



Our Ref: 26-05418

Dr Ron Edwards  
Chairman  
Rock Lobster Industry Advisory Committee  
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Dear Dr Edwards

I am writing to you regarding the future management system for the West Coast Rock Lobster Managed Fishery (WCRLMF). As you are aware there has been much discussion over recent years about which is the best management system - either by input controls (effort) or output controls (quota). There has been considerable investment in studies to provide an answer to this question, and more recently in advice on the policy and operation of optimal input and output management systems.

I now consider that it is in the best interests of all concerned that I provide a way forward to resolve this very important matter. I intend to make my decision regarding whether a quota management system should be introduced for the WCRLMF following consideration of your views on key quota management proposals, including a proposed quota model. To this end, I seek your comments on the proposals and information contained in the attached paper - prepared by the Department of Fisheries.

Please provide me with your comments on the enclosed paper and advice on any other matters relevant to the introduction of quota management by March 2010. I understand that this is a very complex issue, and that should I approve the introduction of a quota management system there will be ongoing discussions with industry about further policy development and implementation.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Norman Moore'.

**NORMAN MOORE MLC  
MINISTER FOR FISHERIES**

Enc

cc Western Australian Fishing Industry Council  
Recfishwest

21 DEC 2009

**QUOTA MANAGEMENT PROPOSALS**

**WEST COAST ROCK LOBSTER MANAGED FISHERY**

**Prepared by the Department of Fisheries**

**December 2009**

## **SUMMARY OF KEY PROPOSALS**

- 1. That a Quota Management System is introduced for the West Coast Rock Lobster Managed Fishery.**
- 2. That the policy settings in appendix 1 are implemented by the determination of a new management plan for the Fishery.**
- 3. That the quota management system is introduced four years after Ministerial approval i.e. 1 July 2014 if this occurred in the first half of 2010.**
- 4. That an independent panel is convened to provide advice on initial allocations.**

## **INTRODUCTION**

This paper provides information and key proposals on a quota management system (QMS) for the West Coast Rock Lobster Managed Fishery (the Fishery).

A QMS is an individually transferable entitlement system whereby units have a value in kilograms of lobster (say 1 unit = 50 kilograms) that can be taken. The sum of all unit values equates to the Total Allowable Commercial Catch (TACC). Biological and other controls are used in this system to ensure that breeding stock is not selectively targeted. The current input management system is also an individually transferable entitlement system, but the value of a unit is expressed in terms of pots (say 1 unit = 0.42 pots). Adjustments to unit values (pot usage) and a complex combination of other measures are used to control the fishing effort, and hence the total commercial catch.

This paper was prepared by the Department of Fisheries for use by the Minister for Fisheries in consulting with the industry over a QMS for the Fishery.

## **BACKGROUND**

Using a QMS to manage the commercial catch of the Fishery has been discussed since 1994/95. The issue was the subject of particular focus from 2002, including an industry poll in 2007 that revealed strong support for retaining input controls.

On the request of the previous Minister, for further advice from RLIAC in late 2007, RLIAC established a Working Group to report on the matter. The Working Group provided its report in 2008. The Working Group report was followed by advice to RLIAC from a Panel of Experts (the Panel) earlier this

year on an optimum QMS and input control system for the Fishery. The Panel advice supported a move to quota management.

Support has grown among fishers for a move toward quota management. Results of a recent poll held by the Western Rock Lobster Council found a majority of managed fishery licensees who responded were in favour of introducing a QMS (versus input controls).

Continuing low and very low puerulus settlement over recent years appears to have led many fishers to question the future of the fishery. This questioning has caused some fishers to shift their support in favour of a QMS, which is more closely aligned with long-term commercial and economic outcomes (such as maximum economic yield). Introducing a QMS also reduces the likelihood of a race to fish mentality, which can erode the financial return from the fishery. However, it should be noted that:

- the potential economic benefits of moving to a QMS can be diminished if other market signals (such as the beach price offered by processors) are distorted; and
- environmental impacts on puerulus settlement are independent of the type of management system.

## **REASONS FOR ADOPTING QUOTA MANAGEMENT**

As a high value single species Fishery, with minimal by-catch, the Fishery is well suited for the introduction of a QMS.

Moving to a QMS has the potential to reduce costs over time to fishers, increase flexibility, better align the incentives of fishers with the long-term interests of the fishery, and provide greater certainty for the fishery moving forward. Other reasons for progressing to a QMS include:

- It provides industry with incentives to minimise fishing costs and maximise profits;
- It provides industry with business flexibility to fish when they believe it is most profitable for them;
- It provides industry with more options to adapt their business operations in response to market failures, market-driven sustainability requirements such as carbon tariffs and climate change induced effects;
- It reduces the race to fish and incentives for industry to over-capitalise that occur in an input controlled fishery;
- It does away with continual effort reductions to compensate for effort-creep;
- Exploitation can be managed more simply and directly through changes to the Total Allowable Commercial Catch (TACC);
- It has the potential to reduce the cost to fishers of managing the Fishery over time; and
- It will result in a form of entitlement better recognised and understood by banks and other lenders.

## Proposal 1

That a Quota Management System is introduced for the West Coast Rock Lobster Managed Fishery.

### **MANAGEMENT PRINCIPLES AND OBJECTIVES**

The following guiding management principles were developed by the Department for consideration by the Panel. The Panel essentially endorsed these principles.

- To maintain rock lobster stocks at or above biologically sustainable levels.
- To create a management environment that encourages and supports a profitable commercial sector within the constraints of its allocated share of the resource.
- To encourage fishing practices that minimize damage to marine habitats and to non-target species.
- To achieve the management objectives through regulations that are targeted, non-discriminatory and cost-effective.

The following fishery specific objectives have been proposed by the Department for the Fishery (these are as presented in the draft harvest strategy and decision rules paper for the fishery):

- Ensure that the egg production in each zone remains above its threshold level, and the probability of still being above this level in five years time is 75%.
- Ensure harvest rates for the fishery are consistent with the principles of Maximum Economic Yield.

### **STAKEHOLDER POSITIONS**

#### **Western Rock Lobster Council (WRLC)**

The WRLC has conducted a poll of the industry's opinion on the introduction of a QMS. The results from the survey of the 612 managed fishery licence holders polled are:

Responses received	302
For a QMS	50%
For input controls	33%
Undecided	11%
Invalid responses	6%

This is a marked turn around on the previous poll conducted in January 2007, where over 80% of respondents opposed the introduction of a QMS.

## RLIAC

RLIAC has advised that a decision on a QMS should be deferred until the current sustainability issues are resolved. Nevertheless, RLIAC has provided its views about the proposed management settings and suggested that a QMS, if approved, should be introduced three to five years after a decision is made to move to quota.

### Panel of Experts

The Panel commissioned by RLIAC to provide advice on a QMS comprised Dr Gary Morgan, Mr Roger Edwards, Dr Caleb Gardner and Mr Ian Cartwright.

The Panel prepared a paper for RLIAC on an optimum quota management system "A Quota management system for the Western Rock Lobster Fishery" that was posted on the Department's website in June. Another paper prepared by the Panel, on an optimum input controlled management system (ICMS) for the Fishery, was also posted on the website. The two papers formed the basis for industry discussions in July 2009 at the Western Rock Lobster Congress.

In the covering letter to RLIAC that accompanied the ICMS paper, the Panel stated:

*"In considering the key features of an ICMS and a Quota Management System (and notwithstanding the considerable transition issues), the panel's consensus was that, on balance, a Quota Management System offers a more appropriate and effective way of achieving the defined management objectives in the medium to long term in a way that provides and promotes efficiency in the industry through greatly increased flexibility to respond to markets."*

The panel provided the following QMS design principles:

- The QMS should specifically target the management principles and objectives.
- The QMS needs to be simple. Over complication or adding layers of input controls adds to costs and reduces the efficiency with which the QMS can achieve the management objectives.
- The QMS targets economic objectives by providing the environment and the individual business flexibility to reduce costs of fishing.
- The QMS is based on a free and competitive market in quota and access rights that will drive economic efficiency and hence profitability.

These design principles are supported.

## **Policy Settings**

A summary of the proposed quota management policy settings is provided in Appendix 1. Generally the policy settings are consistent with those recommended by the Panel in its optimum quota management system paper. However, as discussed in more detail below, the Panel's recommendation to remove the zonal boundaries within the first five years of implementation, and limiting the number of pots used by individual licence holders to a maximum of 200 is not supported.

### *Single Zone*

The Panel recommended that the Fishery should be managed as a single zone to minimise management costs. This view is not supported because there would be a higher risk of serial depletion of the breeding stock if the Fishery is managed as a single zone, particularly at this time. Maintaining the current zoning initially and then revisiting the need for zones five years after implementation is proposed.

### *200 Pot Limit*

The Panel also recommended that operators be restricted to the use of up to 200 pots each, regardless of the number of units held on the managed fishery licence (MFL). This restriction implies that there would be no link between units held on a MFL and the number of pots operated.

Under a 200 maximum pot limit, the potential would exist for large quota holders to be disadvantaged as they are limited in their ability to take advantage of economies of scale. Additional costs would also be incurred under the Panel recommendation, as pot usage compliance would need to be monitored. For these reasons maintaining a restriction on the number of pots used by individual operators under a QMS is not supported.

### *Over/Under quota*

Another important policy matter that was not considered by the Expert panel or RLIAC is how "over" quota and "under" quota will be dealt with. The Department's fundamental position as applied to other fisheries on these matters is it is an offence for someone to take more than they have an entitlement to take, and that there would be no carry forward of uncaught quota.

## **NEW MANAGEMENT PLAN**

Given the fundamental differences in management by quota and input controls a new management plan is proposed to be drafted for the Fishery rather than an amendment to the existing plan.

## Proposal 2

That the policy settings in appendix 1 are implemented by the determination of a new management plan for the Fishery.

### INDICATIVE IMPLEMENTATION COSTS

This section provides details on the costs of implementation of a QMS. The costs are based on the policy settings in appendix one and the key features listed in the table below.

#### Key Features

More extensive stock monitoring and analysis to allow the setting of higher TACCs within sustainability and economic limits.
Minimal at sea compliance for biological controls and other agreed matters
Retention of zones initially (first five years)
Reporting of catch by processors
Some flexibility in selling catch
Landing at any location
Operators are permitted to fish all year, except in A Zone

The Department has analysed the costs of introducing a QMS and compared them to the costs of the current system. As VMS would be introduced in the future under the existing input control system the VMS costs have been included into the 2009/10 western rock lobster budget to aid in comparing the two systems in the future. It is important to understand that at this stage these are indicative costs only, and will change as further policy development and specification of operational arrangements is undertaken.

Further details of the management compliance, research and operational arrangements are available from Appendices 5,6,7 of the RLIAC Quota Management Working Group report titled *Proposed Quota Settings for the West Coast Rock Lobster Managed Fishery* (Fisheries Occasional Publication No. 61). Note that the cost estimates provided in Fisheries Occasional Publication No. 61 are not the same as those provided below. The costs provided here have been updated to reflect current funding arrangements and management proposals.

## Recurrent Costs

There is expected to be a marginal annual saving in recurrent costs under the proposed QMS when compared with the modified input control model (current management costs plus VMS).

### Comparison of Recurrent Indicative Costs

#### RECURRENT INDICATIVE COSTS

Project	09/10 Budget (Existing Input Control)	VMS Costs	Modified Input Control Model <sup>^</sup>	QMS <sup>^</sup>
Management	\$720,000	\$229,000	\$949,000	\$509,000
RLIAC	\$223,000		\$223,000	
Compliance	\$4,111,000	\$282,000	\$4,393,000	\$4,378,000
Research	\$2,502,000		\$2,502,000	\$3,117,000
<b>TOTAL</b>	<b>\$7,556,000</b>	<b>\$511,000</b>	<b>\$8,067,000</b>	<b>\$8,004,000</b>

Per Unit cost

\$117

\$116

Per Kilogram cost\*

\$1.46

\$1.45

\*Based on an average 5,500 tonnes per annum for the QMS and the input controlled system

<sup>^</sup>Includes VMS costs

These costs have been expressed in terms of the cost per kilogram of production to enable a comparison across different jurisdictions. The recurrent indicative costs per kilogram of catch for WA compare favourably to rock lobster fisheries in other jurisdictions. For example, the South Australian management cost per kilogram is around \$3.80 for the Northern Zone and \$1.90 for the Southern Zone. Although not fully comparable, because it is not fully cost recovered and does not include compliance costs, the Tasmanian rock lobster fishery fee is around \$1.30 per kilogram. The costs per kilogram for New Zealand rock lobster fisheries are similar to those in Western Australia.

#### *Management*

Management costs include policy, legal, IT and licensing services. Costs for these services are expected to decrease in the long term by around \$440,000 per annum. The Department expects that there will be fewer policy and legal services required as management changes will primarily be made by adjusting the TACC, rather than via complex changes to input controls, developed through extensive consultative processes. Licensing services are projected to be reduced, as there is a shift from manual processing of applications to electronic transactions under a new entitlement management system.

#### *Compliance*

Overall indicative compliance costs are expected to decrease slightly in comparison to the current system with VMS. Although a 80% decrease in large patrol boat days has been included in projections, the cost saving is offset by the additional expense of employing more compliance officers to undertake auditing functions (fishers and processors). A minimal large patrol

boat presence is retained to assist with investigations that require some at sea surveillance.

There is no projected increase in the compliance costs due to the season being open all year. The Department would reallocate the resources, currently utilised over a seven and a half month season, over a twelve-month period.

### *Research*

Research costs may increase by about \$600,000 per annum. This increase would occur if existing data sets needed for catch projections are maintained, and more resources are used for independent surveys to collect data for stock assessments. Industry may consider that the relatively small investment in collecting more independent research data would be worthwhile if it results in a higher TACC.

### **Set up costs**

Set up costs will also be incurred in moving to a QMS. These costs include funding of a project team and the development of new IT systems including a new entitlement management system.

#### **Indicative Setup Costs**

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Project Team</b>	\$220000	\$276000	\$220000	\$511000	\$136000
<b>IT Systems</b>	\$300000	\$300000	\$300000	\$300000	\$300000
<b>TOTAL</b>	<b>\$520000</b>	<b>\$576000</b>	<b>\$520000</b>	<b>\$811000</b>	<b>\$436000</b>

The cost to industry of purchasing VMS equipment (Automatic Locating Device and computer) is estimated at \$1.85 million (370 boats @ \$5,000). This cost need not be regarded as an additional cost for QMS as it will be incurred anyway if the Fishery moves to the optimised input management system recommended by the Panel.

### *Project Team*

The cost for the project team to manage the transition to QMS is estimated to average around \$270,000 per annum for five-years. These costs include a small team to manage the project, draft legislation, manage the consultation process, testing and training in using VMS and quota management systems, and an initial help desk facility. These costs would not be entirely attributable to introducing a QMS as it could be expected that similar costs would be incurred in managing the transition to a modified input control system.

### *IT Systems*

The introduction of a QMS will add impetus to the use of technology by the Department to drive down costs. The new system requirements include introduction of VMS, reporting on line, and a database to record catch information.

A diagram illustrating the interaction of all these components is attached. The central component of the management system will be a database where a fisher's catch is acquitted against their entitlement. The database will be integrated with existing systems.

However, given the importance of this component of a QMS, and concerns over the cost of development, the Department has contacted other jurisdictions (South Australia, New Zealand, Queensland, and the Commonwealth) about the possibility of purchasing systems to support a QMS. Each of these jurisdictions has developed their own fully integrated purpose-built systems that include a quota database component. Their systems incorporate their own legislative and policy requirements. The costs of purchasing and adapting one of these systems could be as low as \$1.5 million, although it is yet to be determined if they are suitable for adaptation to the Department's IT systems and legal framework.

The Department is developing a tender document for a business analyst to examine the high level requirements for an Entitlement Management System for the Department that would incorporate a quota component. Once this documentation is complete, the functional specifications, business rules, processes around those rules and the system build requirements can be developed.

#### *Recovery of Setup Costs*

It is proposed that costs for the setup of the QMS project team and the IT requirements be financed by a loan from the Department of Treasury and Finance to be repaid over ten years via an industry service fee under new funding arrangements. Furthermore, costs could be spread to other fisheries that benefit from the new system. This is a matter that could be investigated by the Funding Working Group.

#### **IMPLEMENTATION DATE**

The Panel and RLIAC have advocated several years as the appropriate implementation period for a QMS. The Panel proposed a period of two to three years to allow for restructuring of fishing and processing businesses. It suggested that in order to avoid issues of operators trying to establish a claim to quota allocation during the transitional period, the announcement of the move to quota should also include details of how the initial quota allocation process would operate. The RLIAC proposed that there be three to five years' lead in time to allow for adjustments.

In South Australia, an implementation period of four years was provided to allow licence holders who had a higher catch history to adapt to the changes.

A four year transition is proposed given the scope of the change. This will provide a reasonable period for industry to adjust and more certainty that all supporting systems are fully functional. As the proposed commencement date is 1 July, the recommend date of commencement would be 1 July 2014.

### Proposal 3

That the quota management system is introduced four years after Ministerial approval i.e. 1 July 2014 if this occurred in the first half of 2010.

## ALLOCATION

While quota entitlement could be allocated in several ways such as fishing history or per pot, a landmark 1995 High Court decision in South Australia (Minister for Primary Industries & ORS v Lawrie) supported the allocation of quota on the basis of equal value per pot. The Department supports an equal allocation by entitlement (unit) by Zone, that is the value of a unit per zone would be equal to the Total Allowable Commercial Catch (TACC in kilograms) for the Zone divided by the number of units per Zone;

$$\text{Unit value per Zone} = \frac{\text{TACC(kgs) for Zone}}{\text{Total Units for Zone}}$$

However, given the highly contentious nature of allocation in general, and a complication with allocation of quota to Zone A licensees, as they fish in Zone B until the Abrolhos Islands fishing season opens in March, the Department recommends that an independent, three member panel be appointed to report to the Chief Executive Officer on allocations across the fishery and within zones. The independent allocation panel will report to the Chief Executive Officer on principles of allocation including zonal allocations.

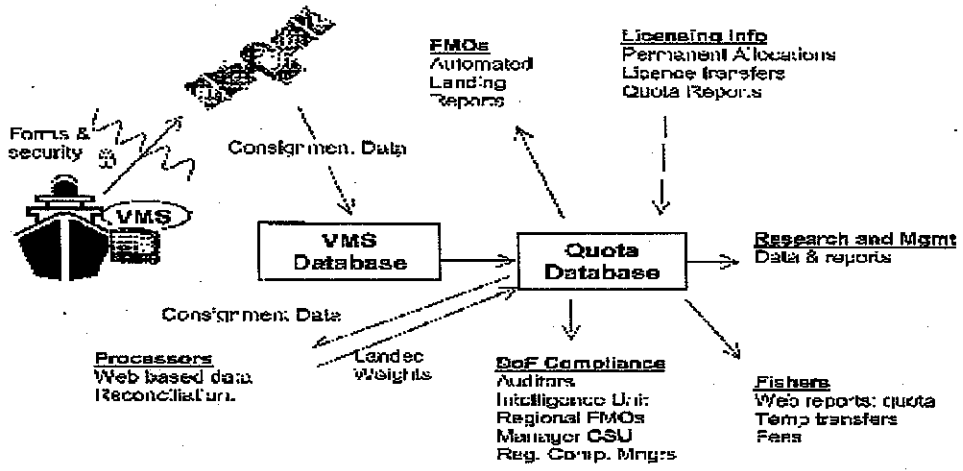
### Proposal 4

That an independent panel is convened to provide advice on initial allocations.

## KEY SUMMARY POINTS

- A QMS will facilitate economic efficiency but will not necessarily address stock sustainability issues any better than an input system.
- A QMS will provide greater certainty to licensees and provide greater flexibility in their fishing and marketing activities to maximise profits.
- The costs of managing the fishery under a QMS will not be significantly lower at least in the short to medium term. However, licensees may achieve cost savings and efficiencies in their fishing and marketing activities.
- A QMS will result in a form of entitlement better recognised and understood by banks and other lenders.

- To minimise risk and provide an appropriate transition, a four year implementation period is recommended (with implementation in 2013/14).



## QUOTA POLICY PROPOSALS

1. Retain the Managed Fishery boundary from Cape Leeuwin to North West Cape.
2. Retain Zonal Boundaries (A,B,C), for the first five years - then review.
3. Maintain Big Bank temporal closure while required.
4. Remove 20 Fathom line (36.6 metre) fishing restriction on holders of A Zone units of entitlement.
5. Commence the season in B and C Zones on 1 July.
6. Commence the season in A Zone on 15 March, close on 30 June.
7. Holders of both A Zone and B Zone entitlements on the one Fishing Boat Licence may not operate in B Zone while A Zone is open.
8. Remove the following closures:
  - a. Fridays, Saturdays, Sundays
  - b. Christmas and New Year closures.
9. Remove restriction on processors operating on Good Friday.
10. A person must hold a Managed Fishery licence and Fishing Boat Licence to operate in the Fishery.
11. Allow multiple Managed Fishery Licences to be held on the one Fishing Boat Licence.
12. Retain twelve month annual right to renewal for holders of Managed Fishery Licences as currently provided for in s 68 of the FRMA and subject to section 136a and 143.
13. No limit on the number of units of entitlement than can be held on a Managed Fishery Licence.
14. Replace minimum operating unit holding of 63 units with 5 tonne of quota.
15. No limitation on the number of pots that can be operated on a Managed Fishery Licence.
16. Retain current configuration of pots including escape gaps, but assess new pot designs.
17. No restrictions on pot hauling times.
18. No restrictions on the number of times a pot can be hauled during a day.
19. No soaking or baiting of pots prior to the start of the season.
20. Maintain maximum and minimum size limits - initially.
21. Prohibit taking setose, tarspot and berried females - initially.

22. Non retained animals must be returned to the water within five minutes of being taken.
23. No conversion of entitlements from one Zone to another zone i.e. Zone C units cannot become Zone B units.
24. Review boat breakdown policy under new arrangements.