Western Australian Marine Stewardship Council Report Series

West Coast Deep Sea Crustacean Managed Fishery

Addendum October 2017

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Background

The West Coast Deep Sea Crustacean resource consists primarily of Crystal (snow) (*Chaceon albus*), Champagne (spiny) (*Hypothalassia acerba*) and Giant (king) (*Pseudocarcinus gigas*) crabs. The resource is accessed primarily by the commercial West Coast Deep Sea Crustacean Managed Fishery (WDSCMF) which targets crystal crabs, with the West Coast Rock Lobster Managed Fishery (WCRLMF) retaining a small amount of champagne crabs as by-product. The WDSCMF is a 'pot' fishery is primarily managed through a total allowable catch with two unit classes. The annual TAC is determined based upon a formal Harvest Strategy 2015-2020 (DoF, 2015) that was adopted by industry to deliver the long-term objectives for this fishery that incorporate the sustainability of all captured aquatic resources as well as broader ecological, social and economic objectives. The annual quota in 2017 was 154 tonnes of Crystal crabs (A class units) and a combined 14 tonnes of Champagne and Giant crabs (B-class units).

This document summarises the status of the resource plus the other ecological components of the fishery based upon the 2016 season which provides the information needed to set the TAC for the 2018 season.

In 2016 the WDSCMF achieved Marine Stewardship Council certification, confirming the robustness of the stock assessment, ecosystem impact and governance arrangements used for the fishery. The knowledge to-date used during that that certification is presented in How et al (2015). The current document is an addendum to How et al (2015) and represents an incremental update on that report.

http://www.fish.wa.gov.au/Documents/wamsc_reports/wamsc_report_no_4.pdf

For some of the criteria where the standard was not achieved, work will be undertaken over the five-year certification period to address a number of conditions that were placed on the fisheries. This addendum provides catch and effort information between the date of certification and the end of the 2016 season, in addition to updates on progress made to-date to address those MSC conditions.

MSC Principle 1

MSC Principle 1 (P1) focuses on maintaining, indefinitely, fishing activity at a level that is sustainable for the targeted populations (MSC 2013).

1.1 Stock Assessment

1.1.1 Catch

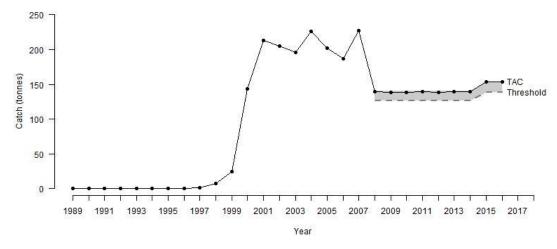
In 2016, a total of 154.5 tonnes of the deep sea crustacean resource was landed. The vast majority of this resource accessed was Crystal crab landed by the WDSCMF (Table 1).

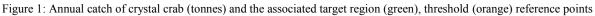
Table 1: Catch of the West Coast Deep Sea Crustacean Resource by species for the 2016 season and fisheries accessing it. West Coast Deep Sea Crustacean Managed Fishery (WDSCMF) and West Coast Rock Lobster Managed Fishery (WCRLMF)

Species	WCDSCMF	WCRLMF
Crystal Crab	153,313 kg	0 kg
Champagne Crab	30 kg	1,167 kg
Giant Crab	0 kg	0 kg

The landings of crystal crab by the WCDSCF in 2016 were 153.3 tonnes, representing 99.6% of the 154 tonne A class TAC which is within the target range (Figure 1a).

• The TAC was achieved





1.1.2 Catch Distribution

The WDSCMF operates off the west coast of Western Australia (WA) from 34.4°S to the Northern Territory border, on the seaward side of the 150 m isobath out to the extent of the Australian Exclusive Economic Zone (EEZ; 200 nm boundary). While the fishery covers

three WA management bioregions: North Coast, Gascoyne Coast and West Coast, the majority of fishing activities occurs in the Gascoyne Coast Bioregion. With the changes in management and the removal of zones in 2008, there was a spatial contraction of fishing effort. The spatial extent of the fishery in 2016 was 42 10x10 nm blocks. This is less than the threshold level of 113 blocks and therefore within the target region (Figure 2). There was minimal change in the spatial distribution of the fishery in 2016 when compared to the distribution of fishing effort in 2015 (Figure 3).

Spatial extent of the fishery is within its target region

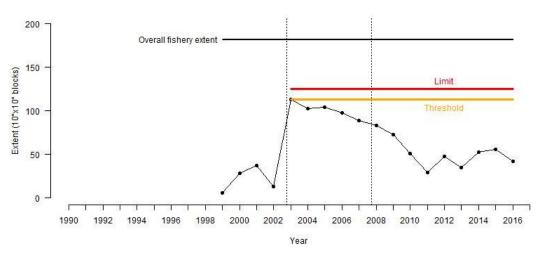


Figure 2: Annual spatial extent of fishing (10x10 nm blocks) for crystal crabs and associated threshold (orange) and limit (red) reference points

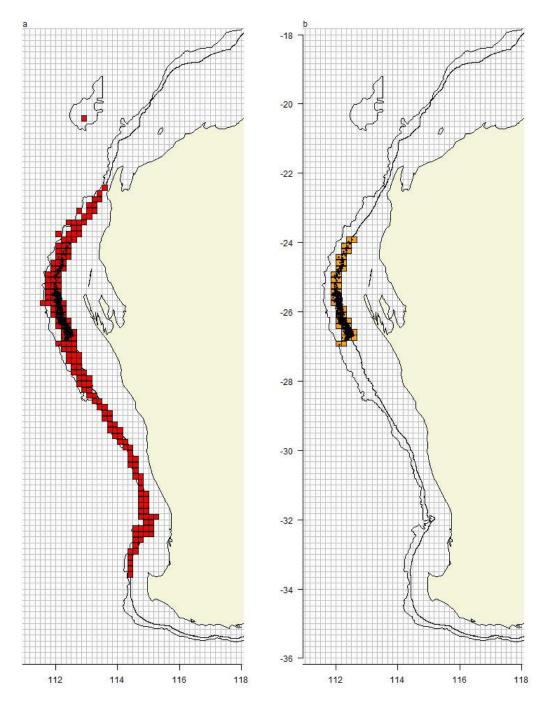
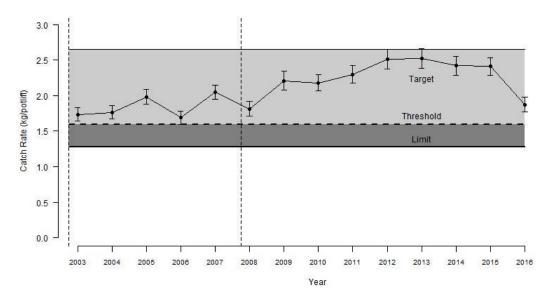


Figure 3: Location of fishing effort in 2016 (black dots) and the 10x10 nm blocks fished during a) the reference period of 2003-2012 (red) and b) 2015 season.

1.1.3 Standardised Catch Rate of Legal Crabs

The catch rate of legal crystal crabs is standardised for soak period, fishing vessel, latitude and depth of fishing and month using a GLM approach. The standardised catch rate increased after the change in management arrangements in 2008 to levels around 2.2 kg/potlift (Figure 4). In 2016 the catch rate of retained crabs declined to 1.87 kg/potlift which while the lowest since 2008 (Figure 4), remains within the target range. The decline in retained catch rates in

2016 coincided with an increase in discarding due high grading within the fishery. A change in the grade mix was observed from processor data with a clear increase in the proportion of the large category crystal crabs for both processors in 2016 (Figure 5). Discards associated with high grading is now being recorded and will be incorporated into future assessments.



The standardised catch rate of legal crystal crabs is within the target range

Figure 4: Annual standardised catch rate (± SE) of retained legal crystal crab (kg/potlift) and associated reference points.

Processor A

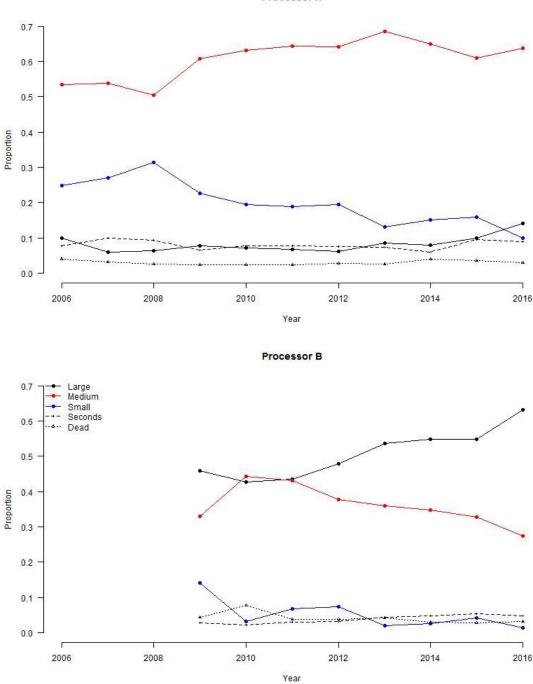


Figure 5: Proportion of catch for the two deep sea crustacean processors by grade category.

1.1.4 Standardised Catch Rate of Berried Female and Undersize Crabs

The standardised catch rate of both berried female and undersized crabs are calculated from logbook estimates provided by skippers so there is inherent variation in the accuracy and precision of estimates submitted by different skippers. On-board camera systems have been used in an attempt to adjust for changes in discard estimation. While not possible for all vessels each year, adjusted values are incorporated into the standardised catch rate analysis when available. The standardised catch rate of berried female crabs in 2016 was 2.8 berried

females/potlift. This was a large increase from the 1.27 berried females/potlift estimated in 2015 (Figure 6a), resulting in the three-point moving average to stabilise. The standardised catch rate of berried female crabs is above the threshold level of 1.6 berried females/potlift. The standardised catch rate of undersize crabs in 2016 was 3.06 undersize crabs/potlift. This was a slight decline from the 3.19 undersize crabs/potlift recorded in 2015 (Figure 7b), resulting in the rolling average to continue to decline but this is still above the threshold level of 2.88 undersize crabs/potlift.

• The standardised catch rate of the secondary performance indicators (berried females and undersize crabs) are both above their respective threshold reference points

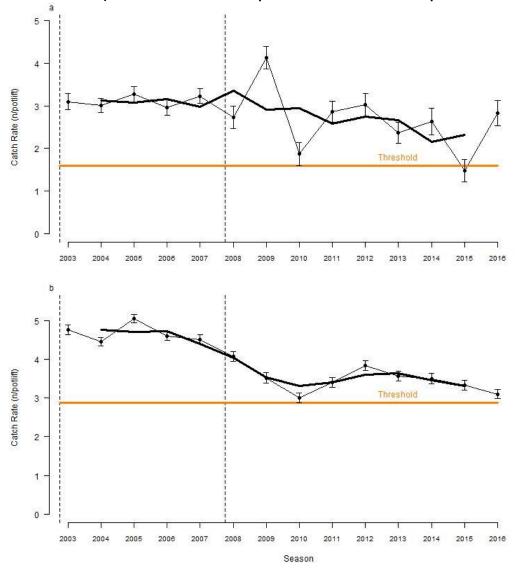


Figure 6: Annual standardised catch rate (\pm SE) of a) berried female (n/potlift) and b) undersize crabs (n/potlift) with associated threshold reference points (orange) and rolling three-point average (thick line).

1.2 Weight of evidence assessment

• The key lines of evidence used in the assessment show that:

1.2.1 Catch

Due to the location of the fishery there is no recreational or customary take of *Chaceon albus*. The attainment of the TAC is one of the primary indicators for this fishery as all landings are accurately recorded. The TAC was introduced in 2008 and since then has been achieved each year including in 2016.

There is no indication from the catch data of an unacceptable level of stock depletion

1.2.2 Catch Distribution

The catch is only obtained from a small proportion of the available habitat within the fishery. The removal of zoning, which was coincident with the move to output management (2008), saw a contraction of fishing activity. The distribution of catch remained concentrated within the Gascoyne Coast Bioregion, with minimal shift in catch distribution evident from 2015 to 2016.

There is no indication that catch levels have been maintained by a progressive shifting of the area fished that may be indicative of unacceptable stock depletion

1.2.3 Catch Rates

The catch rate of legal crabs is the other primary indicator and the most reliable for stock abundance estimates as the catch, effort, depth, month and other factors for which catch rate is standardised for are recorded every trip, with an accurate record of weight also being recorded. However, it should be highlighted that efficiency creep is not accounted for in the standardised catch rate. Catch rate increased since interim management (2003) to a peak of 2.52 kg / potlift in 2013. Since then the standardised catch rate of legal crystal crabs has declined, though it remains within the target range. Discussions with license holders revealed that in 2016 there were some significant changes in market demand for different size grades and fleet dynamics within the WDSCMF. These may have contributed to the decline in the standardised catch rate of legal crabs (i.e. the high grading of legal crabs has increased in recent years).

The secondary indices of berried female and undersize crabs are both above the threshold levels. There has been a notable increase in the catch rate of berried females, though the decline in the catch rate of undersize crabs continued again in 2016. This again is likely to be impacted by the market changes in demand for grade size, which is evident in processor grade category data as fishers move to areas of larger crabs to supply markets and hence are less likely to encounter undersized crabs.

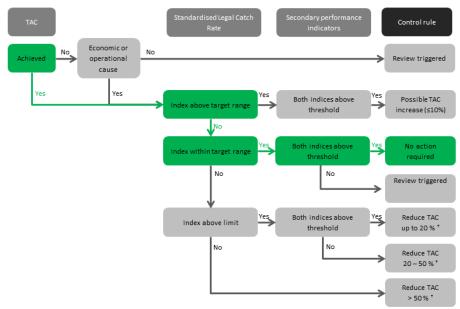
There is no indication that catch rates of legal, berried female or undersize crabs are indicative of unacceptable stock depletion

1.2.4 Summary

All lines of evidence indicate that the status of the West Coast Deep Sea Crustacean Resource is unlikely to be at an unacceptable level of stock depletion.

1.3 Harvest Control Rules and TAC Advice

- With;
- TAC achieved
- Standardised catch rate of legal crabs within target range
- Both secondary indices above their respective threshold levels
 - the control rules indicate that there is no action required with regard to the TAC for A class units (Figure 8).



 † The extent of TAC reduction will be determined by the extent to which the indicator has breached the threshold or limit reference point

Figure 7: Harvest control rule decision tree with current (2016) assessment flow (green).

MSC Principle 2

2.1 Retained Species

2.1.1 Retained Catch

Other species of deep sea crustaceans retained from the West Coast Deep Sea Crustacean Resource are the Champagne and Giant crabs. Catches of Champagne and Giant crabs were 30 (Figure 9a) and 0 kilograms (Figure 9b) respectively, resulting in a combined catch of B class units of 30kgs. This is below the 14 tonne TAC for B class units and within the target range for both species (Figure 9).

The retained species performance measure was met

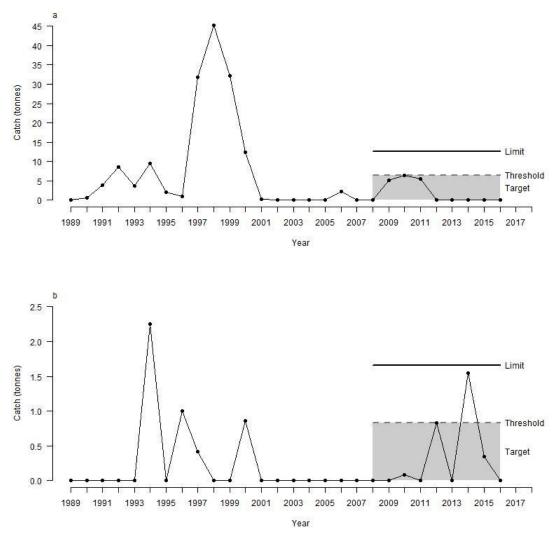


Figure 8: Annual catch of a) champagne and b) giant crab (tonnes) and the associated target (green), threshold (orange) and limit (red) reference points.

As the TAC has not been attained for B class units, and catches are negligible, research advice is to retain the 14 t TAC for B class units. Further advice will be provided in due

course relating to splitting B class units with separate units and TACs for each of champagne and giant crabs.

2.1.2 Bait usage

Bait usage statistics from the WCDSCMF are presented below for all years between certification and the current season at the time of this document's preparation. Note that the statistics represent data from all vessels actively fishing in those years (i.e. 100% fleet coverage). The relative usage of Blue Mackerel has decreased over the three seasons presented reflecting a transition towards local managed bait sources.

Table 2: Identity, origin, type and amount of bait (kg) used during the 2014-16 fishing seasons, and its percentage by weight of the landed West Coast Deep Sea Crustacean catch. Bait status with regard to MSC assessment is indicated (OOS - out of scope, Major ->10% of total UoC catch)

			2014				2015			2016	
Total UoC catch	і (T)			140			154		154		
Bait Type	Origin		Usage (T)	%		Usage (T)	%		Usage (T) 9	6	
Blue Mackerel	NZ	Whole	13	8.4	Major	43	27.9	Major	20.26	13.2	Majo
Hoki	NZ	Heads	13.6	8.8	OOS	16.2	10.5	OOS	14.76	9.6	oos
Herring	Aus	Whole	13.9		Major						
Aus Salmon	Aus	Cutlets							20.35	13.2	Majo
Pilchards	Aus	Whole	9.3						11.1	7.2	Majo
Total bait usage	e (T)	•	1	49.8			59.2		66.47		
Conversion rate	•			0.36		0.38 0.43					

Two local bait sources have seen an increase in the most recent year, Australian salmon and Pilchards.

A 2015 stock assessment considers that stock of Australian salmon is adequate and that the South Coast Salmon Fishery is sustainable (Fletcher et al., 2017). The south coast and west coast pilchard stocks are considered adequate and the South Coast and West Coast Purse Seine Managed Fisheries are considered sustainable (Fletcher et al., 2017)

Specific works to address the bait component of Condition 2 are currently in progress and include:

The development of a Bait Sustainability Guidelines (BSG) document. The BSG is currently in draft format and is undergoing the development and consultation process detailed later in the document. It has been drafted in response to the WCDSCMF condition but has been designed to be applicable to all of the state's bait-based fisheries, and to meet an MSC level of rigour.

A bait Memorandum of Understanding. The MOU has been developed by the WAFIC and is intended to formalise an agreement among the fishers of the WCDSCMF to adhere to the key principles of the BSG document. The MOU is currently in a complete but unsigned state, pending the formal publication of the BSG.

Copies of both the BSG and MOU in their draft state have been provided to at the time of audit.

2.2 Bycatch (non-ETP) species

Bycatch is recorded on a by-trip basis through volunteer logbook returns and validated using an on-board camera system. Volunteer logbooks reported 69,010 potlifts during the 2016 season and no by-catch was recorded. Validation using on-board cameras examined 1063 potlifts from 9 selected lines of gear with complete camera coverage of the line and reported zero by-catch. During the 2015 season a total of 14 lines were examined, 9 from one vessel and 5 from the other, again finding zero bycatch.

With no reported bycatch, which was validated by independent remote monitoring, the WDSCMF is unlikely cause an unacceptable level of risk to bycatch species populations.

• The by-catch performance measure was met

2.3 Endangered, threatened and protected (ETP) species

The traps and ropes used in deep sea crab longlines have minimal capacity to interact with ETP species. The main possible interaction would be entanglement in ropes/lines; however, with approximately 1000 traps in the fishery and an average of 120 traps per longline, there is estimated to be fewer than 25 vertical rope lines deployed at any given time. There were no reported interactions with ETP species in the 2016 season. This is less than the threshold level of three interactions with any species and hence are unlikely cause an unacceptable level of risk to ETP populations.

• The ETP performance measure was met

2.4 Habitats

As the Harvest Strategy for this fishery includes performance indicators relating to the spatial extent of the fishery, information on that aspect of the fishery is detailed under Principle 1 at the beginning of this document.

In terms of the extent of the fishery providing an indication of the extent of the impact of the fishery on habitats, there has been a net decrease in the fished area since 2008 and little change in the extent between the two most recent seasons. The initial assessment in 2016 found that the WCDSCMF passed the habitat performance indicators and since that time there have been no changes to the management strategies or gear types.

2.5 Ecosystem Effects of Fishing

- Effects of the WCDSCF on the ecosystem involve a cumulative assessment of;
- Current management arrangements
- Annual catch of all retained and by-catch species

- Bait usage
- ETP interactions
- Extent of area fished, and
- Annual fishing effort
 - As stated previously, all of these performance measures were above threshold levels, and as such, the cumulative impacts of WDSCMF are considered to be unlikely cause an unacceptable level of risk to ecological processes.
- The ecosystem performance measure was met

MSC Principle 3

MSC Principle 3 (P3) relates to the effective management of the fishery under assessment. Within this context, the fishery must demonstrate that it meets all local, national and international laws and must have a management system in place to respond to changing circumstances and maintain sustainability (MSC 2013).

P3 updates for this addendum are mainly focused on improvements made to the Department's stakeholder consultation and engagement processes since the MSC certification in 2016. It also provides some updated fishery compliance statistics for the relevant fishing seasons.

3.1 Governance and Policy

3.1.1 Legal Framework

Several changes to the legal framework under which the WCDSCMF is managed have either occurred within the previous audit period or will occur within the lifetime of the current certification.

On 1st July 2017 the Western Australian Department of Fisheries was amalgamated with the Departments of Agriculture, the Department of Regional Development and the Regional Development Commissions to form the Department of Primary Industries and Regional Development. As of the 2017 audit the functions and responsibilities of the new Department in terms of management of the WCDSCMF are unchanged.

The new Aquatic Resources Management Act (ARMA) was passed in November 2016 but will not commence until 1st January 2019. The ARMA will become the primary legislative instrument in 2019, replacing the current Fish Resources Management Act 1994 (FRMA) and other linked instruments.

3.1.2 Consultation, Roles and Responsibilities

Since the MSC certification of the WCDSCMF, the Department has broadened its stakeholder engagement process through a new Stakeholder Engagement Guideline (DoF 2016). This document sets out the overarching processes through which the Department seeks out relevant information from, and involvement by, stakeholders and interested parties on proposals relating to the management of WAs aquatic resources. The guideline was an outcome of the Non-Fisher Stakeholder Engagement Project, which included a key stakeholder consultation phase during which more than 20 key stakeholders were interviewed.

The Department also now has a 'consultation corner' on the website where draft documents such as harvest strategies are now posted for public comment prior to being finalised (<u>http://www.fish.wa.gov.au/About-Us/public-comment/Pages/default.aspx</u>). From 20 March 2017, the Department has also extended its external communications with the introduction of corporate Facebook and Twitter accounts. This expansion in social media will provide

powerful new tools to communicate and engage with clients and stakeholders. These platforms will complement existing forms of communications through the website, e-newsletters and education activities.

As an initial implementation of the SEG for the WCDSCMF the list of stakeholders for the fishery was updated. This list now includes representatives from State and local government, non-government organisations such as the Conservation Council of Western Australia and WWF, and key university and research groups. A matrix has been compiled that outlines what level of engagement and consultation that the SEG indicates is reasonable for each of the key stakeholder groups, e.g. relating to review of harvest strategies, fishery management plan amendments, environmental risk assessment etc. (Table 3). The full stakeholder and contacts list is presented in Appendix 1.

Table 3: Matrix of levels of consultation for major stakeholder groups identified for the West Coast Deep Sea Crab Managed Fishery.

			Fishery-specific processes					
	Overarching policy or strategy	Harvest Strategy - review	Environmental Risk Assessment	Bycatch action Plan	Fisheries Management Plan - amendments	WTO Application	Annual Management Meeting	MSC Audit
WAFIC/Licence Holders								
Recfishwest								
Commonwealth Government								
State Government								
Non Government								
Universities and Research								

Collaboration
Involve
Consult - public consultation
Inform - notification published in the Government Gazette or on the Fisheries' website

Since the initial certification there have been no key aquatic resource management related processes that would require significant stakeholder consultation to demonstrate implementation of the Stakeholder Engagement Guidelines. However, in lieu of demonstrated implementation, a Statement of Intent is provided for the development implementation of the Department's Bait Sustainability Guidelines, which are expected to be used in addressing the WCDSCMF condition on bait usage. Also, a communications log has been included in Appendix 2

3.1.3 Statement of Intent: Stakeholder Engagement for the Bait Sustainability Guidelines for Commercial fisheries in Western Australia

As an example of the implementation of the *Guideline for stakeholder engagement on aquatic resource management-related processes* (SEG) (DoF, 2016) for an issue relevant to the West Coast Deep Sea Crustacean fishery the following stakeholder engagement is proposed for the Fisheries Occasional Paper; *Bait Sustainability Guidelines for Commercial fisheries in Western Australia* (BSG).

Note that the BSG has been prepared to address an MSC condition in the Deep Sea Crustacean fishery; however, it will have relevance to all of the bait-based fisheries in Western Australia. As such, the stakeholder list for the BSG will be tailored to be appropriate for that level of consultation, not just specifically the Deep Sea Crustacean Fishery.

The Guiding questions in the SEG Table 2 are designed to help identify Key stakeholder groups for issue-specific consultation.

- In this case the Key Stakeholder groups were limited to the first line of the table *i.e.* WAFIC, sector bodies and license holders. Furthermore, this group can be further refined to include only bait-based fisheries.
- As the BSG were developed in response to an MSC assessment condition, the MSC was identified as an additional issue-specific stakeholder requiring engagement.

These groups will be consulted at "Collaborate" and "Involve" levels. This has included, and will continue to include, collaboration with WAFIC as the industries' peak representative body during the development of the BSG throughout the draft process. Representatives of the MSC have also been involved in the development of the BSG throughout the drafting process.

Further Stakeholder engagement will be undertaken at the "Inform" level with a wider selection of stakeholders including RecFishWest, ENGOs and relevant Commonwealth and State government agencies. This will include provision of the final published version of the

BSG on the Department's website and a notification of the posting to the representatives of the above stakeholders.

It should be noted that the BSG are non-binding and are designed to provide guidance only to those fisheries that wish to voluntarily adhere to them. Individual operators, fisheries or industry groups may choose to implement their own industry-side agreements referencing the BSG as they consider appropriate.

3.2 Fishery-Specific Management System

3.2.1 Harvest Strategy

The Management Plan (MP) and Harvest Strategy (HS) for the WCDSCMF remain unchanged from the initial assessment but the HS is expected to be updated during the lifetime of the assessment as conditions are addressed. Specifically, Performance Indicators for the B-class units will be developed and included in the HS and corrections will be made to the HCRs as per Recommendation 1.

3.2.2 Compliance and Enforcement

Statewide Compliance risk assessment processes are used to determine levels of compliance activities allocated to commercial fisheries. A compliance Risk Assessment was completed in 2015 and was again undertaken in 2017. The results of the risk assessments contain operational details of the compliance regime and are unable to be reproduced in this document. Relevant excerpts of the preliminary 2017 risk assessment have been provided to the auditors in confidence during the 2017 site visit.

There have been zero detected incidents of non-compliance in this fishery since its initial certification.

3.2.3 Research Plan

The research needs and priorities for fisheries statewide were detailed in the RMAD document at the time of certification.

The existing RMAD document may become obsolete during the Departmental amalgamation process but its contents and function will be replaced by an equivalent "Resource Program" detailing research / management needs and projected implementation for the deep sea crustacean resource. When an appropriate Resource Plan is produced for the Deep Sea Crustacean resource it will be provided at the following audit

References

- DoF (2015). West Coast Deep Sea Crustacean Resources Harvest Strategy 2015 2020. Fisheries Management Paper No. 272. Department of Fisheries, Western Australia
- DoF (2016) Guideline for stakeholder engagement on aquatic resource Management-related processes, September 2016. Fisheries Occasional Publication 131. Department of fisheries 8pp.
- Fletcher WJ, Mumme MD and Webster FJ (2017) Status Reports of the Fisheries and Aquatic Resources of Western Australia 2015/16: The State of the Fisheries. Department of Fisheries, Western Australia
- How JR, Webster FJ, Travaille KL, Nardi K and Harry AJ (2015) Western Australian Marine Stewardship Council Report Series No. 4: West Coast Deep Sea Crustacean managed Fishery. Department of Fisheries, Western Australia 172pp.

Appendix 1: Stakeholder list and contacts

The Department of Primary Industries and Regional Development, Fisheries Division (Fisheries) has developed Fisheries Occasional Publication No. 131 *Guideline for stakeholder engagement on aquatic resource management-related processes* (Guideline). As outlined in the Guidelines, the following fishery-specific stakeholders and matrix sets out who are the key stakeholders and the various levels of consultation for various matters. However, each fisheries specific area will be dealt with on a case by case basis and key stakeholders will vary accordingly. Fisheries will collaborate or involve the peak sector bodies, actively consult or inform other stakeholders, interested parties and the public as appropriate.

The list below represents the complete list of stakeholders identified for the West Coast Deep Sea Crustacean Fishery. This list represents the widest pool of stakeholders that may be drawn from to consult on specific issues, *i.e.* not all stakeholders will be relevant for every issue, nor will each stakeholder necessarily be engaged at the same level over every issue. The Guideline document provides a framework for the appropriate levels of consultation, which is applied on an issue-by-issue basis. The subset of the stakeholder list is determined by the nature of the issue being consulted on.

Stakeholder category	Organisation	Position	Key Contact	Telephone	Email
Commonwealth Government	Department of the Environment and Energy	Deputy Secretary	Dr Kimberley Dripps	02 6274 1500	kimberley.dripps@environment.gov.au
State Government	WA Government	Member of Parliament	Matt Taylor (MLA)	9316 0666	matt.taylor@mp.wa.gov.au
	Department of Parks and Wildlife	Planning Manager	Ms Roxane Shadbolt		Roxane.Shadbolt@der.wa.gov.au
	Department of Indigenous Affairs - Geraldton	A/Regional Director	Mr Wayne McDondald	1300 651 077	wayne.mcdonald@daa.wa.gov.au

	Marine Parks and Reserves Authority	Marine Branch	Dr Kevin McAlpine		Kevin.McAlpine@epa.wa.gov.au
	Office of Environmental Protection Authority	Marine Branch Manager	Dr Ray Masini		Ray.Masini@epa.wa.gov.au
Non Government	Australian Marine Conservation Society	President	Mr Craig McGovern	(07) 3846 6777	amcs@amcs.org.au
	Conservation Council of Western Australia	Director	Mr Piers Verstegen	9420 7266	conswa@conservationwa.asn.au
	Geraldton Fish Market	Manager	Mr Steve Lodge	99213755	
	Landcorp	Chief Executive Officer	Mr Ross Holt	9482 7499	landcorp@landcorp.com.au
	Western Rock Lobster Council	Chief Executive Officer	Mr Matthew Taylor	9432 7721	<u>ceo@wrlc.com.au</u>
	Wilderness Society WA		Jenita Enevoldsen	9420 7255	jenita.enevoldsen@wilderness.org.au
		State coordinator	David Mackenzie	9420 7255	wa@wilderness.org.au
	World Wildlife Fund (WWF)	President	Mr Michael Harte		mharte@wwf.org.au
	WWF - WA	Marine Coordinator	Paul Gamlin		pgamblin@wwf.org.au
Universities and Research	Curtin University		Prof. Euan Harvey		Euan.Harvey@curtin.edu.au
	FRDC	Chief Executive	Patrick Hone		patrick.hone@frdc.com.au

		Officer			
	Murdoch University	Leader Marine Management Research Group	Prof. Lynaath Beckley	08 93606392	L.Beckley@murdoch.edu.au
	WA Marine Science Institute	Chief Executive Officer	Luke Twomey		Luke.Twomey@wamsi.org.au
Recfishwest	Recfishwest	Chief Executive Officer	Dr Andrew Rowland	9246 3366	recfish@recfishwest.org.au
WAFIC	Western Australian Fishing Industry Council	MSC Industry Leader	Mr Guy Leyland		gleyland@wafic.org.au

Appendix 2: Summary of Consultation

The West Coast Deep Sea Crustacean Managed Fishery has low stakeholder visibility. The Department has consulted with stakeholders where opportunities have existed.

Opportunity for	Attendance	Matters discussed	Date
Consultation/Engagement			
Deep Sea Crustacean Managed Fishery (WCDSCMF) Annual Management Meeting	 DoF (Management and Research) WAFIC MFL Holders 	 Current management and science for the deep sea crustacean resource. MSC certification TAC split of B class units 	June 2016
Deep Sea Crustacean Managed Fishery email group	 DoF (Management and Research) WAFIC MFL Holders 	• Discussion of the next phase of the MSc process and the actions needed over the lifespan of the current certification.	September 2016
General Business	 DoF (Management) MFL Holder – Chaceon Pty Ltd 	Operations in the WCDSCMF	November 2016
Export of product to the USA and the US Marine Mammal Protection Act	 DoF (Management) WAFIC MFL Holders 	• Discussion to determine if the WCDSC exports catch to the USA.	February 2017
Written update on WSDCSMF in lieu of Annual Management Meeting.	WAFICMFL Holders	 Current management and science for the deep sea crustacean resource. MSC certification TAC split of B class units 	July 2017

DOF - Department of Fisheries

MFL - Managed Fishery Licence

WAFIC - Western Australian Fishing Industry Council