

THE SOUTH COAST CRUSTACEAN FISHERY

A Discussion Paper

FISHERIES MANAGEMENT PAPER NO. 232

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Government of **Western Australia**
Department of **Fisheries**

SUBMISSIONS TO THIS DISCUSSION PAPER

‘The South Coast Crustacean Fishery – a Discussion Paper’ (Fisheries Management Paper No. 232) is designed to inform the fishing community and general public about the issues and management proposals relating to the South Coast Crustacean Fisheries. The Department of Fisheries encourages comment about the issues raised and the proposed management recommendations in this report.

Points to consider for submissions

To ensure that your comments are as effective as possible, please:

- Make your submissions in writing (word processed, if possible) and keep a copy for yourself.
- Clearly and briefly describe each separate subject you wish to discuss.
- Assist us in your submission by referring to the different section/s and page numbers and recommendations in the paper on which you are commenting.
- Tell us whether you agree or disagree with any or all of the recommendations or issues identified under each heading.
- Clearly state your views and quote sources of information that you are using to support your arguments, where appropriate.
- Suggest alternative ways to resolve any of the issues you have raised, with a view to the fact that the Minister for Fisheries must balance competing and conflicting submissions as best he can, in order to satisfy the objects of the *Fish Resources Management Act 1994* (the FRMA 1994).

Responses to submissions

All submissions will be acknowledged by mail. The results of the submission phase will be considered when making final management recommendations for the South Coast Crustacean Fishery.

Where and when to send your submission

The closing date for submissions is 31 March 2009. Please send your submission before this date, along with your full name, address, and association details (if applicable) to:

The Chief Executive Officer
Attention: Regional Fisheries Management Officer - South
Southern Regional Office
The Department of Fisheries
Suite 7 Frederick House
70-74 Frederick Street
ALBANY 6330

Where to get extra copies of this document

For extra copies of the paper, please contact the Department of Fisheries’ Southern Regional Office on (08) 9841 7766. Copies of this paper (Fisheries Management Paper No. 232) can also be downloaded from: www.fish.wa.gov.au

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LIST OF PROPOSALS

- Proposal 1* That a Fishery Management Plan be developed for the crustacean pot fishery off the south coast of the State and the fishery become a Managed Fishery.
- Proposal 2* That the South Coast Crustacean Fishery be defined as fishing for crustaceans by means of traps in the waters of the south coast of Western Australia bounded by a line commencing at the intersection of the high water mark and 115 degrees 8 minutes east longitude (Cape Leeuwin) extending south to the intersection of 115 degrees 8 minutes east longitude and 34 degrees 24 minutes south latitude, thence west along 34 degrees 24 minutes south latitude to the outer limit of the Australian Fishing Zone, thence in a generally southerly direction and thence generally west along that boundary to its intersection with the eastern boundary of the waters adjacent to the State, thence north along the eastern boundary of waters adjacent to the State to the high water mark, thence generally west along the high water mark to the commencing point.
- Proposal 3* That the area be divided into four zones similar to the present managed fishery boundaries with the entire area of the fishery (i.e. all four zones) being open for crystal crab fishing. The zones are to be defined as:
- west of the 116° Longitude - the Augusta Zone;
 - 116° to 120° Longitude - the Albany Zone;
 - 120° to 125° Longitude - the Esperance Zone; and
 - east of the 125° Longitude - the Bight Zone.
- Proposal 4* That target and by-product species are identified and quantified in the management plan, and management actions are developed for further consideration if target or by-product catch trigger limit levels are reached.
- Proposal 5* That a licensee who obtains access to take crystal crab cannot have rock lobster on board their vessel when fishing under the authority to take crystal crab.
- Proposal 6* That a licensee who obtains access to take rock lobster cannot have crystal crab on board their vessel when fishing under the authority to take rock lobster.
- Proposal 7* That the gear restriction for the fishery be limited to an exterior maximum of:
- height - 0.5 metre;
 - length - 1 metre; and
 - width - 1 metre.
- Proposal 8* That each pot has at least one escape gap that conforms to the current specification as per Schedule 13 Part 3 in the Fish Resources Management Regulations 1995 (currently 54 x 305mm).
- Proposal 9* That each pot shall have one entrance that shall be on the upper surface of the pot and no less than 160mm in diameter.
- Proposal 10* That the plan includes a ban on taking rock lobster during the period 1 July to 14 November in any year.
- Proposal 11* That no seasonal closure apply to licensees permitted to take crystal crab.

- Proposal 12 That sea lion exclusion devices not be required within the South Coast Crustacean Fishery.*
- Proposal 13 That fishers within the South Coast Crustacean Fishery complete the log book provided to them by the Department of Fisheries that summarises information each day their pots are retrieved.*
- Proposal 14 That a panel be formed to make recommendations to the Minister for Fisheries regarding access criteria to the South Coast Crustacean Fishery, under terms of reference to be determined by the Minister. It will have an independent chair and include representatives from industry, the recreational sector, the Department of Fisheries, and other interest groups as the Minister thinks fit.*
- Proposal 15 That the South Coast Crustacean Fishery be managed by limiting the number of pots available in the fishery.*
- Proposal 16 That there be no initial reduction of pots in the Esperance Rock Lobster Managed Fishery and the Windy Harbour/Augusta Rock Lobster Managed Fishery zones of the fishery.*
- Proposal 17 That pot allocation in the Albany and Bight Zones be reduced by at least 50 per cent.*
- Proposal 18 That the total number of pots allocated for the deep sea crab fishing zone not exceed 1,000 pots.*
- Proposal 19 Once effort reduction has been achieved, each of the remaining pots shall be allocated an initial value of one unit of the fishery*
- Proposal 20 That for the purposes of Section 75 of the Fish Resources Management Act 1994, the major provisions of the management plans be those relating to:*
- fishing without an authorisation;*
 - selling, dealing or attempting to sell or deal in fish taken in contravention of the plan;*
 - fishing with an unauthorised boat;*
 - fishing out of season;*
 - fishing with gear in excess of entitlement; and*
 - not conforming to other gear requirements.*
- Proposal 21 Transfer arrangements for an authorisation that are created under the authority of the management plan are to be defined in the plan.*
- Proposal 22 That the management plan will not specify any additional grounds to refuse the transfer of units from one authorisation that is created under the authority of the management plan to another authorisation created under the authority of the management plan.*
- Proposal 23 That the temporary transfer of unit entitlements be provided for in the management plan.*
- Proposal 24 That all relevant fishing boat licences in the State be varied to remove condition 105.*

- Proposal 25 That the Windy Harbour/Augusta Rock Lobster Managed Fishery Management Plan be revoked.*
- Proposal 26 That the Esperance Rock Lobster Managed Fishery Management Plan be revoked.*
- Proposal 27 That regulations permitting the issue and use of rock lobster pot licences be revoked.*
- Proposal 28 Annual access fees for this fishery will be calculated in accordance with the process used for other minor commercial fisheries in the State, as agreed by the Minister.*
- Proposal 29 That in addition to the above fee, a research fee will be charged for research specific to the South Coast Crustacean Fishery.*

INTRODUCTION

Fishing for crustaceans including southern and western rock lobster and deep-sea crab species on the south coast of Western Australia began in the 1960s and has developed significantly through improvements in technology, vessel reliability and the risk and endeavour of some fishers. The expansion in the capacity of the fleet has led to the development of two managed fisheries.

This paper provides a brief outline of the history of the fishery; details the fishing and management methods presently used; and discusses the options available for future management, particularly ways of limiting fishing effort.

The current management arrangements for crustacean fisheries on the south coast were developed to address specific issues over the history of the fisheries. This piecemeal approach has produced layers of complexity that contribute to inefficiencies in administration, management and compliance.

The purpose of this paper is to inform the public and fishers of the new management methods being considered and to seek their feedback. The aim is to achieve consensus in developing a robust and comprehensive management approach that meets the present needs of the fishermen and the Department of Fisheries ('the Department'). In particular, the new management arrangements should meet the ecological requirements of the Federal Government department that monitors compliance with the *Environment Protection and Biodiversity Conservation Act, 1999*. This paper proposes that all the crustacean fisheries in the south coast will be managed as one fishery - the South Coast Crustacean Fishery (SCCF).

Management of the south coast fisheries has been discussed for some time, the most recent being in February 2008 when the Department of Fisheries facilitated meetings to discuss options that could be used in their future management. Twenty-nine participants, including commercial fishers, representatives from peak industry bodies and people representing licensees attended the meetings.

SECTION 1 FISHERY OVERVIEW

1.1 History

Fishing for southern rock lobster on the south coast of Western Australia began during the late 1960s. For many years, fishers targeting southern rock lobster were largely confined to the inshore areas and islands around Esperance, with some expansion of the fishing effort to the Albany and Great Australian Bight ('Bight') areas occurring in the late 1970s. In the early years, fishers that caught lobsters also fished for shark, tuna and pelagic species. Lobster fishing was very much a part-time operation, with the product being marketed locally.

The Windy Harbour/Augusta Rock Lobster Managed Fishery (WHARLMF) commenced in the late 1970s has had a slightly different history to the other south coast crustacean fisheries. Because its catches have comprised largely of western rock lobsters rather than southern rock lobsters, this fishery has been perceived more as a southern zone of the western rock lobster fishery, rather than a western zone of a southern rock lobster fishery. Another important difference is that early access to fish for lobsters in the Windy Harbour/Augusta area was by an endorsement on a West Coast Rock Lobster Fishery licence rather than through a rock lobster regulation licence, as is used in other south coast crustacean fisheries.

In many respects the late 1980s and early 1990s heralded a transition in effort for the south coast crustacean fisheries. It was around 1988 that southern rock lobster fishers operating out of Esperance discovered a deep-water offshore component to the lobster fishery. Prior to this all the fishing had been in shallow waters of less than 50 metres.

This shift in the exploitation merged with another major development in the fishery, when at the start of the 1990s a large processor (Esperance Lobster) opened their doors, thereby expanding marketing opportunities. This new player and the existing processors fitted their operations out with live tanks. The greater competition of the additional processor and the ability to market product live to Asia for higher returns, created a greater incentive for fishers to fish harder and catch more.

As a direct result of this situation, there was a substantial increase in rock lobster catches in all zones in the fishery. Crab catches also increased dramatically about this time, due to the development of markets for those products and the greater focus by fishers on catching crustaceans in deeper water.

1.2 Physical area

Currently, there are four fisheries that cover the area, species and fishing methods that will be managed under the proposed SCCF:

- the Windy Harbour/Augusta Rock Lobster Managed Fishery;
- the Esperance Rock Lobster Managed Fisheries,
- the Southern Rock Lobster Fishery (SRLF) managed as a regulation licence fishery operating in the Albany and Bight areas; and
- a deep-sea crab fishery operating under a licence condition.

The boundaries of the four fisheries making up the proposed SCCF are defined within Appendix 1 and illustrated in Figure 1 below. Please note the number in each fishery/proposed zone shown in Figure 1 indicates the number of licenses that can currently fish for rock lobster in that fishery/proposed zone.

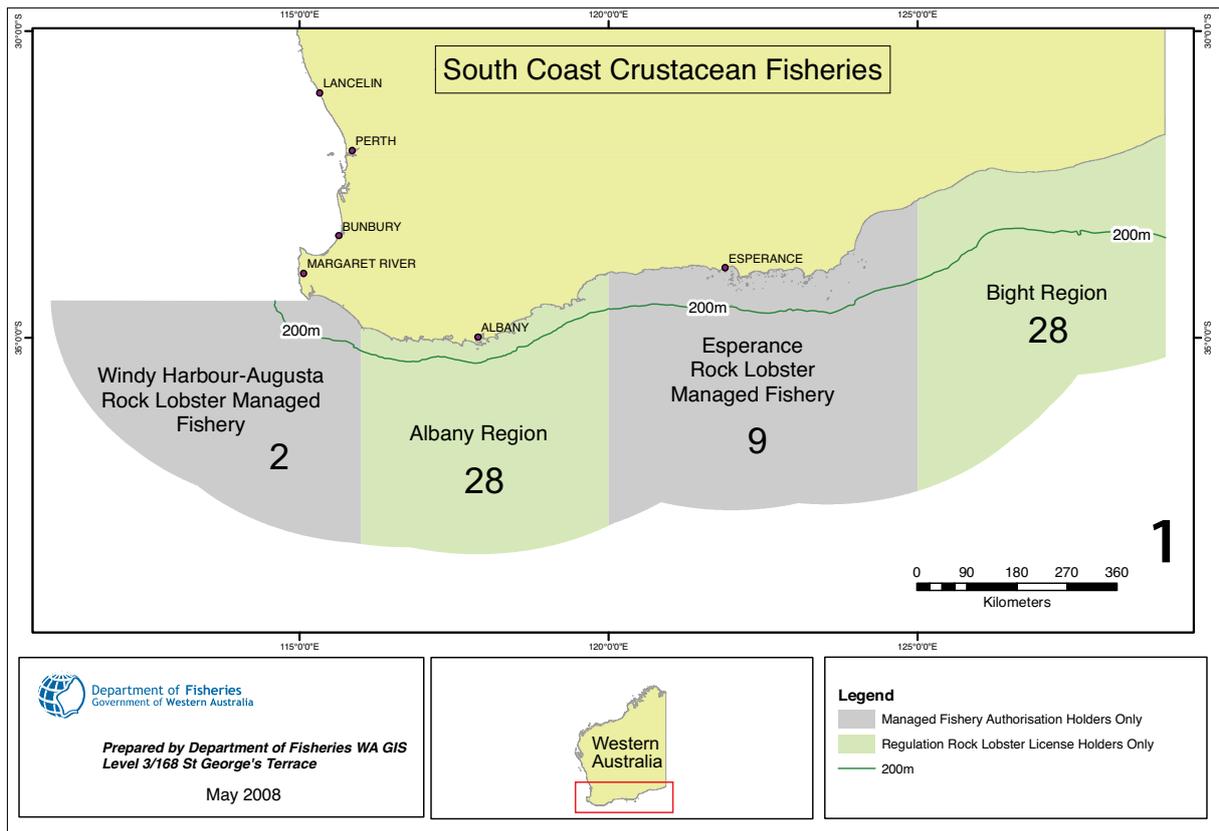


Figure 1. Boundaries of the four zones making up the South Coast Crustacean Fishery (SCCF).

1.3 Catch data

Figure 2 below shows the history of total catch within the existing south coast crustacean fisheries and includes all species that would be managed under the new SCCF. The previously mentioned discovery of an offshore resource in the late 1980s/early 1990s and the change in total catch can be clearly seen. The proportion of different species making up the catch has varied considerably over time.

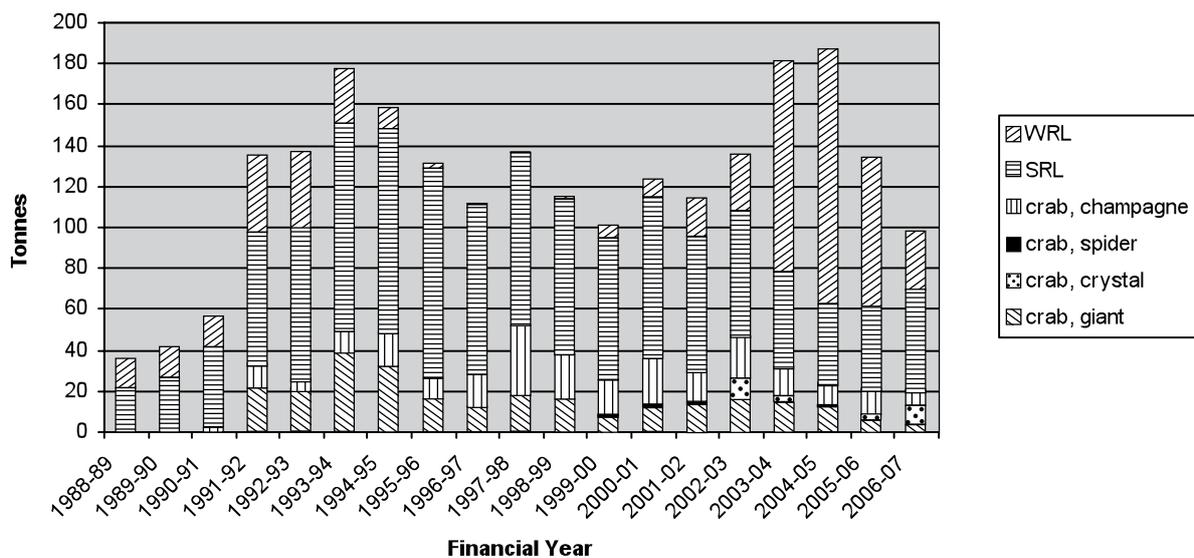


Figure 2. Total Catch from the South Coast Crustacean Fishery by Species.

The WHARLMF had a significant reduction of effort in 1996, when the numbers of licences and pots were reduced from 14 licences and 1,103 pots to two licences and 350 pots, due to a series of low recruitments and the resulting economic hardship among fishers.

The ERLMF has been reasonably stable since it became a limited entry fishery in 1987, with 12 licenses and 593 pots being issued initially. Two of these were class 'B' licences that were originally not transferable and only had 25 pots allocated. Of the original 12 licences, one class 'B' has been cancelled and two ordinary licences have been voluntarily surrendered to the Department of Fisheries. However, this has led to only a minor change in pot numbers, as the pot allocations of the two ordinary licenses was transferred to other licenses before their surrender.

1.4 Fishing methods

The SCCF is a 'pot' fishery and fishing occurs from shallow inshore waters to over the edge of the continental shelf. The pots used in the SCCF are mainly steel-frame beehive pots, with chicken wire, plastic 'elvinco'-style or west coast rock lobster batten pots.

All rock lobster pots used in WA are, in some way, limited in dimension or composition through regulation. The limitations include restrictions on pot size and requirements for a certain number and size of escape gaps or the placement and size of entry points. These rules are specified in the schedule 13 of *Fish Resources Management Regulations 1995* (FRMR 1995).

Rock lobster pots used on the south coast have no size restriction, but are required to have one escape gap of a defined size and location, and the entry point ('neck') on the uppermost surface. Due to a deep-sea crab pot being capable of taking rock lobster, they are deemed to be a rock lobster pot. Therefore the restrictions on the design of pots used in targeting deep-sea crabs are determined by what is permitted as a rock lobster pot in schedule 13. It is intended that under the new management plan for the SCCF, a pot design and maximum size will be specified.

Pots are used in a number of configurations that change with the depth of water being fished. In shallow waters, when targeting rock lobster, pots are usually set on an individual basis. As the water gets deeper, fishers will often use two pots per line. In very deep water when targeting crabs, the pots are usually set in long-line configurations, with up to 60 or more pots on one line. The main reason for changing to long-lines in deeper water is due to the logistics and time required to set and pull pots from depths of 200m-plus.

Depending on the species being targeted, pots in the fishery are baited with a variety of low-value finfish, including salmon and pilchard. Baited pots are set from boats near reefs and other habitats where the lobsters and crabs usually reside. Fishing locations are based on a combination of information gained from depth sounders, global positioning system (GPS), previous experience and recent catch rates in the area.

Pots are generally left overnight, during which time lobsters and crabs are attracted to the baits and enter the pots. Pots are then retrieved with the captured lobsters and crabs of legal size and of appropriate reproductive status (e.g. not berried, etc.) placed into holding tanks and returned to on-shore processing plants. From there, they are prepared for live shipments to go interstate, overseas and to local markets. In some areas and during some times of the year, pots are left fishing for a number of days before retrieval.

SECTION 2 RELEVANT OBJECTIVES OF MANAGEMENT

The management objectives of the SCCF must be consistent with the objects listed at Part 1, Section 3 of the *Fish Resources Management Act 1994* (FRMA 1994). In the context of this fishery, they include:

- *To conserve fish and protect their environment.*
- *To ensure that the exploitation of fish resources is carried out in a sustainable manner.*
- *To enable the management of fishing, aquaculture and associated industries and aquatic eco-tourism.*
- *To foster the development of commercial and recreational fishing and aquaculture.*
- *To achieve the optimum economic, social and other benefits from the use of fish resources.*
- *To enable the allocation of fish resources between users of those resources.*

To achieve the broad objectives of the FRMA 1994, the following specific management objectives have been proposed for the SCCF:

- **To ensure that the exploitation of fish resources is carried out in a sustainable manner.** Explicitly manage fishing effort and standardise equipment to limit the impact on bycatch and non-target species.
- **To enable the most effective management of fishing.** Develop better management ‘tools’ for the fishery.
- **To foster the development of commercial fishing.** Provide more flexibility for fishing operations, increase the certainty of access rights for authorisation holders and maintain resource shares in accordance with the guidelines of Integrated Fisheries Management (IFM)¹.
- **To enable the allocation of fish resources between users of those resources.** Develop management arrangements that will manage fish stocks in accordance with IFM guidelines that will minimise the likelihood of conflict between operators in this fishery, participants in other fisheries and the general community.

2.1 Possible impact of proposed management arrangements on other user groups

If the proposed management arrangements described in this paper are implemented, there should be little or no change in the impact of the SCCF on other user groups (including recreational fishers). The proposed management arrangements seek to bring existing commercial fishing activities under a more comprehensive management framework that more effectively controls fishing effort and catch.

¹ More information on the IFM policy of the Department of Fisheries is available at <http://www.fish.wa.gov.au/sec/man/index.php?0601>

SECTION 3 JURISDICTION

The jurisdiction for the management of crustacean fishing off the south coast of WA is provided for under the Offshore Constitutional Settlement 1995² (the OCS). The OCS is a legal arrangement between the Australian and State Governments, and defines control over the fisheries that operate off each State of Australia.

The OCS sets out jurisdictional arrangements for all waters between the coast and the outer limit of the Australian Exclusive Economic Zone (200 nautical miles) which is also the limits of the Australian Fishing Zone (AFZ). The arrangement³ declares that the fisheries in all waters relevant to Western Australia are to be managed in accordance with the laws of the State, except for some fisheries that are specifically excluded and managed by either the Commonwealth or by a Joint Authority (Commonwealth and the State).

The existing south coast crustacean fisheries are managed entirely under Western Australian State law, specifically the *Fish Resources Management Act 1994* and the *Fish Resources Management Regulations 1995 (FRMR 1995)*.

² More information on the OCS is available in Fisheries Management Paper 77

³ An “arrangement” which gives effect to the OCS was gazetted in the Australian Government Gazette No.GN4 of 1 February 1995 and is titled “*Arrangement Between the Commonwealth and State of Western Australia in Relation to the Fishery for Fish and Other Aquatic Biological Resources in Waters Relevant to Western Australia*” (the arrangement).

SECTION 4 EXISTING LAW

4.1 Legislation

The SCCF is to be comprised of four fisheries: this includes two managed fisheries (the Windy Harbour/Augusta Rock Lobster Managed Fishery and the Esperance Rock Lobster Managed Fishery), a 'regulation licence' fishery operated in the Albany and Bight zones, and a deep-sea crab fishery operating under a 'licence condition'. The primary species for the SCCF are the western rock lobster, southern rock lobster, crystal crab, giant crab and champagne crab.

The FRMA 1994 provides the legislative framework to implement the management arrangements for all managed fisheries. The FRMR 1995, written under the authority of the FRMA 1994, outlines the arrangements surrounding the regulation pot licence. Controls on fishing can also be introduced through prohibition notices issued under Section 43 of the FRMA 1994.

Details on the Orders, regulations under which the fishery operates, are set out in Appendix 2.

4.2 Summary of current arrangements

The following table is a snapshot of the industry at present and the number of pots and licences in each area.

Authorisation	Area	Species caught	Season	Number of pots	# of licenses
Windy Harbour/ AugustaRock Lobster Managed Fishery authorisation	As defined by the plan	western rock lobster; southern rock lobster; crystal crab; giant crab; and champagne crab.	15 November to 30 June in any year	350	2
Southern rock lobster licence	Any area that is not a managed fishery	southern rock lobster; western rock lobster; crystal crab; giant crab; and champagne crab.	15 November to 30 June in any year	3,178	28
Esperance Rock Lobster Managed Fishery authorisation	As defined by the plan	southern rock lobster; giant crab; and champagne crab.	15 November to 30 June in any year	568	9
Condition 105	All off shore areas of the south coast of WA deeper than 200 metres except the ERLMF area of the south coast	crystal crab; giant crab; and champagne crab	All year	Unlimited*	24

* This is limited during the rock lobster season if being fished from a boat that is also entitled to fish in any of the rock lobster fisheries mentioned above.

SECTION 5 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Fisheries Management Paper No. 157 (September 2001) sets out the policy for the implementation of Ecologically Sustainable Development (ESD) for fisheries and aquaculture within Western Australia.

The policy contends that management arrangements should include:

1. Explicit description of the management unit.
2. The issues addressed by the plan.
3. Descriptions of the stocks, their habitat and the fishing activities.
4. Clear operational (measurable) objectives and their associated performance measures and indicators.
5. Clearly defined rules, including what actions are to be taken if performance measures are triggered.
6. Economic and social characteristics of the groups involved in the fishery.
7. Management and regulatory details for the implementation of the actual management plan.
8. The reporting and assessment arrangements.
9. How and when a review of the plan will occur (including consultation mechanisms)
10. A synopsis of how each of the ESD issues is being addressed.

The Commonwealth's Department of Environment, Water, Heritage and the Arts (DEWHA) has assessed the south coast crustacean fisheries against the Australian Government guidelines for the ecologically sustainable management of fisheries. Providing that the conditions and recommendations set by DEWHA (which includes the publication of this paper) are progressed in new management arrangements, the fishery will continue to be considered ecologically sustainable, i.e. the fishery would continue to meet DEWHA guidelines.

The fishery can then apply under Part 13 A of the *Environment Protection and Biodiversity Conservation Act, 1999* (EPBCA 1999), to have the produce of the fishery to be listed under section 303DB, i.e. the list of species that are exempt from export restrictions.

The implications of Native Title and the National Competition Policy on the SCCF are contained within Appendix 6 and Appendix 7 respectively.

SECTION 6 POTENTIAL MANAGEMENT OPTIONS UNDER THE FISH RESOURCES MANAGEMENT ACT 1994

There are four different types of fisheries management arrangements under the *Fish Resources Management Act 1994* (FRMA 1994) that are considered suitable to be used to manage the SCCF. These include:

1. Section 43 Orders;
2. Regulation Licences;
3. Interim Management Plans; and
4. Management Plans.

A management plan is considered the most appropriate management arrangement for the SCCF. Issues regarding the other types of arrangements (1 to 3 above) are set out in Appendix 3.

6.1 Managed fisheries

The FRMA 1994 provides for the development of fishery management plans –effectively a set of rules that provide a framework for the comprehensive management of a fishery. They can be established so that considerable flexibility in the management of the fishery is achieved. Under such arrangements, the Chief Executive Officer of the Department of Fisheries (under delegated authority from the Minister) can be provided with the power to permit fishing that is otherwise prohibited by the plan, or prohibit fishing in certain areas or at certain times if necessary.

Rules regarding transfers, variations, fee structures, objections and cancellation of licences can be defined in the plan or are already defined in the FRMA 1994. Management plans therefore are seen to provide a greater level of security for licensees and an appropriate process for the Department of Fisheries to follow. In addition, there is the ability to define offences against the plan as either ‘major’ or ‘standard, which tiers the penalty provisions to some extent.

Statutory consultation is required for the development, amendment and revocation of management plans. This means that people without a direct interest in fishing could object to some or all of the proposed arrangements.

The SCCF is not a new fishery, but to maintain consistency for licensees a management plan would be the most appropriate arrangement for managing it.

7.1 Outcomes

There is no point in changing any arrangements for a fishery unless there are some benefits in doing so. In this case the following should be considered as the desired outcomes for any new management arrangements:

- to improve the quality of data collected for the fishery to help manage it;
- resolution of uncertainty with regard to multiple types of authorisations and the future access of each type;
- development of an improved and comprehensive scheme of licence rights;
- management of latent fishing effort⁴;
- continued Wildlife Trade Operation approval under the *Environment Protection Biodiversity and Conservation Act 1999* (i.e. the ability to export product);
- a management format that is efficient to administer;
- a management scheme with the appropriate framework and controls to ensure sustainability of the fish stocks; and
- ability to manage the commercial share of the resource in accordance with Integrated Fisheries Management policy.

7.2 Proposed legislative base

As discussed earlier, the authority to use pots on the south coast to capture crustaceans is provided through two management plans, a regulation licence and a permissive condition on a fishing boat licence.

To achieve the outcomes desired above and considering the different legislative options that are administered by the Department of Fisheries (see section 6) a managed fishery gives consistency with present arrangements and the flexibility to combine the four different elements into one fishery.

In accordance with section 56(1)(b) of the FRMA 1994, a fishery management plan must declare the fishery to be either a Managed Fishery or an Interim Managed Fishery.

Proposal 1 That a Fishery Management Plan be developed for the crustacean pot fishery off the south coast of the State and the fishery become a Managed Fishery.

7.3 Fishery definition

7.3.1 Background

In accordance with section 56(1) of the FRMA 1994, a management plan for a fishery must identify the fishery. This is usually achieved by describing gear that may be used, species that may be taken and the area that may be fished.

⁴ Latent fishing effort is fishing capacity that is currently not being used in the fishery, but has the potential to be used (for example, rock lobster pots that are a part of a licence, but which are not used for all or part of the rock lobster season).

The Offshore Constitutional Settlement (OCS) intends that the State has jurisdiction for pot fishing activities targeting crustaceans inside the Australian Fishing Zone (AFZ).

Under current arrangements, the area is divided into four distinct zones along the coast and the most pragmatic way to manage the fishery in the future would be to continue with the same zoning. The fishery also has an offshore component, as set out in condition 105. The offshore zone could be removed and replaced with sections in the management plan that determine what species cannot be on-board a vessel at the same time (e.g. fishers that are permitted to catch crystal crab would not be permitted to retain rock lobster and *vice-a-versa*). This will ensure there will be no change in fishing patterns and will not require a line to be drawn on the ocean. For a full description of the fishery and current defined areas, see Appendix 1.

7.3.2 Consideration

This plan is to be developed to cover the two managed fisheries, a regulation licence and a condition attached to some fishing boat licences. Therefore the area defined by the plan will need to cover all areas described by the existing arrangements, as outlined in Appendix 1.

Currently, the two areas covered by the regulation pot licence (Albany and the Bight) are managed as one fishery, which allows fishers to transfer effort from one area to the other. The new management arrangements need to reflect the different environments and mix of species encountered in these two areas and establish a sustainable effort or catch for each.

The management plan needs to describe the target species. The regulation pot licence and the two managed fisheries are specific in regulating the catching of rock lobster. Over time and with the advent of better technology, both in finding fishing ground and transporting fish to market, other crustaceans have become a valuable part of the fishery.

Condition 105 was introduced to allow targeting of deep-sea crabs, but did not specify particular species. The SCCF will cover the commercial catch of all crustaceans on the south coast, but at this stage will be limited to the regularly caught species.

Proposal 2 That the South Coast Crustacean Fishery be defined as fishing for crustaceans by means of traps in the waters of the south coast of Western Australia bounded by a line commencing at the intersection of the high water mark and 115 degrees 8 minutes east longitude (Cape Leeuwin) extending south to the intersection of 115 degrees 8 minutes east longitude and 34 degrees 24 minutes south latitude, thence west along 34 degrees 24 minutes south latitude to the outer limit of the Australian Fishing Zone, thence in a generally southerly direction and thence generally west along that boundary to its intersection with the eastern boundary of the waters adjacent to the State, thence north along the eastern boundary of waters adjacent to the State to the high water mark, thence generally west along the high water mark to the commencing point.

Proposal 3 That the area be divided into 4 zones similar to the present managed fishery boundaries with the entire area of the fishery (i.e. all four zones) being open for crystal crab fishing. The zones are to be defined as:

- *west of the 116° Longitude - the Augusta Zone;*
- *116° to 120° Longitude - the Albany Zone;*
- *120° to 125° Longitude - the Esperance Zone; and*
- *east of the 125° Longitude - the Bight Zone.*

Proposal 4 That target and by-product species are identified and quantified in the management plan, and management actions are developed for further consideration if target or by-product catch trigger limit levels are reached.

In developing a management plan, the implications on compliance need to be considered. The Department of Fisheries' resources are limited, so ideally a management plan should include arrangements that limit the take of fish so that no additional fishing pressure is put on the resources. At the consultation meeting, industry members supported the concept of preventing the holders of more than one authorisation from fishing for more than one resource of the fishery at the same time (i.e. rock lobster or crystal crabs).

Proposal 5 That a licensee who obtains access to take crystal crab cannot have rock lobster on board their vessel when fishing under the authority to take crystal crab.

Proposal 6 That a licensee who obtains access to take rock lobster cannot have crystal crab on board their vessel when fishing under the authority to take rock lobster.

7.4 Specification of fishing gear

7.4.1 Background

Under current regulation, there is no size limitation on any pots set in waters off the southern coast of WA. The only specification is the requirement to have one escape gap as defined in schedule 13 of the *Fish Resources Management Regulations 1995*. As there can be an increase in effective effort by using a larger pot, some limitations need to be set. To avoid confusion and simplify compliance, the same specification for pot dimension and escape gaps should apply in all zones.

The exception to this could be the outer zone of the fishery where crystal crabs are predominantly caught. This is a relatively new fishery and hence the most appropriate gear is still being established. To enable fishers to maximise their catching efficiency is one of the objectives in section 3 of the FRMA 1994, to “*achieve the optimum economic, social and other benefits from the use of a fish resource.*” therefore there needs to be some flexibility in pot design in this area of the fishery.

7.4.2 Considerations

For ease of enforcement and to allow fishers some flexibility in pot design, it is suggested the pot be defined by maximum exterior dimensions. For example, a pot could be permitted to have a maximum height of 0.5 metres and a length and width not exceeding one metre. This would allow licensees to experiment with pot design within these limits - and to use commercially-available pots that comply with these limits.

To prevent unnecessary stress on undersize animals (crabs and rock lobsters), it is proposed that any pot used on the south coast will have an escape gap. It has been found that the current escape gap allows most undersize crystal crabs to escape. For consistency, it is proposed all pots used in the SCCF will continue to have a 54 x 305mm escape gap. If the capture of undersize of any species becomes an issue, the dimensions of the escape gap will be reviewed.

To conform with other fisheries in WA, it is proposed that there will be one entrance on the top or upper surface of the pot.

- Proposal 7* That the gear restriction for the fishery be limited to an exterior maximum of:
- height - 0.5 metre;
 - length – 1 metre; and
 - width - 1m.
- Proposal 8* That each pot has at least one escape gap that conforms to the current specification as per Schedule 13 Part 3 in the Fish Resources Management Regulations 1995 (currently 54 x 305mm).
- Proposal 9* That each pot shall have one entrance that shall be on the upper surface of the pot and no less than 160mm in diameter.

7.5 Determination of closed seasons

7.5.1 Background

Notice 389 currently prohibits the take of rock lobster by any method during the period 1 July to 14 November in any year. This closed season aligns with the breeding and egg bearing period for southern and western rock lobsters. The southern rock lobster stock is self-supporting and stress during breeding time may reduce egg production. Females that are in an active breeding state can have a higher susceptibility to being caught, due to their higher food requirement. It is appropriate that this closed season applies to any licensees targeting rock lobster.

In the case of crystal crabs there is no distinct breeding season, therefore there would be little benefit of having a closed season in this fishery.

Proposal 10 That the plan includes a ban on taking rock lobster during the period 1 July to 14 November in any year.

Proposal 11 That no seasonal closure apply to licensees permitted to take crystal crab.

7.6 Environmental issues

7.6.1 Sea lion exclusion devices

Interactions between sea lions and rock lobster pots in other fisheries have occurred over many years. Sea lions are listed as “vulnerable” species under the *Environmental Protection and Biodiversity Conservation Act 1999* and “specially protected” under the *WA Wildlife Conservation Act 1950*. As such, there is an obligation for SCCF licensees and the fishery’s managers to address any fishing related mortalities of this species.

All recorded deaths on the west coast have occurred in waters less than 20 metres deep. Since there is very little effort in this depth range in the SCCF and no deaths have been reported on the south coast, it supports the view that sea lion exclusion devices are not required in the fishery.

Proposal 12 That sea lion exclusion devices not be required within the South Coast Crustacean Fishery.

7.7 Fishery reporting

In many fisheries, one of the problems is collecting data on the fish being caught, whether this is through dedicated research or from concise and detailed information from commercial fishers. To enable more informed management decisions in the future, a new log book needs to

be introduced for the SCCF that will allow the collection of information in a uniform way, with the least impost on the fisher.

The log book would need to be completed each day a commercial fisher licensed for the SCCF retrieves their pots and is expected to include the following items:

- detailed information as to where pots are being set, including their depth;
- the soak period of pots;
- number of discards and reasons for discarding fish; and
- interactions with protected species.

Proposal 13 That fishers within the South Coast Crustacean Fishery complete the log book provided to them by the Department of Fisheries that summarises information each day their pots are retrieved.

7.8 Management methods

There are two widely used methods for managing a fishery - input or output controls. *Input controls limit the level of fishing effort in the fishery* such as gear, boats and time, which in turn limit the capacity of the fishery to take fish. *Output controls limit the quantity of fish taken from the fishery* by setting what is called a total allowable catch (TAC) for the fishery. The TAC sets the maximum quantity of fish that can be taken from the fishery in any one season or period, but does not limit the effort. TACs can be set on a total fishery basis or they can be broken down further and allocated to individual licence holders, (referred to as individual transferable quota or 'ITQ').

Due to significant additional compliance resources required to manage quota fishing, it is proposed to (continue to) manage the SCCF by input ('effort') controls. A discussion of output controls is provided in Appendix 4.

7.9 Commercial access panel

The best way to manage any fishery is to have the support of the people within it. This paper is the second stage of a consultation process with industry on how to manage the SCCF in future. However, to gain consensus on who should be given access becomes increasingly difficult the greater the number of people that are involved.

As a result of the latter, a recommendation will be made to the Minister that a panel should be established to determine the access criteria to the fishery. It will have an independent chair and include representatives from industry, the recreational sector, the Department of Fisheries, and other interest groups as the Minister thinks fit.

The recommendations from the panel shall be forwarded to the Minister for final approval.

Proposal 14 That a panel be formed to make recommendations to the Minister for Fisheries regarding access criteria to the South Coast Crustacean Fishery, under terms of reference to be determined by the Minister. It will have an independent chair and include representatives from industry, the recreational sector, the Department of Fisheries, and other interest groups as the Minister thinks fit.

7.10 Capacity of the fishery

7.10.1 Background

Establishing access criteria and management arrangements for the SCCF that result in fishing effort levels that do not threaten the sustainability of the stocks is an integral part of the management plan.

Data available from the SCCF indicates that significant reductions in fishing capacity (particularly latent effort) are required. Further reductions may be required in future if more precise data collected under the management structure shows that the exploitation rate is too high.

7.11 Input limited fishery

The current management plans in the two managed fisheries – the Windy Harbour/Augusta Rock Lobster Managed Fishery (WHARLMF) and the Esperance Rock Lobster Managed Fishery (ERLMF) - within the SCCF area have been based on input management methods and are at catch levels that are considered sustainable. There is little latent effort in either of these two fisheries, i.e. unused effort that could be mobilised/activated to over fish the resource. Therefore the most appropriate access criteria for these two areas that currently have management plans are that if a person holds a managed fishing licence in either the WHARLMF or ERLMF, they be granted access to that zone under the new SCCF fishery management plan.

The area covered by the rock lobster pot regulation licence presently has a significant over-capacity in the order of about 50 per cent, therefore the number of pots will need to be reduced by this amount to reach a more sustainable level. This is considered a starting point for this area of the fishery, and, as more detailed information becomes available, it may be necessary to reduce fishing effort further (e.g. pot numbers).

Deep-sea crab fishing is relatively new and whilst pot numbers are limited during the rock lobster season (for those boats that have a rock lobster authorisation) during the rest of the year (and for those boats without rock lobster authorisations) there is no limit on the number or size of pots that can be used. Recently, it was agreed between fishers and the Department that boats would not fish more than 200 pots at any time.

Whilst some research has been completed on the distribution and abundance of deep-sea crabs, in particular crystal crabs, the Department of Fisheries considers a conservative approach of only permitting 1,000 pots to be used to target deep-sea crabs on the south coast. Again, this is considered a starting point for this area of the fishery, and, as more detailed information becomes available, it may be necessary to reduce fishing effort further (e.g. pot numbers)

There are three options that can be used to reduce the amount of effort in the fishery: These options are:

- Knife-edge criteria⁵ removing those licence holders who do not meet certain criteria based on catch history.
- Percentage reduction of pots across all licence holders.
- Reducing the number of days that can be fished.

⁵ Knife edge criteria – This is determining a set of specific criteria that needs to be met by a fisher to gain access to a fishery. If fishers do not meet all the criteria, then access will not be approved.

The first of these options is discussed below, while the other two are included in Appendix 5.

As more detailed information comes to hand, there may be compelling data that suggests further reduction in effort is required. To facilitate any future change in an efficient manner, it would be appropriate that the fishery be managed in units rather than pots.

At the introduction of the SCCF, a unit would have the value of one pot, but should an adjustment in effort be required in the future then a unit may have a different value. For example, if a 10% reduction is required, then a unit may be allocated a value of 0.9 of a pot, therefore for every 10 units only 9 pots would be permitted to be used.

Proposal 15 That the South Coast Crustacean Fishery be managed by limiting the number of pots available in the fishery.

Proposal 16 That there be no initial reduction of pots in the Esperance Rock Lobster Managed Fishery and the Windy Harbour/Augusta Rock Lobster Managed Fishery zones of the fishery

Proposal 17 That pot allocation in the Albany and Bight Zones be reduced by at least 50 per cent.

Proposal 18 That the total number of pots allocated for the deep sea crab fishing zone not exceed 1,000 pots.

Proposal 19 Once effort reduction has been achieved, each of the remaining pots shall be allocated an initial value of one unit

7.11.1 Reduction in fishing effort based on catch history

One of the successful methods of reducing effort in a fishery is to use historical statutory catch data as proof that licensees have been reliant on the fishery for a reasonable period of time. Licensees who were involved in the meetings held during February of 2008 gave considerable support for any reduction in effort to take into account:

- the effort that some licensees have put into developing what will be called the South Coast Crustacean Fishery;
- the risks some licensees have taken in exploring ground;
- the effort some licensees have made to maintain a market for the product, and
- the reliance some fishers have on the fishery as part of their overall fishing operation.

Whilst it has been suggested earlier that a panel be used to determine the final access criteria, the best way to understand how knife-edge criteria is used is through an example using actual figures from the 'regulation' rock lobster licence fishers.

To reduce pot allocation in the Albany and Bight Zones to the desired level (50 per cent + reduction), access to the Albany Zone could be based on a fisher having a catch history of more than 300kg for at least five years within the 10-year period prior to June 2005. Access to the Bight Zone could be based on a catch history of more than 2,000kg per year for at least 4 years in the same 10-year period.

If the above proposal was agreed, the management plan could include the following;

- Catch considered will be from 1 July 1994 to 30 June 2005 inclusive.
- Catch will only include crustaceans that will be managed under this management plan, (blue swimmer crabs and sand crabs will not be considered.)
- The area that history must be associated with is the Albany Zone (between 116° and 120° of Longitude) and the Bight Zone (between 125° and 129° of Longitude).

By applying the above criteria, approximately 900 (pots) units would be left in the Albany Zone and 700 (pots) units in the Bight Zone of the fishery.

Even though targeting crystal crabs is a relatively new fishery, a knife-edge criteria could still be used, but the timeframe would need to be varied to reflect the recent history of the fishery. The criteria could be that the holder of a fishing boat licence endorsed with condition 105 where the licence was used to take a total of 1,000kg or more of crystal crabs in any year OR it was used to catch any amount (1 kg or more) of crystal crabs in at least three years during the 10-years preceding 30 June 2007.

Applying the above criteria would leave approximately 1,000 (pots) units that would be authorised to fish for crystal crabs.

7.12 Offences and major provisions

Section 75 of the FRMA 1994 provides for provisions (rules) of a management plan to be designated as major provisions. If contravened, major provisions attract higher general penalties (as defined in the FRMA 1994). Major provisions are those considered to be the most important rules in the fishery.

Regardless of what 'part' of an authorisation is being exercised when a major provision of the management plan is contravened, any resulting record of conviction will be recorded on the register in respect of the relevant managed fishery authorisation.

Proposal 20 That for the purposes of Section 75 of the FRMA 1994, the major provisions of the management plans be those relating to:

- *fishing without an authorisation;*
- *selling, dealing or attempting to sell or deal in fish taken in contravention of the plan;*
- *fishing with an unauthorised boat;*
- *fishing out of season;*
- *fishing with gear in excess of entitlement; and.*
- *not conforming to other gear requirements.*

7.13 Transferability considerations

7.13.1 Transfer of authorisations

Section 140(2)(b) of the FRMA 1994 provides for the Chief Executive Officer of the Department of Fisheries to refuse to transfer an authorization or part of an entitlement on grounds specified in a relevant management plan or prescribed in the regulations.

If in the development of the SCCF, the desired reduction in effort is achieved through access criteria, there would not be a requirement to include any additional impediments to the transferability of SCCF authorisations at this time.

Proposal 21 *Transfer arrangements for an authorisation that are created under the authority of the management plan are to be defined in the plan.*

7.13.2 Transfer of units of entitlement

If the management plan is able to manage the catch to acceptable levels through a reduction in current effort, it will not be necessary to limit the temporary or permanent transfer of units between authorisations. At the end of the licensing year, all of the temporarily transferred units would automatically revert back to the authorisation on which they are permanently endorsed.

Proposal 22 *That the management plan will not specify any additional grounds to refuse the transfer of units from one authorisation that is created under the authority of the management plan to another authorisation created under the authority of the management plan.*

Proposal 23 *That the temporary transfer of unit entitlements be provided for in the management plan.*

7.14 Amendments, revocations and variations

If a management plan is implemented for the SCCF, the Department of Fisheries considers it appropriate to revoke any legislation and licence conditions that would have effectively been made redundant by the new arrangements.

At the time the SCCF management plan comes into force:

Proposal 24 *That all relevant fishing boat licences in the State be varied to remove condition 105.*

Proposal 25 *That the Windy Harbour/Augusta Rock Lobster Managed Fishery Management Plan be revoked*

Proposal 26 *That the Esperance Rock Lobster Managed Fishery Management Plan be revoked.*

Proposal 27 *That regulations permitting the issue and use of rock lobster pot licences be revoked.*

7.15 Fees

Other minor commercial fisheries in Western Australia contribute towards the costs of their management, research and compliance activities by paying an annual fee. The fee will be calculated in accordance with the process used for other minor commercial fisheries in the State, as agreed by the Minister.

It was recognised at all preliminary meetings about the SCCF that research is required in this fishery. The collection of extra data through the introduction of a new logbook only partially addresses this issue. Therefore, in addition to the above mentioned access fee, it is proposed that an additional fee be applied to each authorisation to raise funds for conducting research and analysis of catch data that will be used for the future management of the SCCF.

Proposal 28 Annual access fees for this fishery will be calculated in accordance with the process used for other minor commercial fisheries in the state, as agreed by the Minister.

Proposal 29 That in addition to the above fee, a research fee will be charged for research specific to the South Coast Crustacean Fishery.

SECTION 8 EXTERNAL CONSULTATION AND FUTURE PROCESSES

Under the *Fish Resources Management Act 1994* (FRMA 1994) when developing or implementing a management plan, the Department of Fisheries must call for comment regarding the proposed arrangements from a wide range of stakeholders and interested parties. It is intended that copies of this discussion paper will be sent to the following organisations.

- The Western Australian Fishing Industry Council (WAFIC)
- Department of Environment, Water, Heritage and the Arts
- The South Coast Licensed Fishermen’s Association
- South Coast Natural Resource Management Group
- Australian Fisheries Management Authority (AFMA)]
- Aboriginal and Torres Strait Islander Commission (ATSIC)
- Recfishwest
- Great Southern Regional Recreational Fishing Advisory Committee
- Esperance and Goldfields Regional Recreational Fishing Advisory Committee
- Southwest Regional Recreational Fishing Advisory Committee
- Augusta Margaret River Shire Council
- Esperance Shire Council
- Albany City Council
- Jerramungup Shire Council
- Goldfields Land and Sea Council
- World Wildlife Fund – Australia
- Conservation Council of Western Australia

The Department of Fisheries encourages each of the above organisations, and any other individuals who have expressed an interest in the development of the fishery, to forward submissions to the Department in response to this discussion paper, as detailed in the “Submissions to the Discussion Paper” section at the front of this publication.

APPENDIX 1 CURRENT AREA OF FISHERIES

A1.1 Background on area of the south coast crustacean fisheries

The Windy Harbour Augusta Rock lobster Managed Fishery (WHARLMF), as defined within the plan, is a fishery specifically for rock lobster and has the following area defined:

The waters situated on the south coast of the State bounded by a line commencing at the intersection of high water mark and 115° 08.091' east longitude (Cape Leeuwin) extending south to the intersection of 115° 08.091' east longitude and 34°24' south latitude; thence west along 34°24' south latitude to the outer limit of the Australian Fishing Zone; thence along that boundary to its intersection with 116° east longitude, thence north along 116° east longitude to the high water mark (near Point D'Entrecasteaux); thence along the high water mark to the commencing point.

The Esperance Rock Lobster Managed Fishery (ERLMF) as defined within the plan is a fishery specifically for rock lobster and has the following area defined:

The water situated on the south coast of the State between 120° east longitude and 125° east longitude.

The area available to rock lobster regulation licence holders is defined only by where they are not permitted to fish. Management arrangements, notices and orders apply to most areas of the State, leaving the following two areas in state waters where these licences holders can use rock lobster pots:

- *The waters situated on the south coast of the State between 116° east longitude and 120° east longitude; and*
- *The waters situated on the south coast of the State between 125° east longitude and 129° east longitude or the Western Australian/South Australian border.*

The area available to fishing boat licence holders endorsed with “condition 105” is defined within the condition as:

...in the waters situated on the south coast of the State bounded by a line commencing at the intersection of the high water mark and 115 degrees 8 minutes east longitude (Cape Leeuwin) extending south to the intersection of 115 degrees 8 minutes east longitude and 34 degrees 24 minutes south latitude, thence west along 34 degrees 24 minutes south latitude to the outer limit of the Australian Fishing Zone, thence along that boundary to its intersection with the eastern edge of the waters adjacent to the State, thence north along the eastern edge of waters adjacent to the State to the high water mark, thence along the high water mark to the commencing point, excluding all waters between 120 degrees east longitude and 125 degrees east longitude.

If a comparison of the condition 105 area is made with the rock lobster managed fishery areas (i.e. the ERLMF and the WHARLMF) it shows that it covers the area of the WHARLMF that is deeper than 200 metres, but specifically excludes the area defined as the ERLMF. As condition 105 covers the WHARLMF area deeper than 200 metres, it appears that the intent at the time was to allow condition 105 holders to fish in this area.

However, the WHARLF management plan has precedence and precludes condition 105 licensees from taking or attempting to take rock lobster in any of the WHARLF area unless they are taken in accordance with the plan. As setting pots to take crabs could in fact catch rock lobster, only WHARLMF authorisation holders can lawfully fish the area of the WHARLMF, during the period 15 November to 30 June in any year.

A2.1 Orders

A2.1.1 Notice 677 of 1994 Fish Traps Prohibition Notice

This Section 43 Order prohibits any person from taking any fish species by way of trap, which includes rock lobster pots. The exemptions to this order include:

- This notice does not apply to a licensed professional fisherman using a licensed fishing boat –
 - (a) (i) which is being operated in a limited entry fishery declared by notice under section 32 of the Act; and
 - (ii) authorised to be used to take fish by means of fish traps in that limited entry fishery; and
 - (iii) which is being operated in accordance with the provisions of the notice declaring the fishery in which the boat is being used;

or

- (b) the license for which is endorsed to permit the boat to be used to take fish by means of fish traps and the boat is being used in accordance with that endorsement.

The current arrangements fit within the above exception and, as detailed below, any future arrangements will need to meet the exception to this notice.

A2.1.2 Notice 278 of 1987 Esperance Rock Lobster Fishery Management Plan 1987

This legislation describes the Esperance Rock Lobster Fishery Management Plan. This plan, previously known as the Esperance Rock Lobster Limited Entry Fishery, sets out the arrangements for the fishery from 120 degrees east to 125 degrees east including, amongst others, authorised means of fishing, pot entitlements and distributions and the season when fishing for rock lobster is permitted. Under the Saving and Transitional Arrangement in the *Fish Resources Management Act 1994* (FRMA 1994) Schedule 3, this fishery is now considered a managed fishery.

A.2.1.3 Notice 279 of 1987 Windy Harbour-Augusta Fishery Management Plan 1987

This legislation describes the Windy Harbour-Augusta Rock Lobster Fishery Management Plan. This plan, previously known as the Windy Harbour-Augusta Rock Lobster Limited Entry Fishery, sets out the arrangements for the fishery including, amongst others, authorised means of fishing, pot entitlements and distributions, and the season when fishing for rock lobster is permitted. Under the Saving and Transitional Arrangement in the FRMA 1994 Schedule 3, this is now considered a managed fishery.

A2.1.4 Condition 105 Taking of Deep Sea Crabs with the use of Rock Lobster Pots.

This condition exempt a person from the Section 43 Order prohibition notice 677 and sets out the rules by which rock lobster boats may use equipment for deep sea crabs and the rules for boats other than those used for rock lobster. It also describes the area in which deep-sea crabs are allowed to be taken by the licence holder with the condition attached to their fishing boat licence.

A2.1.5 Rock Lobster Pot Licence – Regulation 125

Three regulations from the *Fish Resources Management Regulations 1995* (FRMR 1995) relate to rock lobster pot licences. The intention of regulation 125 is to ensure that all people who fish for rock lobster commercially hold the appropriate authorisation - either a rock lobster pot licence or, if operating in a managed fishery, a relevant Managed Fishery Licence (MFL). Regulation 126 refers to the Chief Executive Officer (of the Department of Fisheries) having the ability to grant rock lobster pot licences. Regulation 38 sets out the specifications that a rock lobster pot must meet prior to being used in different areas of the State. The holder of the licence must abide by all conditions on the licence and is limited to a maximum number of pots as specified on the licence.

The licences are transferable (within certain conditions) but the area of operation permitted on the licence does not change.

A2.2 Regulations

In addition to the above, specific management arrangements, there are certain items defined within the FRMR 1995 that also have an influence on this fishery.

A2.2.1 Totally protected species

Within Western Australian waters, minimum size limits and protection for biological stages of fish have been set through declaring the fish a protected species at certain sizes or stages in its life. Any fish smaller than a certain size limit are considered protected fish. Section 46 and 47 of the FRMA 1994 prohibits any person from taking any totally or commercially protected species.

Schedule 2 of the FRMR 1995 lists all species, by their common names, that are considered protected and the size at which the species becomes a totally or commercially protected species. Included in the list of protected species are female crustaceans in certain stages of reproduction. In the case of all rock lobster and deep sea crabs, it is when there are eggs visible; in the case of western rock lobster taken from waters south of 21° 44' south latitude and west of 116° east longitude it is when there is a “tar spot “visible or from the earlier stage of setose.

A2.2.2 Minimum size limits

The biological basis behind the western rock lobster minimum size has been fully dealt with in the Ecologically Sustainable Development ESD report⁶ for that fishery. It was believed for some time that stocks of rock lobster on the south coast were not self-sustaining, but dependent on other stocks for the majority of their recruitment. In the case of southern rock lobster it was from the stock to east (e.g. South Australia) and in the case of the western rock lobster from the west coast.

Recent modelling completed by the CSIRO now indicates that the southern rock lobster stocks are very likely to be self-sustaining and hence levels of breeding stock need to be maintained at biologically safe levels. Therefore minimum sizes need to be maintained at present levels until more information becomes available on the size at maturity. Depending on research results, changes in minimum sizes may occur through the regulatory process and would apply to commercial and recreational fishers.

⁶ The ESD report for western rock lobster is published by the Department of Fisheries as report number 4 of the ESD report series

There are legal minimum size limits for the giant, champagne and crystal crabs under the FRMR 1995. The size limits for the crab species are based on the Department of Fisheries' knowledge of these species⁷.

The minimum size limits are as follows:

- *southern rock lobster* - 98.5 mm carapace length;
- *western rock lobster* - 77 mm carapace length from 15 November to 31 January and 76 mm carapace length from 1 February to 30 June;
- *champagne crab* - 92 mm carapace length;
- *giant crab* - 140 mm carapace length; and
- *crystal crab* – 120 mm carapace length.

All under-sized and egg-bearing female crabs are to be returned to the water within five minutes of coming on board and before the next trap comes on board. In addition, it is illegal to take female lobsters carrying eggs, or western rock lobster taken from waters south of 21° 44' south latitude and west of 116° east longitude that are in a setose condition or have a visible tarspot.

A2.2.3 Limitation on baits

Regulation 31A of the FRMR 1995 restricts any hide or bovine material from being used as a bait in rock lobster pots. This regulation was implemented as a result of market concerns, mainly in the live rock lobster market in Asia.

⁷ Fisheries Research and Development Report, Biological and Fisheries Data for Managing the Deep-sea Crabs *Hypothalassia acerba* and *Chaceon bicolour* in Western Australia, Final Report FRDC projects 1999/154 and 2001/055.

APPENDIX 3 POTENTIAL MANAGEMENT OPTIONS

A3.1 Section 43 Orders

Section 43 of the *Fish Resources Management Act 1994* provides a power for the Minister to prohibit persons from engaging in fishing activity of a specified class. Orders made under this section exist as a 'Notice' or 'Order' published in the Government Gazette.

One of the issues with a Section 43 order is how to properly exempt appropriate commercial fishers from the order. Historically, Orders have declared that persons are exempt from the Order (or parts of it) if they are the holder of a fishing boat licence that is appropriately 'endorsed' with a condition. However, it is now considered more appropriate to either list the names (or fishing boat licence numbers) of the persons exempted from the Order in a Schedule to the Order instead of "endorsing" a fishing boat licence with a condition.

There are no specific rules for transfer, variation, cancellation, consultation requirements, objection, or access fee structures provided for under a Section 43 order - participants in the fishery are listed in a Schedule to the Order. As a result, the level of security for fishers is usually perceived as being less than for other options.

Section 43 Order managed fisheries are also relatively inflexible in terms of the Department of Fisheries' ability to make any urgently needed changes to their management. Any change to the management of the fishery, even minor ones (such as a temporary area closure), would require Ministerial approval and an amendment to the Order.

Under present legislative arrangements, a Section 43 Order is used to prohibit the take of any fish by way of traps (pots) in all WA waters. The South Coast Crustacean Fisheries are exempt from that order - as outlined in the Appendix 2 (Existing Law).

A3.2 Regulation licences

Management arrangements of this type are defined in detail in the FRMR 1995. The power to issue a licence rests with the Chief Executive Officer (of the Department of Fisheries).

Regulation licences are relatively limited in the range of management controls that can be introduced. No statutory consultation is required if arrangements are to be revoked or varied. The framework relating to the issue or variation of a licence is contained within the FRMR 1995.

Current 'Regulation licences' include the rock lobster pot licence (which has already been discussed in this paper) and the recently established aquatic eco-tourism operator and fishing tour operator's licences.

Regulation licences are similar to Managed Fishery Licences, except that the fishery rules are defined in the Regulations or by conditions on the licence and tend not to be as 'adaptive' as managed fishery rules. Consultation requirements are not well defined for regulation-managed fisheries. They are not considered appropriate for the management of the SCCF.

A3.3 Interim managed fisheries

Interim managed fisheries are essentially the same as managed fisheries in terms of their flexibility and rules regarding transferability, variation, cancellation, objections and fee structure. However, Interim Management Plans have a defined end date and fewer

consultation requirements in the developmental stages. Upon the expiry of an Interim Management Plan, the fishery can either cease, or new management arrangements can be adopted (such as a Managed Fishery Plan).

It is considered appropriate to develop an Interim Management Plan for a fishery if previous management arrangements have not been comprehensive or where the fishery is of a new or developmental nature.

APPENDIX 4 OUTPUT LIMITED FISHERY

A4.1 Quota-based fishery

With the success of the two input managed fisheries in the SCCF area –the Esperance Rock Lobster Managed Fishery (ERLMF) and the Windy Harbour/Augusta Rock Lobster Managed Fishery (WHARLMF) - it is proposed the input controls for those areas would continue. Therefore discussion of output management is limited to the Albany and Bight Zones.

Limiting the total weight of fish removed from a fishery is in some aspects the simplest form of managing a fishery, as theoretically there is no need for any gear restrictions, i.e. it would be considered appropriate for a fisher to catch their allocated quota with a large amount of gear over a short period, or spread their fishing out over the full season, depending on which strategy was most cost effective for them.

On face value, a Total Allowable Catch (TAC)-based fishery can allow some management rules to be removed. However, in order to make sure landed weights set for each zone and for each license are accurately reported and monitored, it would require significant extra compliance and administration resources that the fishery would have to pay for. The long coastline involved and its remoteness means compliance would be difficult and expensive.

To assist in managing the fishery all boats would need to install Vessel Monitoring Systems (VMS). There would be a limited number of approved landing points along the coast and only approved processors would be permitted to handle their product. Landings and weigh-in stations would be defined in the plan.

Another issue created by quota management of a multi species fishery is that when the quota for one species is reached, it may become uneconomic for a fisher to continue fishing to fill their quota for a different species. In addition, significant mortality/wastage can occur when animals have to be returned to the water because a fisher's quota has been reached.

There are three methods of using a quota to limit the take of fish within a fishery:

- individual allocation according to pot entitlements;
- individual allocation based on catch history; and
- competitive for the fishery as a whole.

The Department of Fisheries' Research Division has investigated indicative TACs for this fishery and the following would be considered as the initial TACs for the relevant zones of the fishery.

Zone	Southern rock lobster (tonnes)	Giant crab (tonnes)	Champagne crab (tonnes)	Crystal crab (tonnes)
Albany	6	4	10	0
Bight	20	Bycatch only	Bycatch only	0
Crystal crab	0	Bycatch only	0	20

A4.1.1 Individual Transferable Quota based on pot entitlements

The total TAC could be divided up between licensees in the SCCF based on their number of pots they are licensed to fish. These units are called Individually Transferable Quota or 'ITQ'. As the pot entitlements are based in each of the zones, the allocation of the quota would be calculated by dividing all the pots of a zone into the total TAC for that zone. The current allocation of pots is:

Zone	Number of pots
Albany	3,178
Bight	3,178
Condition 105	4,800

Based on this method, the following allocation of weight per pot would be:

Zone	SRL	Giant Crab	Champagne Crab	Crystal crab
Albany	1.89kg/pot	1.26kg/pot	3.15kg/pot	0
Bight	6.29kg/pot	Bycatch only	Bycatch only	0
Crystal crab	0	Bycatch only	0	4.16kg/pot

The above table reflects the significant over capacity (latent effort) in the two rock lobster zones and the crystal crab fishery. Allocating equally across all pots would leave all the active fishers with lower levels of quota than they would need to be viable in the fishery.

A4.1.2 Allocation of ITQ based on catch history

There are two ways ITQ can be divided up on catch history. First an average annual catch (weight) for each fisher could be determined over a set period and then converted to a percentage of the average annual total weight that was caught in the fishery over the same period. The percentage could then be applied to the total TAC in each zone and this would give the weight allocated to each fisherman in each zone, as shown in the table below.

A second way to achieve ITQ based on catch history would be to reduce the number of pots in the fishery based on a 'knife-edge criteria', as described at section 7.11.1, where there is a reduction in fishing effort based on catch history and the TAC is then allocated equally to each pot remaining in the fishery. This would leave approximately 900 pots in the Albany Zone of the fishery and 700 pots in the Bight Zone of the fishery.

The allocation for crystal crab catch could also be done along similar lines (see description at section 7.11.1), which would leave approximately 1,000 pots in the SCCF targeting crystal crabs. This reduced number of pots could then be divided into the TAC for crystal crabs to give the ITQs as shown in the table below.

Proposed ITQs (weight) per pot based on reducing pots using the same knife edge criteria as described in section 7.11.1 are shown in the table below.

Zone	Souther rock lobster	Giant crab	Champagne crab	Crystal crab
Albany Zone (~ 900 pots)	6.67kg/pot	4.44kg/pot	11.1kg/pot	0
Bight Zone (~ 700 pots)	28.57kg/pot	Bycatch only	Bycatch only	0
Crystal crab (~ 1,000 pots)	0	Bycatch only	0	20.0kg/pot

A4.1.3 Competitive TAC

A competitive-style TAC is where the TAC is set on for each zone within the fishery and individual licensees would be entitled to fish their entitlement of pots until the TAC had been reached. Once the TAC was reached, the fishery would be closed until the next season. Access to each of the zones could be based on the historical catch of the licence. This method of management was not supported at any of the meetings.

A5.1 Percentage reduction in pots

To achieve the 50 per cent reduction in pots, there can be an across-the-board 50 per cent reduction of individual pot entitlements. Licensees would then be required to trade between themselves to purchase the number of pots they need to be viable in the fishery.

This process does not recognise the risk that some licensees have made in developing and maintaining markets through regular supply of product, which is what makes the fishery viable and valuable - without a market for the products, all the licences are worthless.

A reduction of 50 per cent in any one year could have a serious and significant financial impact on those licensees who rely on the fishery, therefore the process would need to be phased-in over a number of years.

A5.2 Reduction in fishing effort using days fished

Instead of reducing pots in the fishery to achieve a 50 per cent effort reduction, it is possible to reduce the number of days that can be fished. This can be on a total fishery basis, for example permitting fishing for three months of the year. However such a closure could lead to an inconsistent supply to markets, which could have a negative impact on the value of the product. However allowing individual licensees to nominate which three-month period they will fish could offset this.

Further to this, limiting the days fished to a nominated period or to a set short period each year would be difficult to achieve with equity on the south coast due to two factors:

- As most commercial fishers in the SCCF hold licences in other fisheries, having an additional closed season may disadvantage them.
- Prolonged periods of bad weather can limit the ability of any commercial fishers to put to sea.

APPENDIX 6 NATIVE TITLE

Legislation that is enacted on or after 1 July 1993 is subject to the ‘future act’ regime under the Australian Government’s *Native Title Act 1993* (the Native Title Act).

In 1999, the Department of Fisheries obtained a ‘Report for Fisheries Western Australia’ in respect of the interaction between fisheries/pearling legislation and the Native Title Act. This report advised that:

- The very wide scope of what can be done under a management plan means that they do have the potential to affect native title and therefore would be ‘future acts’ for the purpose of the Native Title Act.
- Because the management plan would be covered by the Native Title Act section 24HA, it can be validly made without the need for any specific native title notification or comment procedure.
- While specific notification is not required, it would however be prudent for comment to be sought from any native title parties likely to be affected by the management plan under the provisions of the *Fish Resources Management Act 1994* section 64(2).
- The granting of licences and permits under management plans will not be future acts in their own right and they can therefore be granted without the need for any native title procedure or notification requirement.

In accordance with point 3 above, the Department of Fisheries will provide native title party(s) with an opportunity to comment on the proposed management arrangements for the proposed fishery.

APPENDIX 7 NATIONAL COMPETITION POLICY

Clause 5(1) of the Competition Principles Agreement (CPA) requires that

“...legislation (including Acts, enactments, Ordinance or Regulations) should not restrict competition unless it can be demonstrated that:

(a) the benefits of the restriction to the community as a whole outweigh the costs; and

(b) the objectives of the legislation can only be achieved by restricting competition.”

Clause 5(5) of the CPA continues to specify that

“...new legislation that restricts competition (will) be accompanied by evidence that the legislation is consistent with the principle set out in subclause (1).”

Apart from general policy considerations for Government around the “property rights” issues in fisheries, legislative restrictions on resource competition for the sole purposes of sustainability and biodiversity are usually not inconsistent with competition policy principles.

The judgement is whether the restrictions directly and effectively target the sustainability objectives and represent an appropriately measured and balanced constraint on competition (that is, the overall restriction(s) on competition is (are) not excessive for the purpose).

A National Competition Policy assessment will be completed for each of the management arrangements to be legislated for the fishery.

APPENDIX 8 ABBREVIATIONS USED IN THIS DOCUMENT

Abbreviation	Full name
AFZ	Australian Fishing Zone
DEWHA	Department of Environment, Water, Heritage and the Arts
CEO	Chief Executive Officer
EPBCA 1999	Environment Protection and Biodiversity Conservation Act 1999
ERLMF	Esperance Rock Lobster Managed Fishery
FRMA 1994	Fish Resources Management Act 1994
FRMR 1995	Fish Resources Management Regulations 1995
IFM	Integrated Fisheries Management
ITQ	Individual Transferable Quota
MFL	Managed Fishery Licence
OCS	Offshore Constitutional Settlement
SCCF	South Coast Crustacean Fishery
SRL	Southern rock lobster
TAC	Total Allowable Catch
VMS	Vessel Monitoring System
WHARLMF	Windy Harbour/Augusta Rock Lobster Managed Fishery
WRL	Western rock lobster
