisheries management unit that they apply to and need to be developed in the context of the high level overarching legislation and policy objectives and any relevant ministerial directives. These conceptual objectives should be defined and agreed upon by key stakeholders early on in the development of a harvest strategy because they directly influence the management options suitable for the fishery (Dowling et al. 2011).

When developing the conceptual management objectives, the trade-offs between the ecological, economic, social and customary outcomes being sought should be considered at the beginning of the harvest strategy design process, preferably in consultation with all key stakeholders. These trade-offs should be identified and understood so that the agreed management objectives can be achieved.

Box 1: Example of the linkage between 'high-level' legislative objectives, 'conceptual' fishery management objectives and 'operational' management objectives for the Pipi Fishery

TIER 1-High level legislative objective (*Fisheries Management Act 2007*)
-To protect, manage, use and develop the aquatic resources of the State in a manner that is consistent with ecologically sustainable development

TIER 2-Conceptual fishery management objective (Lakes and Coorong Fishery Management Plan)
-Ensure the Lakes and Coorong Fishery resources are harvested within ecologically sustainable limits

TIER 3-Operational management objective for Pipi Fishery (Lakes Coorong Fishery Management Plan)
-Maintain a target Pipi relative biomass above 10 kg/ 4.5 m^2 and not less than 8 kg/ 4.5 m^2
-Ensure the Pipi relative biomass does not drop below 4 kg/ 4.5 m^2
-Maximise Fishery Gross Margin

2.5 Determine the stock status and other ESD considerations for the fishery

Determining the status of the fishery being managed is an important step in the harvest strategy design process because the operational objectives used could vary based on fishery or stock status. For example, an overfished stock may require additional resources for assessment and have more restrictive decision rules than a stock that is considered sustainable. To ensure consistency, the guidelines in the National Fish Stock Status Reporting Framework (Flood et al. 2012; 2014) will be used to assess fishery biological status and the reference points defined in this framework will be linked to the harvest strategy, to assist with reporting of biological status.

To enable a harvest strategy to incorporate all aspects of ESD (and not just focus on the ecological aspects), the economic, social and customary performance of each fishery should also be considered, where appropriate. An effective way to establish the overall ESD status and context of a fishery is to use the national ESD reporting framework tool developed by Fletcher et al. (2002) to conduct an assessment of the ecological, economic, social and customary risks to the fishery. Conducting an ESD risk assessment will assist to identify and prioritise the full suite of ecological, economic, social and customary issues in the fishery and help inform harvest strategy development in the context of achieving ESD outcomes for the fishery. While conducting an ESD risk assessment is not considered to be critical to developing a harvest strategy, it is recommended that this occurs because it will facilitate a holistic approach to ensure the full set of ESD characteristics of a fishery are incorporated in the harvest strategy.

Conducting an ESD risk assessment will also ensure issues such as by-catch, by-product and broader ecosystem impacts including TEPS interactions are taken into account and, where necessary or relevant, built into the harvest strategy. It is important to note that while issues like TEPS interactions may influence harvest strategy design, they should not be considered a determining factor, as there are many ways in which such issues can be managed within the overall fisheries management system.

2.6 Building the harvest strategy

The key technical elements of a harvest strategy form an integrated package and should be developed together to create a formal structured decision making framework (Sloan et al. 2014).

2.6.1 Develop operational management objectives

Because the conceptual fishery management objectives are frequently expressed in broad terms, the desired outcomes for a harvest strategy need to be translated into operational management objectives that are relevant for defined species within a fishery. Operational management objectives are more precise and formulated in such a way that they can be easily measured and achieved within a specified period. To be effective, operational objectives should be consistent with higher level legislative and conceptual fishery management objectives articulated in the management framework and linked to performance indicators and reference points. Often, a particular reference level of a performance indicator can be translated directly into an operational objective. Establishing linkages between the operational objective, performance indicator and reference point in this way, helps to ensure that the performance of the fishery can be measured and audited against the operational objectives. Examples that show how a defined conceptual management objective is translated into an operational and measurable objective for many types of fisheries are presented in the National ESD Reporting Framework for Australian Fisheries: The How to Guide for Wild Capture Fisheries (Fletcher et al. 2002; 2003).

2.6.2 Develop performance indicators, reference points and acceptable levels of risk

The indicators and reference points developed for a particular fishery and/or stock will be largely determined by the availability of information. This will depend on both availability of past data, but also on decisions made about future monitoring and assessment methods to be used in the fishery, noting the 'catch-cost-risk' trade-off inherent in such choices (Fletcher et al. 2002; Sainsbury 2005; Dowling et al. 2013). The performance indicators that are chosen should be able to measure the extent to which the objectives are being achieved.

Importantly, the development of indicators and reference points is an iterative process and there will often be a range of indicators and reference points available. The choice of which to use will be influenced by the objectives chosen and the relative costs of data collection and stock assessment required to determine the performance indicators.

Harvest strategies should be designed to meet the probability and risk thresholds specified for the management of the fishery, in accordance with the Policy, regardless of the level of uncertainty of assessments. This is an explicit recognition of the need for precaution in the face of uncertainty. In general terms, it requires that increasing assessment or management uncertainty will be mitigated by reducing exploitation rates. Harvest strategies that adopt higher levels of exploitation should adopt higher levels of monitoring and more regular assessment, which inherently involves higher costs. Therefore, in a cost-limited context, a more cautious strategy should be adopted in data-poor fisheries.

A tiered approach is a useful way to deal with different levels of information and uncertainty in assessments of stocks (e.g. Smith et al. 2008). Each tier corresponds to a given availability of data and a method to assess biological status. The decision rules may also vary across tiers, and should be selected at each tier to achieve the same acceptable level of biological, economic and social risk. This inevitably means that tiers based on less certain information will need to be more precautionary in nature.

2.6.3 Developing the monitoring and assessment system and the decision rules

There will often be a range of available data collection, monitoring and assessment methods to consider when developing the harvest strategy. The right option will require judgement on a case by case basis to suit the individual fishery needs and will be influenced by the available data, future needs and the relative costs associated with the different methods. As noted in Sloan et al. (2014), decision rules can take many forms and need to be part of the overall package. The decision rules are linked directly to the reference points and performance indicators and are dependent on the monitoring and assessment strategy that is chosen. These choices need to be pragmatic and take account of the core policy principles contained within the Policy prior to implementation.

2.7 Testing the robustness of a harvest strategy

In recognition of the inherent uncertainty in knowledge of the past and current biological stock status of fish stocks or fisheries management units, and their response to different levels of harvest as well as their current and future productivity, an evaluation of the likely performance of any proposed harvest strategy to achieve operational objectives should be undertaken prior to implementation (Davies et al. 2007). Such testing is particularly important when information is incomplete and imprecise, and when the relationship between the harvest decision rule and management actions is complex (Davies et al. 2007).

There are various quantitative, qualitative, empirical and experiential methods available to undertake an assessment of whether the harvest strategy is likely to be appropriate. Such assessments are often called management strategy evaluation (MSE). The most complex method is to use a simulation model to represent the assumed underlying dynamics of the fishery and generate future data to evaluate how different operational objectives in a harvest strategy will impact on future fishery performance (e.g. Punt et al. 2002; Punt et al. 2012) by comparing the relative performance of possible alternatives. This allows for the explicit calculation of the probability of breaching reference points, even for stocks where current biomass cannot be calculated (Australian Government 2007).

An evaluation of a harvest strategy need not just be simulation based. More qualitative methods can also be applied, and 'empirical' tests can also be undertaken to evaluate scenarios such as 'what if' the harvest strategy had been applied in the past, given the history of biological stock status observed (see Smith et al. 2004; Prince et al. 2011) or how well the approach worked in the past, in the fishery being assessed, or in similar fisheries. The focus of the evaluation is to identify whether the proposed harvest strategy is likely to be suitably 'robust' based on known and plausible sources of uncertainty in the biological stock status and dynamics of the fishery. In other words, it provides a basis to identify the strategies that are most likely to meet objectives in spite of the uncertainty in the stock status and dynamics of the fishery and its response to different levels of harvest and management (Davies et al. 2007; Prince et al. 2011).

2.8 Periodic review and update of the harvest strategy

Experience world-wide has demonstrated that irrespective of the amount of prior testing of a harvest strategy periodic amendments (to ensure optimal management decisions) are likely and indeed necessary (Smith et al. 2008). For example, when there is new information that substantially changes understanding of the biological stock status of a fishery, when problems are identified in application of the harvest strategy or when uncertainties that were not previously understood arise (Australian Government 2007).

One way to build flexibility into a harvest strategy is to identify 'exceptional circumstances' that may trigger a departure from, or even suspension of, the harvest strategy. This allows for flexibility in a structured way, but not so much flexibility that it undermines the intent of having a harvest strategy. In this sense, understanding the boundaries of flexibility in a harvest strategy is part of the iterative process to develop mutual understanding among managers, fishers and stakeholders about expectations from adopting a formal harvest strategy. Specifically, this could include defining the exceptional circumstances that may trigger such a change.

A formal review of a harvest strategy, involving all stakeholders, should be planned and undertaken on an agreed time frame (for example, every three to five years). Harvest strategies need to be adaptive enough to address deficiencies, unforeseen circumstances and to allow for improvements (Walters and Hilborn 1978), but should not be changed to relax or vary the harvest strategy when the decisions are not suitable to some, or all, stakeholders.

2.9 Considerations for specific fishery scenarios

While the principles of a harvest strategy are the same for any fishery, it is important to identify specific issues that need to be considered when applying the Policy to a given fishery, and to tailor the harvest strategy appropriately. The *National Guidelines to Develop Fishery Harvest Strategies* (Sloan et al. 2014) contains a set of considerations to assist fishery managers, fishers and other stakeholders in the development of harvest strategies for particular fishery scenarios and should be consulted where necessary.

3. Glossary

Biomass (B): The total weight of a stock or a component of a stock; for example, the weight of spawning stock biomass is the combined weight of sexually mature animals.

Decision rule: Pre-determined actions, linked directly to performance indicators and information about current status, and designed to maintain fishery performance in line with operational objectives. These management actions may also be linked to reference points.

Ecologically sustainable development (ESD): Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased. ESD principles require that:

- decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equity considerations
- if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
- the principle of inter-generational equity: that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations
- the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making and
- improved valuation, pricing and incentive mechanisms should be promoted.

Ecosystem: A dynamic complex of plant, animal, fungal, and micro-organism communities and the associated non-living environment interacting as an ecological unit.

Fishery: A term used to describe the collective enterprise of taking fish. A fishery is usually defined by a combination of the species caught (one or several), the gear and/or fishing methods used, and the area of operation.

Fish stock: A discrete population of a fish species, usually in a given geographical area and with negligible interbreeding with other biological stocks of the same species.

Fishery management unit: Defined in terms of the area of water or seabed that is fished, the jurisdictional boundaries that exist, the people involved in the fishery, the species caught, the fishing methods and the types of boats used.

Harvest strategy: A framework that specifies pre-determined actions in a fishery for defined species (at the stock or management unit level) necessary to achieve the agreed ecological, economic and social management objectives (see Sloan et al. 2014).

Management framework: The broad set of controls needed to manage a fishery usually described in fisheries regulations, a fishery management plan or a fishery management policy.

Management strategy evaluation: A qualitative or quantitative procedure where alternative management strategies are evaluated and compared before implementation.

Operational objective: An objective that has a direct and practical interpretation in the context of a fishery and against which performance can be evaluated (in terms of achievement) (Fletcher et al. 2002).

Overfished stock: A state where the stock is recruitment overfished and current management is not adequate to recover the stock, or where appropriate management measures have been implemented but have not yet resulted in measurable improvements.

Performance indicator: A quantity that can be measured and used to track changes in an operational objective.

Precautionary principle: A concept that asserts that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.

Recreational fishing: Fishing other than commercial fishing or traditional fishing, where the catch is either released or retained.

Recruitment overfished: A state where the spawning stock biomass for a stock or management unit has been reduced through catch, so that average recruitment levels are significantly reduced.

Stock assessment: An assessment that produces information on the biological status of a stock.

Stakeholder: An individual or a group with an interest in, or connection with, the conservation, management and use of a resource.

Traditional fishing: Fishing for the purposes of satisfying personal, domestic or non-commercial communal needs, including ceremonial, spiritual and educational needs and utilising fish and other natural marine and freshwater products according to relevant Aboriginal custom.

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