



Fisheries Victoria Management Report Series

Victorian Rock Lobster Fishery Management Plan

No. 70
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**Fisheries Victoria
Management Report Series No. 70**

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Minister's foreword

I am pleased to be able to declare this management plan for the Victorian southern rock lobster fishery. This is the second plan for the fishery declared under the *Fisheries Act 1995* and builds on initiatives and directions contained in the first plan that was published in 2003.

The plan is part of the Brumby Government's vision for Victoria as a State where protecting the environment and using our resources sustainably is built into everything we do.

Southern rock lobster is a highly sought after delicacy, with local and overseas consumers willing to pay a premium price for the seafood experience. The majority of the catch is exported live to Asia. The industry is an important source of employment in regional coastal towns and has a landed catch value of around \$14 million.

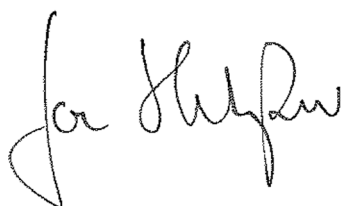
Being one of the State's earliest commercial fisheries, the industry has a long history of success. However, recent declining catch and catch rates in the Western Zone have posed a significant challenge to the industry. The Victorian Government is committed to continuing to work with rock lobster fishermen to tackle these challenges. The Brumby Government's recent \$5 million restructure assistance for the Western Zone industry has ensured fishers are in a much stronger economic position from which to take the fishery forward.

Consistent with our commitment for effective stakeholder consultation, the initiatives in the plan have been developed through intensive negotiation with key stakeholder groups. Effective stakeholder input was achieved through the Steering Committee convened by an independent chair, Mr Ian Cartwright.

The complexity of issues dealt with by the Steering Committee is not to be underestimated and I would like to thank members for the sustained effort put into working through some very challenging issues. I would also like to thank all stakeholders who made a submission to the draft plan during the three month public consultation period.

Once again, I would like to congratulate all those involved in the development of the *Victorian Rock Lobster Fishery Management Plan*.

I am confident that the plan will help ensure that the fishery continues to be managed on a sustainable basis into the future while allowing for ongoing development of the industry that it supports.



Joe Helper, MP

Minister for Agriculture

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Executive summary

The *Victorian Rock Lobster Fishery Management Plan* specifies the policies and strategies for managing the rock lobster fishery in Victoria for at least five years from declaration. The plan establishes arrangements to manage the commercial and recreational catch at levels that prevent over-fishing, allow stocks to rebuild and reduce the risks of lower stock abundance in the future.

This management plan has been prepared under the requirements of the *Fisheries Act 1995*. This is the second fishery management plan for the rock lobster fishery. The status of the stock and the existing management arrangements of the commercial and recreational fisheries have been reviewed in consultation with major stakeholders. The plan builds on the previous management arrangements and incorporates additional initiatives arising from the review and a risk assessment process.

Key aspects of this management plan are:

- A defined resource rebuilding strategy and a new decision framework to provide clear guidance for the Total Allowable Commercial Catch-setting process.
- Establishment and use of economic performance indicators for the fishery.
- Retention of the existing fisheries management zones.
- Retention of the existing arrangements for Total Allowable Commercial Catch and individually transferable quota units.
- Retention of independently tradable quota units and pots within each commercial management zone.
- Investigate the possibility of establishing a fully independent specialist panel comprising of fisheries science, economic and management skills to set the Total Allowable Commercial Catch for lobsters, with clear opportunities for fishers to make individual or collective submissions.
- Retention of the cap on the total number of pots in the fishery.
- Continued monitoring of changes in ecological risks to rock lobster stocks and habitats.
- A change in the timing of licensing and quota years to commence on 1 July 2009 to allow the most recent fishing catch data to be included in the stock assessment and Total Allowable Commercial Catch-setting process, providing for more responsive fishery management.
- Retention of the principle of resource sharing with a Total Allowable Catch for the recreational sector (i.e. Total Allowable Recreational Catch).
- A process for implementing an effective method of estimating recreational rock lobster catch as an input to the Total Allowable Recreational Catch.
- Establishment of a management advisory forum for the rock lobster fishery as a communication process to assist in improving management arrangements.
- Reducing the possession limit for recreational fishing from 4 to 2 lobsters per person in, on or adjacent to Victorian waters, thereby aligning it with the daily bag limit and assisting compliance with catch limits.
- A process for considering potential compliance tools such as tagging in the commercial fishery.
- A process for consulting the industry regarding the winter closure in the Western Zone fishery and other fishing business related initiatives that are not based on stock protection objectives.

A schedule for implementation and an estimate of the resources required to implement this management plan are provided.

Introduction

Rock lobster is the second most valuable commercial fishery in Victoria after abalone. The fishery is important to the state's economy and coastal communities, employing about 200 people in the catching sector. The catch in 2008/09 was 284.8 tonnes valued at about \$14.3 million.

The *Victorian Rock Lobster Fishery Management Plan* specifies the policies, management objectives and strategies for managing the rock lobster fishery under the requirements of the *Fisheries Act 1995* and the principles of ecologically sustainable development for at least the next five years.

The first fisheries management plan for the Victorian rock lobster fishery was the 5-year plan declared in 2003 (Department of Primary Industries 2003). Two key objectives of that management plan were to rebuild the rock lobster biomass and to promote commercial use for economic prosperity. The available biomass has increased only marginally in the five years since the 2003 plan was declared, with catch rates, a clear indicator of economic efficiency, falling sharply in some areas of the fishery. One shortcoming of the previous plan was the lack of clear decision rules in response to declining biomass indicators.

This second management plan for the fishery has been prepared after a review of the previous plan and an ecological risk assessment of the fishery (Appendix 1; Jenkins et al. 2005). The *Review of the Victorian Rock Lobster Fishery Management Plan* (Department of Primary Industries 2007a) is available on the DPI website <www.dpi.vic.gov.au>.

Risk mitigation strategies and improved management arrangements to meet the challenges and opportunities that have arisen in the fishery, including a need for a structured framework for establishing appropriate Total Allowable Catch levels or other management arrangements, are presented in this plan.

This management plan builds on the goals and objectives of the previous fishery management plan. The primary management objective is the sustainable use of the rock lobster resource in an environment of increasing community awareness of the implications of utilising marine resources and the uncertainties arising from climate change. The core sustainability strategy is a deliberate

stock re-building scheme where commercial catches are constrained to levels that will allow for a significant increase in the available biomass over the life of the management plan.

Effective implementation of this management plan is expected to enable industry to maintain the approval issued by the Commonwealth Government to export products taken from the fishery. This is essential to the economic viability of the fishery as most of the catch is exported.

To assist the reader, a glossary of terms used throughout this management plan is provided.

Management plan preparation and implementation

This management plan was prepared by Fisheries Victoria, a division of the Victorian Department of Primary Industries (DPI), under cooperative consultative arrangements including advice and input from a stakeholder-based steering committee and an opportunity for public comment. The preparation process is summarised in Appendix 2.

This management plan will come into effect following its declaration by the Minister via a notice in the *Victoria Government Gazette*.

Ongoing implementation of the plan will require consultation and action by DPI in conjunction with key stakeholders. Any proposed changes to the regulations that are subordinate to the Fisheries Act (the Fisheries Regulations) are subject to a Regulatory Impact Statement process under the provisions of the *Subordinate Legislation Act 1994*, which includes stakeholder consultation.

An annual progress report on the implementation of this management plan will be prepared by Fisheries Victoria. Progress will be reported against the key performance indicators described in the plan. The annual reports will be provided at an annual management workshop and be made publicly available through the DPI website.

Funding arrangements

Fisheries Victoria will fund from its program budget the management plan actions required to meet the objectives of the Fisheries Act. Subject to industry cost recovery and the budget, actions not required to meet these objectives will require funding to be obtained from other sources (e.g. the Recreational Fishing Licence Trust Account).

Description of the fishery

Southern rock lobster

Southern rock lobster (*Jasus edwardsii*) is found on coastal reefs from the south-west coast of Western Australia to the south coast of New South Wales, including Tasmania and the New Zealand coastline. Southern rock lobsters are found to depths of 150 metres with most of the catch coming from inshore waters less than 100 metres deep.

The life cycle of the rock lobster is complex. After mating in autumn, fertilised eggs are carried under the tail of the female for approximately three months before being released, typically between September and November. Once released, rock lobster larvae, or *phyllosoma*, live in the plankton and undergo eleven developmental stages over a period of one to two years while being carried by ocean currents. During metamorphosis, juvenile rock lobster shift from a planktonic to a benthic existence.

Rock lobsters grow by moulting or shedding their exoskeleton. The frequency of the moulting cycle declines with age from five moults a year for newly settled juveniles to once a year for mature adults. Males grow faster and larger than females reaching 160 millimetres in carapace length after ten years. Females generally reach 120 millimetres in the same period. Growth rates also vary spatially, with growth faster in the east than in the west. Female rock lobster are thought to mature around the same age but, due to variation of growth, generally mature at a larger size in the east (112 millimetres) compared to those in the west (90 millimetres).

Adult rock lobster are carnivorous and feed mostly at night on a variety of bottom dwelling invertebrates such as molluscs, crustaceans and echinoderms. Major predators include octopus and various large fish and sharks. In Victoria, the abundance of rock lobster decreases from west to east reflecting a decreasing area of suitable rocky reef habitat.

Overview of the fishery in Victoria

There are southern rock lobster fisheries in Victoria, South Australia, Tasmania, Western Australia and New Zealand. The most productive fishing grounds exist in waters adjacent to South Australia, which supports the largest fishery for the species, followed by Tasmania.

Victoria supports both commercial and recreational rock lobster fisheries. Commercial rock lobster fishers must hold a Rock Lobster Fishery Access Licence which is renewed annually.

Recreational rock lobster fishers must hold a valid Recreational Fishing Licence unless they are exempt.

Commercial and recreational rock lobster fishing activities in Victorian waters are managed under the provisions of the Fisheries Act and the Fisheries Regulations. A summary of the key elements of the fishery is provided in Table 1.

Commercial fishery

Victoria's rock lobster fishery is the second most valuable commercial fishery in the state with a landed value of \$14.3 million in 2008/09 or approximately 8.4 per cent of total landed value in Victoria, South Australia and Tasmania. Almost all of the catch is now exported alive to international markets, mostly in Asia with the remainder sold into domestic markets. The commercial lobster fishery has been managed as a separate and limited-entry fishery since 1968.

The fishery in Victorian waters is divided into two separately managed fishing zones: the Western Zone (from the South Australian border to Apollo Bay) and the Eastern Zone (from Apollo Bay to the New South Wales border) (Figure 1). The Victorian Government has jurisdiction over the commercial rock lobster fishery in Commonwealth waters adjacent to Victoria under an Offshore Constitutional Settlement Arrangement with the Commonwealth Government.

Fishing operations mainly occur out of twelve coastal ports, the most important of which are identified in Figure 1. Rock lobsters are caught with baited pots that are generally set and hauled once each day. Commonly used baits include barracouta, Australian salmon, mackerel, carp and some imported fish species. Each pot is set individually and has a surface buoy with the vessel identification mark. Circulating tanks, seawater sprays or wells in boats are used for keeping rock lobster alive.

During 2001, the fishery moved to output controls in the form of quota management, changing the emphasis from restricting fishing effort to allocating and limiting the catch. The commercial fishery is now primarily managed through limiting the number of Rock Lobster Fishery Access Licences allocated across the two zones; restricting the Total Allowable Commercial Catch in each of the zones divided into individual transferable quota units; and restricting the number of pots that can be used in each zone.

The rock lobster industry in the Western Zone has in recent times struggled to adapt to a number of challenges including reduced profitability and a thirty per cent reduction in Total Allowable

Commercial Catch over the last two years prior to declaration of this management plan.

In July 2008, the Minister for Agriculture announced a \$5 million structural adjustment program to assist the Western Zone rock lobster industry. The one-off program aims to restore investor confidence, improve economic efficiency and provide financial assistance for struggling licence holders to exit the industry. The program

was delivered by the Rural Finance Corporation and based on guidelines developed by DPI in consultation with the rock lobster industry.

Upon completion of the program in June 2009, 14 Western Zone Rock Lobster Fishery Access Licences and 366.52 quota units, equivalent to 29.3 tonnes of rock lobster quota, will be permanently removed from the fishery.

Table 1: Key elements of the rock lobster fishery.

Aspect of fishery	Commercial Fishery	Recreational Fishery
Access to fishery	Entry limited to holders of a Rock Lobster Fishery Access Licence	Recreational Fishery Licence (unless exempt) Unlimited entry
Allowed fishing method/ equipment	Baited pots	Hand capture and hoop nets
Management zones	Eastern Zone and Western Zone	State-wide –no zones
Primary method of control	Total Allowable Commercial Catch and individual transferable quotas	Daily bag limit: 2 lobster Possession limit: 2 lobster ¹
Method of monitoring	Quota Management System	Random inspection for recreational catch
Secondary controls	Legal minimum length, gear restrictions Closed seasons	Same as commercial fishery
	Commercial Fishery	
	Western Zone	Eastern Zone
Zone boundary	Longitude 143°40'E Longitude 140°57.9'E Latitude 40°S.	Longitude 143°40'E New South Wales border Latitude 39°12'S
Maximum number of licences	71 ²	47
Maximum number of licences per boat	Not limited	Not limited
Total number of quota units per zone	3633.48 ³	1000
Total number of pots in zone	5162 ⁴	2021
Total number of active pots in 2007-08	4792	1808
Maximum number of pots per boat	140	120
Minimum number of pots to activate licence	20	15
Minimum quota holding per licence	10 units	5 units
Maximum quota holding per licence	No maximum	No maximum
Total Allowable Commercial Catch in 2008-09 (tonne)	320	66
Landed catch, 2008-09 (tonne)	243.5	41.3
Value of landed catch in 2007-08	\$12.2 million	\$2.1 million

¹ To align daily bag and possession limits, the possession limit *in, on or adjacent to* Victorian waters of four lobsters will be changed to two lobsters under this fishery management plan.

² The maximum number of licences in the Western Zone has been reduced from 85 through the Western Zone structural adjustment program.

³ As a result of the Western Zone structural adjustment program implemented in early 2009, 366.52 quota units have been permanently removed from the Western Zone rock lobster fishery. The Initial Quota Order for the Western Zone will be amended from 4000 quota units to 3633.48 quota units under this fishery management plan and in accordance with the requirements of the Fisheries Act.

⁴ At the time of writing, the number of pots remaining in the fishery following the Western Zone structural adjustment program is not known.

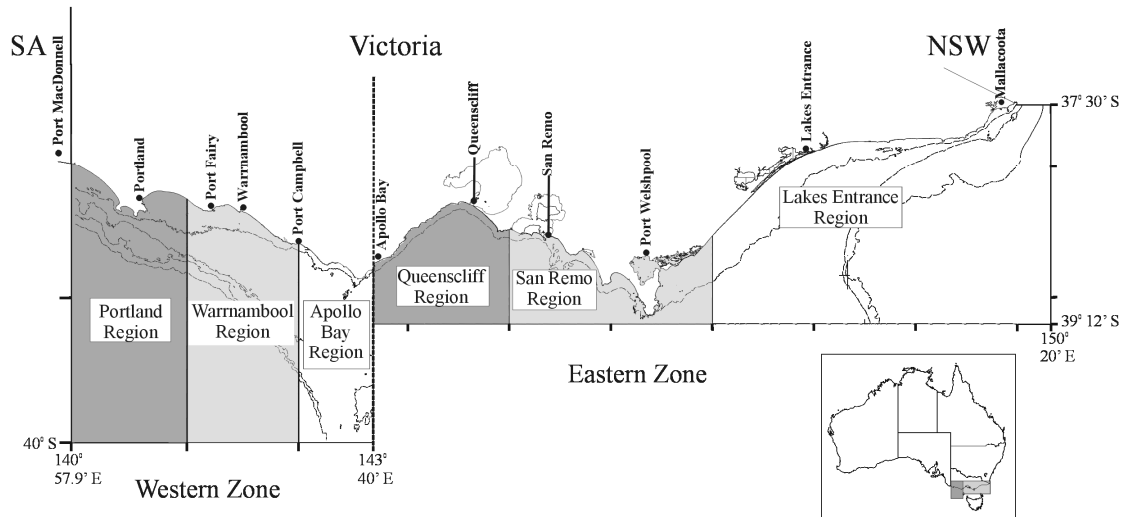


Figure 1. Rock lobster fishery management zones and assessment regions.

Recreational fishery

The most recent assessment estimated the total annual recreational rock lobster catch from both zones to be 10 to 20 tonnes (Hobday 1996). Most recreational take of rock lobster is by hand in water less than 20 metres deep. The fishery is managed on a state-wide basis using a daily bag and minimum size limit and there is a notional Total Allowable Recreational Catch of five and ten per cent of the Total Allowable Commercial Catch for the Western Zone and the Eastern Zone, respectively. Limiting recreational take to the Total Allowable Recreational Catch has, to date, not occurred because there is no agreed method for estimating and regulating take.

Rock lobster aquaculture

At present, there is no rock lobster aquaculture activity in Victoria as current rock lobster aquaculture technology has not proved to be commercially viable.

Stock assessment

The status of the rock lobster resource in Victoria is reviewed at the annual Stock Assessment Workshop undertaken by Fisheries Victoria involving all stakeholders. The cornerstone of the assessment is a length-structured population model (Hobday et al. 2005) which uses catch data, on-board observer data and biological information such as growth and reproductive characteristics to provide estimates of the current stock biomass and projections of future biomass under varying

harvesting strategies. The model also incorporates the impacts of marine protected areas.

The Stock Assessment Workshop is the principal means by which stakeholders are informed of the biological condition of the fishery and have input into the evaluation of the status of the stock. The stock assessment is a key input into the Total Allowable Catch Forum by providing an assessment of key performance indicators used in the decision framework for establishing allowable catch.

Stock status

Available biomass levels have only increased marginally over the five years since the 2003 plan was declared and remain below 30 per cent of B_{1951} (refer page 14 for explanation) in both zones. These levels are considered low given the uncertainties the fishery might face in the future from external pressures such as climate change. The low biomass levels result in relatively low catch rates, which in the Western Zone are currently at the lowest level in the history of the fishery. Catch rates in the Eastern Zone have been increasing from very low levels in the mid 1990s and are now approaching that of the Western Zone (Figure 2). The falling/low catch rates have had a direct effect on the profitability of the fishery.

The primary strategy of the new management plan will be to significantly rebuild the resource which will improve catch rates and have economic and social benefits by reducing fishing effort and improving economic efficiency.

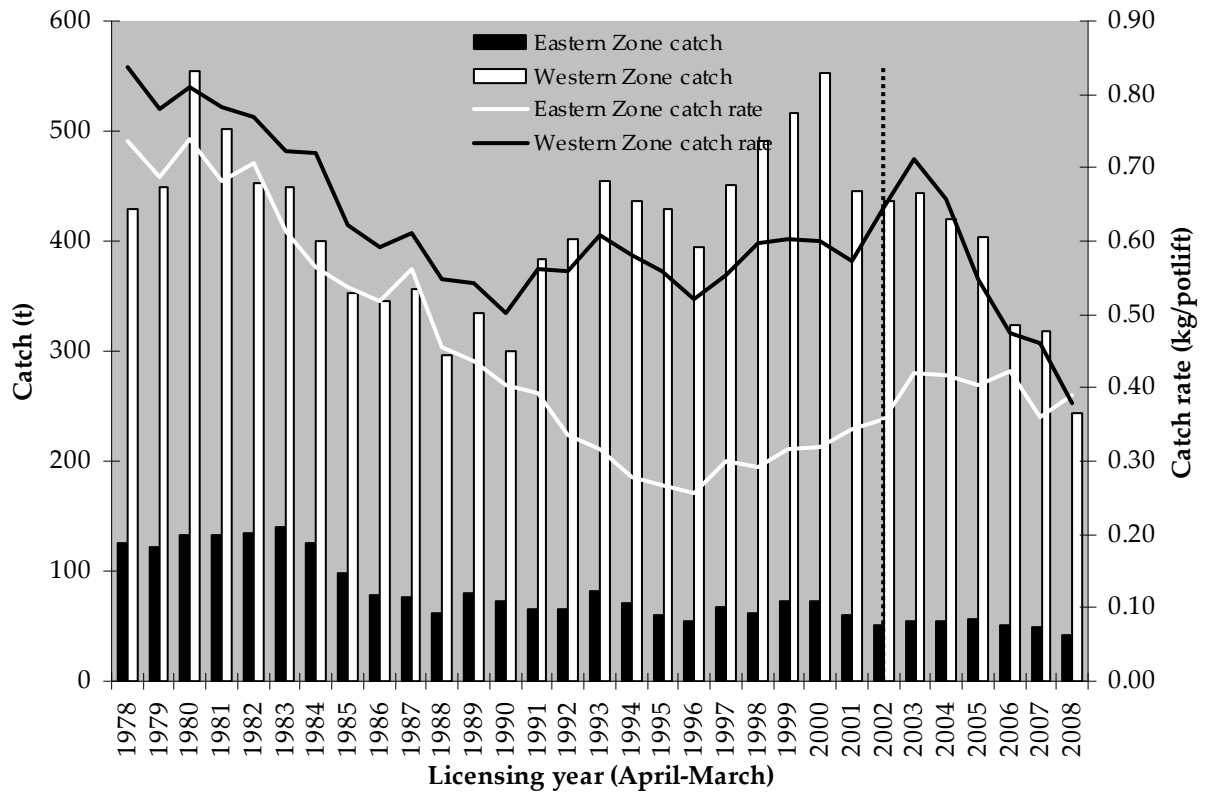


Figure 2: Catch (t) and catch rates (kg/potlift) by fishing zone from 1978-79 to 2008-09 (April–March). The vertical dotted line marks the introduction of quota management.

Policy and regulatory framework

Vision

Victoria's rock lobster resources are ecologically sustainable, economically viable and are managed in a socially equitable manner in partnership with stakeholders.

Fisheries Victoria's strategic direction

Fisheries Victoria's vision of success is to develop and manage Victoria's fisheries resources within an ecologically sustainable development framework to ensure fish now and for the future (Figure 3).

Securing fisheries resources is about demonstrating sustainability; sharing the fish means allocating fisheries resources in the public interest; and growing the value is about having competitive fishing industries.

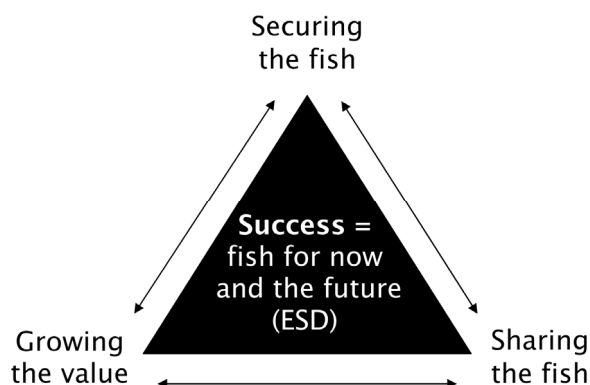


Figure 3. The Fisheries Victoria vision of success.

Policy and regulatory context

This management plan has been developed within the context of other important state and Commonwealth legislation and policies.

All Australian governments, including Victoria, have made a commitment to manage fisheries according to the principles of ecologically sustainable development. These principles include:

- ensuring that fishing is carried out in a biologically and ecologically sustainable manner

- ensuring that there is equity within and between generations regarding the use of fish resources
- maximising economic and social benefits to the community from fisheries within the constraints of sustainable utilisation
- adopting a precautionary approach to management, particularly for fisheries with limited data
- ensuring that the processes and procedures involved in management of a fishery are appropriate, transparent and inclusive.

These principles have been followed in developing this management plan.

Ecosystem-based fisheries management

Ecosystem-based fisheries management promotes the use of fisheries resources in a manner that does not jeopardise the benefits and opportunities of those resources for future generations. It recognises that the users and beneficiaries of fisheries resources are obliged to behave in a way that promotes the sustainability of the resource.

An ecosystem-based approach recognises the uncertainty that characterises our knowledge of fisheries and supporting ecosystems and allows for this uncertainty by applying the precautionary approach where knowledge is incomplete. The precautionary approach is based on the principles outlined in the Commonwealth *Intergovernmental Agreement on the Environment 1992*:

Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (Department of the Environment, Water, Heritage and the Arts 1992).

Fisheries Victoria undertakes a risk-based approach to implement ecosystem-based fisheries management so that the highest risks to fisheries and or supporting ecosystems are addressed as a priority, planned for and risks monitored.

The Fisheries Act 1995

The Fisheries Act provides the legislative framework for the regulation and management of Victorian fisheries and for the conservation of fisheries resources, including their supporting aquatic habitats. In summary, the objectives of the Fisheries Act include:

- To provide for the management, development and use of Victoria's fisheries
- To protect and conserve fisheries resources, habitats and ecosystems
- To promote sustainable commercial fishing and viable aquaculture industries and quality recreational fishing opportunities
- To facilitate access to fisheries resources for commercial, recreational, traditional and non-consumptive uses.
- To encourage the participation of resource users and the community in fisheries management.

The Fisheries Act provides for the development, implementation and review of fishery management plans; facilitates participation of stakeholders in fisheries management allowing for co-management; and prescribes enforcement powers to assist in achieving compliance with fishing controls.

The Fisheries Regulations 2009

The detailed management arrangements for the commercial and recreational rock lobster fishery are found in the *Fisheries Regulations 2009*. The regulations include licensing and quota management requirements, gear restrictions, catch limits, size limits, closed seasons and closed areas.

It is important to note that the provisions of fisheries legislation can only be applied to the control of fishing activities. Other human activities (e.g. foreshore management, marine pests) that may directly or indirectly affect fish habitats, fishery resources or the quality of fishing may be managed by other government agencies under a variety of legislation.

The Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* is administered by the Commonwealth Department of the Environment, Water, Heritage and the Arts.

The Environment Protection and Biodiversity Conservation Act provides for the identification of key threatening processes and the protection of critical habitat and promotes the conservation of

biodiversity and provides for the protection of listed species, protected areas and communities in Commonwealth areas.

Under the Environment Protection and Biodiversity Conservation Act, all export fisheries must be assessed against the *Guidelines for the Ecologically Sustainable Management of Fisheries* to ensure that fisheries are managed in an ecologically sustainable manner.

The Victorian rock lobster fishery was given export approval under the Environment Protection and Biodiversity Conservation Act in March 2004 and requires periodic reassessment. This plan has been prepared in recognition of the sustainability guidelines in order to assist industry to maintain access to export markets.

Off-shore Constitutional Arrangements

Under international law, Australia controls all economic resources, including fishing, mining and oil exploration, within its exclusive economic zone which extends 200 nautical miles from the territorial sea baseline (normally the low water mark). The division of management arrangements between the Commonwealth and the States within the exclusive economic zone is an important constitutional issue.

Under the Offshore Constitutional Settlement, states generally have responsibility over areas up to three nautical miles from the territorial sea baseline (i.e. coastal waters). Offshore Constitutional Settlement agreements between states and the Commonwealth provide an integrated legislative framework for managing commercial fisheries resources that move between the two jurisdictions by conferring management responsibility on Commonwealth or state fisheries management authorities (Attorney-Generals Department 2007).

Under an Offshore Constitutional Settlement agreement, the Victorian Government has jurisdiction over the commercial rock lobster fishery in Commonwealth waters adjacent to the state.

Marine national parks and sanctuaries

Like national parks on land, marine national parks and their smaller counterparts, marine sanctuaries, are highly protected areas of the sea. They safeguard a range of marine plants, animals and habitats in their natural state for the benefit of the environment and current and future generations of Victorians, while providing a buffer against potential environmental impacts.

Victoria was the first jurisdiction in the world to establish an entire system of highly protected marine areas where activities such as fishing, mining of seabed materials and dumping of waste are prohibited under the *National Parks (Marine National Parks and Marine Sanctuaries) Act 2002*. This system of parks and sanctuaries protects over five per cent of the Victoria's coastal waters.

Two marine national parks and three marine sanctuaries are located in the Western Zone; seven marine national parks and three marine sanctuaries are situated in the Eastern Zone. Parks Victoria is responsible for management of these parks and sanctuaries. Under a service agreement with Parks Victoria, Fisheries Victoria is responsible for the delivery of fisheries compliance in marine national parks and sanctuaries.

It is estimated that eight per cent and 16 per cent of the Eastern Zone and the Western Zone biomass, respectively, were incorporated into the marine national parks at their establishment (Hobday et al. 2005).

There have been some interactions between rock lobster fishers and marine national park boundaries and fishers seeking further information regarding these boundaries should contact Parks Victoria.

The Victorian Climate Change Strategy for Fisheries and Aquaculture 2008-2018

The *Victorian Climate Change Strategy for Fisheries and Aquaculture 2008-2018* will help to ensure the long term sustainability of Victoria's fisheries resources by guiding activities to support the fishing and aquaculture sectors and fisheries managers to prepare for, and adapt to, the impacts of a changing climate.

The Strategy covers all fishing and aquaculture for both inland and marine waters. It explains the roles of the Victorian Government and the fishing sectors in preparing for climate change, and explains how the Victorian Government will support adaptation changes.

Research information obtained under the climate change strategy will: assist Victoria's fishing and aquaculture sectors to implement actions to manage their own exposure to climate change risks and to successfully meet the challenges and opportunities ahead; be used by the Victorian Government to assist the industry to prepare for the challenges; and inform reviews of the legislation, plans and policies necessary to sustainably manage our community's fisheries resources within a changing climate.

The climate change strategy is available at www.dpi.gov.vic.au/fishing/.

Marine plan for south-eastern Australia

Under Commonwealth oceans policy, regional marine plans will be prepared at the large ecosystem level and will include marine protected areas.

The first plan to be developed is for the South-East Marine Region, which covers the waters from 3 to 200 nautical miles offshore between Bermagui, New South Wales to Cape Jervis, South Australia, including Tasmania. The importance of the fishing industry in this region is widely recognised. The value of the rock lobster fisheries within the region was more than \$171 million in 2006-07 (ABARE 2008).

Fishery management plans

The Fisheries Act provides for the preparation of management plans for Victoria's major fisheries. The *Victorian Rock Lobster Fishery Management Plan* contains the objectives, strategies and actions for the management of the fishery. The primary objectives of the plan are:

- Sustainability of the rock lobster resource
- Resource access and utilisation
- Cost effective, participatory fishery management

The strategies and actions to implement the objectives of this plan are described in the following sections and summarised in Table 2.

Actions, performance indicators, targets, key partners and potential funding sources are reported in the section entitled *Summary of the Victorian Rock Lobster Fishery Management Plan*.

Performance indicators

Performance indicators are provided for actions that Fisheries Victoria has responsibility for implementing. These indicators provide a means of tracking progress on an ongoing basis. Performance indicators are not provided for actions that other agencies are responsible for implementing.

As part of the ongoing implementation of this management plan, performance indicators may be further refined using data from monitoring programs and surveys.

Targets

Targets provide a longer-term measure for the objectives of this management plan and should be achieved through its successful implementation. Targets are not provided for actions that other agencies are responsible for implementing.

Industry code of practice

It is not practical to have all operational matters prescribed in regulations or as conditions specified on licences. During the life of this management

plan, the rock lobster industry will develop an overarching Code of Practice that will document and demonstrate the methods that the industry uses to operate in an environmentally and socially sustainable manner.

Table 2: Summary of the objectives, strategies and actions of the Victorian Rock Lobster Fisheries Management Plan

Objectives	Strategy	Actions
1. Sustainability of the rock lobster resource	1. Rebuild the stock biomass	<ul style="list-style-type: none"> • Maintain knowledge about the biomass • Establish and apply a defined biomass-build rate • Maintain appropriate input controls • Minimise mortality
	2. Maintain the ecological integrity of the fishery ecosystem	<ul style="list-style-type: none"> • Minimise wildlife interactions and ecological effects of rock lobster fishing • Assess ecological risks of fishing and major threats to rock lobster habitats
2. Resource access and utilisation	3. Facilitate an economically efficient commercial fishery	<ul style="list-style-type: none"> • Maintain access for commercial use • Introduce and monitor economic performance indicators • Facilitate market access for rock lobster products
	4. Maintain recreational and Aboriginal use	<ul style="list-style-type: none"> • Maintain recreational opportunities • Estimate the recreational catch • Integrate traditional fishing access with other management arrangements
3. Cost-effective, participatory management	5. Promote stakeholder participation in decision-making	<ul style="list-style-type: none"> • Provide opportunities for stakeholder participation
	6. Deliver and monitor cost effective management arrangements	<ul style="list-style-type: none"> • Recovery of fishery management service costs • Cost-effective identification of commercially taken rock lobster • Identification and prioritisation of research and development projects • Investment in and delivery of research and development • Monitor aquaculture activities
	7. Achieve compliance with legislation	<ul style="list-style-type: none"> • Review and implement the rock lobster compliance strategy • Report against the performance measures on an annual basis • Develop an education and communication strategy

Management arrangements in the rock lobster fishery

Management arrangements for the fishery are established in the regulations which are subordinate to the Fisheries Act. Following a review of the Fisheries Regulations, new regulations will be declared and any changes to these management arrangements will apply.

Rights and entitlements

The Victorian community owns the wild rock lobster resource and has provided long-term and secure rights to holders of Rock Lobster Fishery Access Licences to access it for commercial fishing. Ownership of rock lobster passes to the licence holder when they are taken from waters under Victorian jurisdiction in accordance with the conditions of the licence. Under this management plan, rock lobster fishing entitlements remain based on the legal ownership of Rock Lobster Fishery Access Licence holders to quota holdings and pot entitlements as defined in the Fisheries Act. Quota units and pot entitlements on access licences remain as separate and independently tradeable commodities within the fishery.

Commercial and recreational access

The commercial rock lobster fishery remains a limited-entry fishery and the Rock Lobster Fishery Access Licence provides access to the fishery. No additional licences will be issued in either fishery zone and licences will not be replaced when cancelled by a court or removed from the fishery through mechanisms such as restructure or non-renewal. Access licences will remain fully transferable.

Unless a recreational fisher is exempt, a Victorian recreational fishing licence is required to take rock lobster from marine waters in Victoria. Bag and size limits and gear restrictions apply to recreational take of rock lobster.

Licence renewals

Rock Lobster Fishery Access Licences are issued for one year and must be renewed prior to expiry in order for the licence holder to commence fishing at the start of a new quota period.

Licence holders will not receive a quota notice for a new quota period until their licence is renewed.

Licences which are not renewed will be removed from the rock lobster fishery.

Management controls

The Victorian commercial rock lobster fishery is managed as an output controlled (i.e. Total Allowable Commercial Catch, individual transferable quota) fishery augmented by a number of input controls (i.e. licence conditions, total number of pots per zone and per boat, legal minimum length, and closed seasons) that are applied separately to each fishing zone. Output controls constrain and limit the amount of rock lobster taken from the fishery. Input controls limit effort and address biological and ecological aspects of the fishery.

Total Allowable Commercial Catch and individual transferable quota

The primary catch control tool for the rock lobster fishery is individual quotas. Each licensed commercial fisher is annually assigned a proportion of the Total Allowable Commercial Catch through individual transferable quota units.

Each rock lobster fishing zone has a total number of individual transferable quota units. In any given year, a zonal Total Allowable Commercial Catch is established, which by dividing by the number of individual transferable quota units in the zone, confers a kilogram value to each unit. A quota notice is issued by the Minister or delegate to each access licence holder stating the Total Allowable Commercial Catch for each zone, the kilogram value of a quota unit in each zone and the period for which the quota notice applies.

Individual transferable quota units are attached to Rock Lobster Fishery Access Licences and it is a requirement that a commercial rock lobster fisher hold a licence to which a minimum number of individual transferable quota units are attached. The number of individual transferable quota units was established when the quota management system was introduced and quota units allocated. Individual transferable quota units are tradable and a licence holder may apply to transfer individual transferable quota units to the holder of another Rock Lobster Fishery Access Licence within the same zone.

Individual transferable quota units may be transferred permanently or for a quota period. There is no maximum number of individual transferable quota units that can be attached to a licence in either zone but there remains a requirement for a minimum of five and ten individual transferable quota units in the Eastern Zone and the Western Zone, respectively.

The number of individual transferable quota units assigned to a Rock Lobster Fishery Access Licence is known and tracked. As rock lobster are caught, the weight of the catch is subtracted from the quota balance assigned to the Rock Lobster Fishery Access Licence. When the entire quota assigned to a licence has been caught, the holder must either acquire more individual transferable quota units or cease fishing for the remainder of the quota period.

The rock lobster Quota Management System is based on telephone and written records. The number of rock lobster caught will continue to be recorded in the daily catch record book and reported by telephone using the interactive voice response system within the specified minimum time prior to entering any of the ports or mooring areas at which rock lobster may be landed in Victoria. Daily catch records are submitted to DPI each month.

Rock lobster catches must be weighed and reported through the interactive voice response system no more than 20 minutes after landing. Rock lobster sold or taken from the place of landing must be recorded in catch disposal records. Catches, boats and required documentation are inspected regularly by Fisheries Officers.

The Total Allowable Commercial Catch is set for the southern rock lobster and includes catches of the eastern rock lobster, *Jasus verreauxi*.

As a result of the Western Zone structural adjustment program implemented in early 2009, 366.52 quota units have been permanently removed from the Western Zone rock lobster fishery. The Initial Quota Order for the Western Zone will therefore be amended from 4000 quota units to 3633.48 quota units under this fishery management plan and in accordance with the requirements of the Fisheries Act.

Licence Conditions

The current arrangement whereby a licence holder may apply to vary the conditions relating to the operators, boat and pot entitlements on a Rock Lobster Fishery Access Licence will remain. No more than two operators can be named on a Rock

Lobster Fishery Access Licence and either person may operate the licence. The same boat may be specified on multiple access licences in the same zone but not different zones.

Pots, pot entitlements and limits

Pot entitlements are freely traded amongst licence holders in each zone according to competitive market forces. Pots may be transferred permanently, or for one licensing period, between Rock Lobster Fishery Access Licences within a zone.

The overall number of pots in the fishery is limited to 5162 in the Western Zone and 2021 in the Eastern Zone. The number of pots in Western Zone is expected to be reduced following the completion of the structural adjustment program.

Under this fishery management plan, no more than 140 pots can be fished from a commercial rock lobster fishing boat.

The current management arrangements which place no limit to the number of pots on a licence or maximum quota holding remain. Licence holders must have a minimum of 15 and 20 pots to operate in the Eastern Zone and the Western Zone, respectively. A licence holder can own quota without pots but cannot operate in the fishery.

Legal minimum length

The legal minimum length for rock lobster is defined by the carapace length which is measured from the front edge of the groove between the animal's large antennae to the nearest part of the rear edge of the carapace. At the commencement of this management plan, the legal minimum length for male and female rock lobster is 110 millimetres and 105 millimetres, respectively.

Due to differences in size at the onset of sexual maturity and growth rates of male and female rock lobster, the legal minimum length may be reviewed as part of the Total Allowable Commercial Catch-setting process to manage available and spawning biomass in each zone.

Closed seasons

Fishing for rock lobster is prohibited during closed seasons. The closed season for the taking of female rock lobster from 1 June to 15 November protects females in berry (with eggs attached) during the spawning period. The closed season for male rock lobster, from 15 September to 15 November, protects males during the moulting period when soft shells increase their vulnerability.

The take or possession of soft-shelled rock lobster or female rock lobster in berry, or the removal of eggs, spawn, setae or fibres from females, is prohibited in Victoria.

Fisheries regulations are in place to manage the environmental risks associated with leaving rock lobster pots unattended during closed seasons (i.e. holding ground). Under the Fisheries Regulations, holders of Rock Lobster Fishery Access Licence must not, during the closed season for male rock lobster, use any rock lobster pot or leave or have any rock lobster pot immersed or set in Victorian waters.

Interstate landing arrangements

Rock lobster catches from Victorian waters may be landed in Port MacDonnell, South Australia and in Eden, New South Wales. Licence holders must apply each year for a condition to allow for interstate landings to be added to their licence.

Discussions will continue with Tasmanian fisheries managers regarding possible arrangements for landing Victorian rock lobster in Tasmanian ports.

Objective 1: Sustainability of the rock lobster resource

Strategy 1: Rebuild the stock biomass

Maintain knowledge about the biomass

National and international workshops on lobster biology and management are held regularly and provide benchmarks for scientific advancement and opportunities for shared knowledge and research collaboration. Given this background, the Victorian rock lobster resource is well monitored and understood relative to many other commercially exploited species.

The aim of biological research and monitoring is to improve the understanding of rock lobster stock dynamics and to evaluate alternative management measures. This includes developing better indicators of stock status, maintaining fishery independent surveys and obtaining more robust estimates of the recreational catch.

Available biomass is a measure of the stock which is above legal minimum length and therefore available for harvest. Spawning biomass is a measure of the stock of mature females who contribute to recruitment. The spawning and available biomass values are calculated using the rock lobster fishery model. The biomass performance indicators from the 2003 rock lobster management plan have been retained, along with the concept of reference points relative to the biomass in 1951 (B_{1951}), the first year that catch per unit effort data was available (Table 3).

Improved methods of standardising catch per unit effort will be developed in the first year of this management plan. As catch per unit effort is a major driver of biomass estimation in the model, appropriate standardisation is required to ensure that it is representing abundance and not affected by other factors. Research by other agencies (e.g. the Fisheries Research and Development Corporation) may assist Fisheries Victoria to improve the measurement of catch per unit effort. Using catch per unit effort as an indicator of economic efficiency will also be investigated.

The rock lobster fishery model

The rock lobster fishery model is a length-structured model that assesses risk associated with various harvest strategies (Hobday and Punt

2001). To achieve this outcome, the rock lobster population is divided into several length-classes starting at 80 millimetres with the probability of growing from one length class into another based on an analysis of tagging data (Troynikov 1998). Consideration is given to length-specific vulnerability, the winter closure for females and differences in the number of eggs produced by different sized females. The model assumes that recruitment is variable and independent of egg production and is fitted to data on catches (in weight); catch rates; number of animals landed by commercial fishers; and the length-frequency distribution of the catches (by sex).

The model incorporates Marine Protected Areas (Hobday et al., 2005) but illegal harvest is not considered significant and is not included.

The major uncertainties considered in the model projections relate to the current state of the resource relative to that in some early year and future recruitment.

Actions

Fisheries Victoria to develop improved methods of standardising catch per unit effort in the first year of this management plan

Fisheries Victoria to use regional assessments to measure spatial differences within zones

Within the first year of this management plan, Fisheries Victoria and relevant stakeholders will establish a resource assessment working group for the purpose of improving fishery assessments (including obtaining a more complete understanding of illegal, unregulated and unreported (IUU) catch) and will report to the Management Advisory and TAC Forums

Ongoing responsibility for the operation of this working group to be transferred to relevant stakeholders within two years

Establish and apply a defined biomass build-rate

Beginning in 2011, a new performance indicator, biomass build-rate, will be introduced and evaluated at zonal and regional scales. Build-rate will define a fixed window that future biomass estimates and projections must lie within. The

primary strategy of this management plan is to rebuild the available biomass in both zones to the target reference point of 40 per cent of B_{1951} by 2021. In this management plan, Total Allowable Commercial Catch-setting options must deliver projections of biomass levels that fall with the defined build-rate 'window'.

The starting point for the window will be the biomass for the 2010/11 year and the upper and lower bounds defined by the time required to reach the 40 per cent target between 2016 (5-year build rate) and 2021 (10-year build rate) (Figure 4). The window is fixed in time from 2011 and future Total Allowable Commercial Catch levels will be adjusted to ensure the projected available biomass five years into the future lies within the build-rate window.

The spawning and available biomass levels must be kept above the limit reference point of 20 per cent of B_{1951} with a 75 per cent probability. If either indicator falls below the limit reference point, Total Allowable Commercial Catch levels must be set so that the indicator returns to above the limit within two years.

Results of the stock assessment will be tested against the decision framework at the annual TAC Forum. Figure 5 outlines the order in which the decision points are tested in a given year. Once a decision point is triggered, the action to be taken in that year is determined and no further decision points are considered. The Total Allowable Commercial Catch remains unchanged unless one of the decisions leads to an action to either increase or decrease in the Total Allowable Commercial Catch.

If the 5-year available biomass projection is below the build-rate window, the Total Allowable Catch must be set to bring the projections above the 50 per cent build-rate within five years. If the build

rate projection is above the 50 per cent mid-point for two consecutive years, the Total Allowable Catch may be increased by up to ten per cent providing the build rate remains above the 50 per cent line (Figure 4).

This is the first time that a decision framework that specifies a time frame for which stock biomass targets must be reached has been applied to the Victorian rock lobster fishery. The new indicators and decision framework with mandatory adjustments to Total Allowable Catch if decision points are triggered will commence in 2011. Until that time, the decision framework will be run in parallel with the decision rules specified in the previous rock lobster fishery management plan and will be reviewed in 2010. Following that review, and after the incorporation of any changes, Fisheries Victoria will, in consultation with relevant stakeholders, implement the decision framework as outlined in Figure 5 in 2011.

Actions

Fisheries Victoria will use the decision rules specified in the previous rock lobster fishery management plan in determining the Total Allowable Catch in 2010

Fisheries Victoria will run the new decision framework in parallel with the rules specified in the 2003 fishery management plan in 2010

Fisheries Victoria will in consultation with relevant stakeholders, undertake a review of the new decision framework in 2010

Following the 2010 review, and after the incorporation of any changes, Fisheries Victoria will in consultation with relevant stakeholders, implement the new decision framework in setting the Total Allowable Catch in 2011

Table 3. Stock performance indicators and reference levels.

Indicator	Used in plan	Type	Limit Reference	Target Reference	Considerations	
					Zone	Regional
Spawning biomass	✓	Calculated	Above 20 per cent of B_{1951} with a 75 per cent probability	Above 40 per cent of B_{1951} with a 50 per cent probability	✓	Largest
Available biomass	✓	Calculated	Above 20 per cent of B_{1951} with a 75 per cent probability	Above 40 per cent of B_{1951} with a 50 per cent probability	✓	Largest
Rebuild rate	Start 2011	Projected	10-year build rate	50 per cent build rate	✓	Majority
Total Allowable Catch taken	✓	Actual	>90 per cent	-	✓	-
Standardised catch per unit effort	Start 2011	Actual	Trend only	Not applicable	✓	Majority

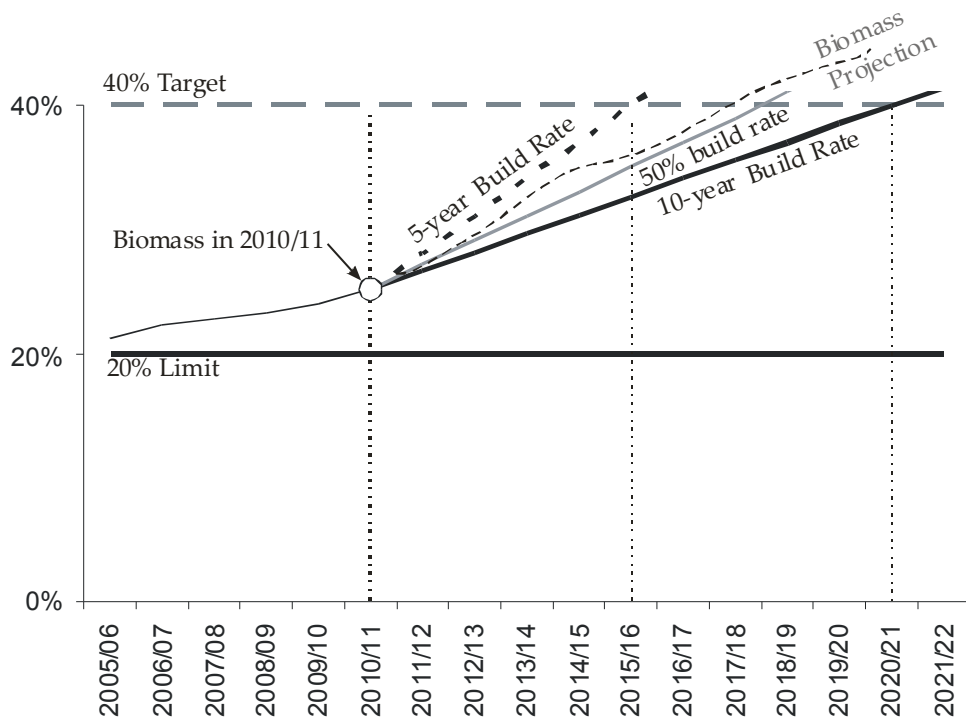
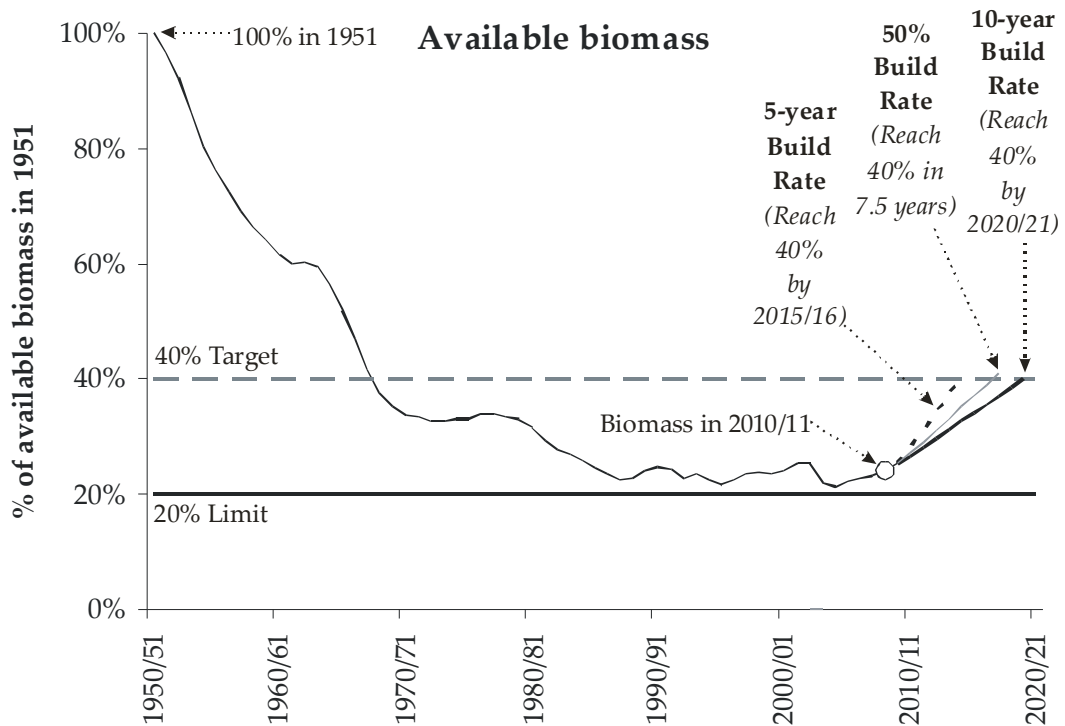


Figure 4. Generalised historical available stock biomass and five and ten year and fifty per cent biomass build rate projections. This figure is for illustration purposes and the historical data does not apply to either the Eastern Zone or the Western Zone.

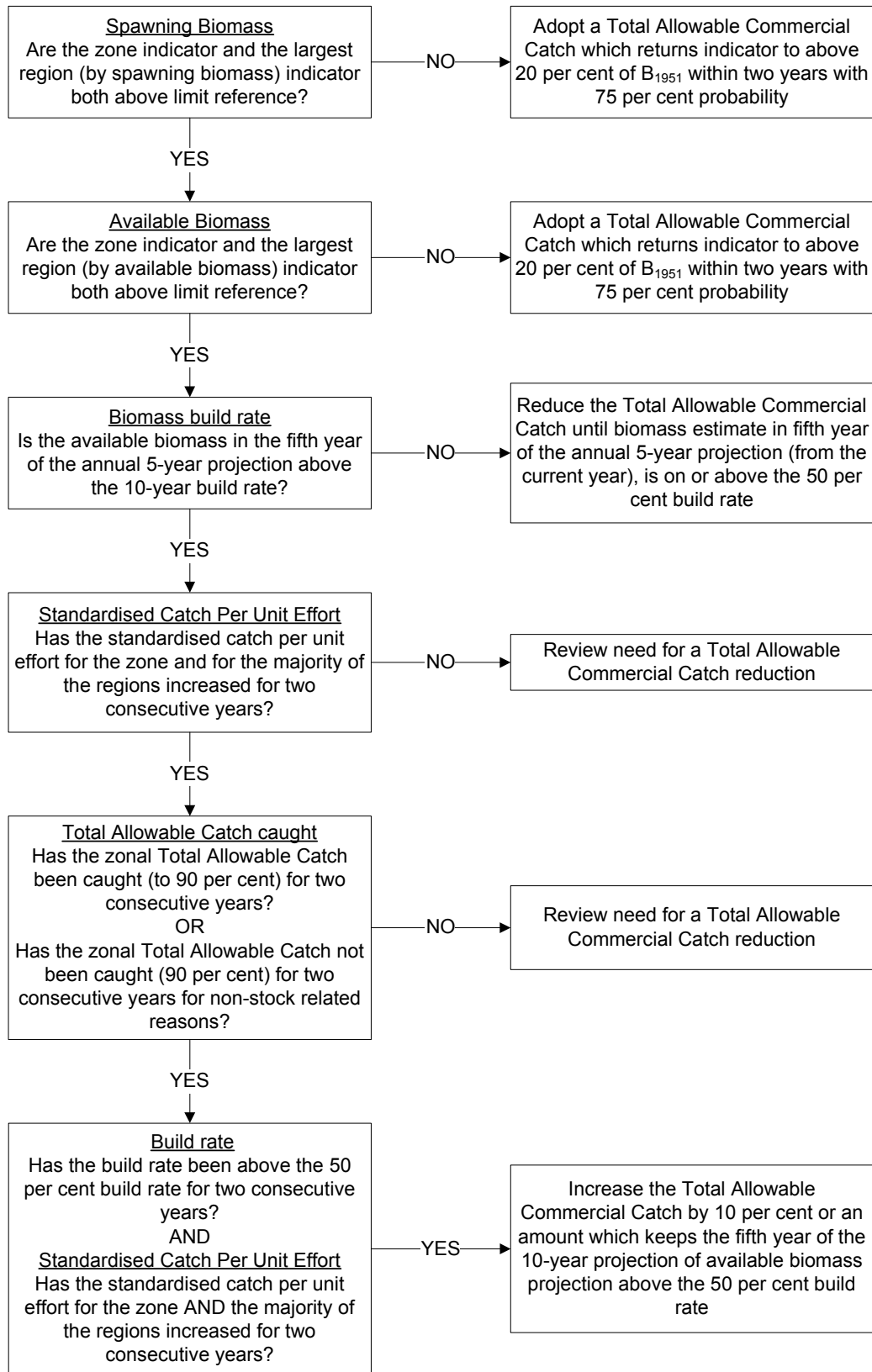


Figure 5. Default hierarchal management decision framework used to establish Total Allowable Commercial Catch (TACC).

Maintain appropriate input controls

The appropriate use of fishery management tools is critical to ensure that stock biomass is built and maintained at biologically sustainable and economically efficient levels. To ensure the sustainable development of the rock lobster fishery, all management tools will, over the life of this fishery management plan, be reviewed as required. In reviewing management tools, Fisheries Victoria will note the need to provide certainty for operators to plan their business activities.

Action

Fisheries Victoria to review and assess the appropriateness and effectiveness of fishery management tools

Minimise mortality

Pot design and discard of under-size rock lobster

Escape gaps will continue to be used in pots to minimise by-catch of undersized rock lobster.

Undersized rock lobster and berried females caught in pots should be quickly returned to the sea alive near the habitats where they were caught. As discussed in the section entitled *Industry Code of Practice*, a Code of Practice will contain recommendations for appropriate practices.

Discard rates will continue to be monitored by onboard observers and taken into account during stock assessments.

Industry will monitor means, including changes to pot design, to reduce rock lobster mortalities.

Actions

Seafood Industry Victoria to prepare a Code of Practice that will include appropriate practices for returning undersize rock lobster and berried females to the sea alive

Fisheries Victoria will continue to use onboard observers to monitor rock lobster discards and consider this information during annual stock assessments

Industry will monitor means, including changes to pot design, to reduce rock lobster mortalities

Coffs and wet wells

A coff is a sea cage used to store rock lobster alive. A wet well is a water-filled chamber on board a rock lobster fishing boat used to store rock lobster alive. Rock Lobster Fishery Access Licence holders may continue to use coffs or wet wells.

Under current management arrangements, rock lobster that die in coffs or wet wells are not deducted from quota.

Once a rock lobster is in the possession of a licence holder it is no longer common property. The management plan recognises that in principle, where a licence holder has removed a rock lobster from the fishery and is storing it in a coff or wet well, the kilogram value of that lobster will be deducted from the individual transferable quota of that licence holder.

This management plan provides for mandatory reporting of rock lobster mortality in coffs and wet wells to assist in quantifying mortalities.

Measures to manage deaths in coffs and wet wells will be developed early in the life of the plan and may be included in a Code of Practice. New regulations will be introduced to implement changes for coffs and wet wells as required.

Actions

Seafood Industry Victoria to develop measures to manage deaths in coffs and wet wells early in the life of the plan

Fisheries Victoria to introduce the requirement that, from 1 July 2011, operators must deduct from their quota the estimated weight of rock lobsters that will be stored in coffs or wet wells

Strategy 2: Maintain the ecological integrity of the fishery ecosystem

Minimise wildlife interactions and ecological effects of rock lobster fishing

Code of practice for minimising entanglements

The *Victorian Rock Lobster Fishery Code of Practice for Reducing Whale Entanglements* (Seafood Industry Victoria 2005) was developed to minimise wildlife entanglements. While this Code of Practice is specifically aimed at minimising entanglement of whales in rock lobster pot lines, the strategies proposed will minimise entanglements with other marine wildlife as well.

This Code of Practice will assist industry in meeting the requirements of the Victorian *Flora and Fauna Guarantee Act 1988* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and will be incorporated into the industry Code of Practice that will be developed for the commercial fishery.

Action

Seafood Industry Victoria to incorporate the *Victorian Rock Lobster Fishery Code of Practice for Reducing Whale Entanglements* into the industry Code of Practice that will be developed for the commercial fishery

Wildlife interaction reporting

Under the Victorian *Wildlife Act 1975*, the *Flora and Fauna Guarantee Act* and the *Fisheries Act*, interactions with protected wildlife are an offence and may be subject to prosecution. This creates a disincentive for fishers to accurately report interactions with protected species.

DPI and the Department of Sustainability and Environment have reached an agreement whereby an operator who is fishing in Victorian waters in accordance with the conditions of a Rock Lobster Fishery Access Licence and the prescribed management arrangements for the rock lobster fishery, will not be prosecuted for an incidental or unintentional interaction with protected species, provided such interactions are reported (Department of Primary Industries 2007b). A similar agreement exists for Commonwealth waters.

Protected species that may be encountered in the rock lobster fishery include all cetaceans (*i.e.* whales and dolphins), seabirds, marine turtles, seals, syngnathids, great white shark, grey nurse shark and whale shark.

Incidental interactions with protected species must be reported by operators using the Protected Species Interactions form contained in the Rock Lobster Daily Catch Record Book. Interaction reports must be submitted with the daily catch record form.

Action

Industry to report incidental interactions with protected species using the *Protected Species Interactions* form

By-catch

Several species of marine invertebrates and fish including octopus, draughtboard sharks, wrasse, and leatherjackets and hermit, giant, sand and velvet crabs are taken as by-catch in lobster pots (Hobday et al. 2007). Some by-catch is used as bait or sold (*i.e.* it is by-product).

An onboard observer program monitors by-catch, wildlife interactions and discards. Monitoring has shown that fishing-related interactions and mortalities of by-catch species are low, due in part to the use of escape gaps and return to the sea of by-catch alive. Fishing effects on by-catch species are also minimised through codes of practice.

The onboard observer program will continue to enable ongoing assessment of the impacts of the fishery on other species.

Action

Fisheries Victoria to continue to use onboard observers program to monitor the impacts of by-catch on the fishery

Assess ecological risks of fishing and major threats to rock lobster habitats

Identification of critical habitats for rock lobster

A study of rock lobster habitats was conducted as an action of the previous management plan. At the time of preparation of this plan, the report of the study was in the final stages of preparation. When the final report is available, the findings will be considered and actions will be developed as necessary.

Action

Fisheries Victoria to review the final report on rock lobster habitat and take appropriate action as necessary

Climate change

Climate change is a strategic priority for action by the Victorian Government. The *Victorian Climate Change Strategy for Fisheries and Aquaculture 2008-2018* (refer page 9) will help to ensure the long term sustainability of Victoria's fisheries resources by guiding activities to support the fishing and aquaculture sectors and fisheries managers to prepare for, and adapt to, the impacts of a changing climate (Department of Primary Industries 2009a).

Research information obtained under the strategy will assist Victoria's fishing and aquaculture sectors to implement actions to manage their own exposure to climate change risks and to successfully meet the challenges and opportunities ahead; be used by the Victorian Government to assist the industry to prepare for the challenges; inform reviews of the legislation, plans and policies necessary to sustainably manage our community's fisheries resources within a changing climate.

This response may include adapting the rock lobster fishery model to allow for changes in spawning activity, fecundity and or growth rates.

Actions

Fisheries Victoria will continue to monitor the potential impacts of climate change on the rock lobster fishery and will develop a response if required

Fisheries Victoria will give high priority to collaborative research with adjacent jurisdictions that is aimed at understanding the potential impacts of climate change on the rock lobster fishery

Rock lobster fishery ecological risk assessment

The ecological risk assessment (Appendix 1) determined that climate change is an extreme risk to the rock lobster fishery. The risk assessment panel concluded that climate change could directly affect the survival and distribution of rock lobster and the reef plants and animals on which they depend. The panel also recognised that ocean currents important to the productivity of the fishery may be affected by climate change.

In the first year of this management plan, Fisheries Victoria will establish a working group to update and review the currency of the fishery risk assessment. The review will include an assessment of the risks associated with interactions of the fishery with cetaceans (e.g. southern right, humpback and blue whales).

Actions

Within the first year of this management plan, Fisheries Victoria to review the rock lobster fishery ecological risk assessment in consultation with relevant stakeholders

This review will consider the adequacy of its assessment of the ecological risks associated with cetacean entanglements

Objective 2: Resource access and utilisation

Strategy 3: Facilitate an economically efficient commercial fishery

Maintain access for commercial use

Current management arrangements

Under this fishery management plan, current administrative arrangements relating to the transferability of access licences, quota units, pot holdings and entitlements, and the establishment of the Total Allowable Commercial Catch remain.

A licence holder may apply to vary the conditions on an access licence relating to the operators, boat and pot entitlements. Up to two operators can be named on a Rock Lobster Fishery Access Licence so that either person may operate the licence. The same boat may be specified on multiple access licences for the same zone but not for different zones. This allows multiple licences to be operated from one boat.

Action

Fisheries Victoria will continue to provide a mechanism for fishery operators to vary Rock Lobster Fishery Access Licence in specified circumstances

Change to quota and licensing year

Under this plan, the quota period will change to commence on 1 July each year, and run until 30 June the following year. This will allow for the most recent summer fishing data to be used in the stock assessment and Total Allowable Commercial Catch-setting process and align the quota and licensing years with other business priorities that are based on the financial year. The new quota period will be introduced in 2009.

It is necessary for the licensing year and the quota period to continue to be aligned for a range of administrative and fishery management reasons. The rock lobster licensing year will also change to 1 July to 30 June.

Action

Fisheries Victoria to re-align the licensing and quota periods to begin on 1 July and finish on 30 June the following year

Amend the Western Zone Initial Quota Order

The Western Zone structural adjustment program implemented in early 2009 resulted in 366.52 quota

units being permanently removed from the Western Zone rock lobster fishery.

The Initial Quota Order for the Western Zone will therefore be amended from 4000 quota units to 3633.48 quota units under this fishery management plan and in accordance with the requirements of the Fisheries Act.

Action

Fisheries Victoria to amend the Initial Quota Order for the Western Zone from 4000 quota Units to 3633.48 quota units

Western Zone commercial rock lobster fishery winter closure

At the request of industry, the Western Zone was closed in winter by Fisheries Notice in 2007 and 2008. The closure was for socio-economic reasons because catch rates, and hence profitability, are generally low during the winter months.

Because these closures have not been for the purpose of stock protection, a clear rationale, including a high level of industry support, will be required to implement closures in the future.

Fisheries Victoria will consult with holders of Rock Lobster Fishery (Western Zone) Access Licences regarding the implementation of a winter closure in 2010. Depending on the outcome of this consultation process, a decision will be made on a winter closure that will apply for the duration of this management plan.

Action

Starting in 2010, Fisheries Victoria to conduct a poll of Rock Lobster Fishery (Western Zone) Access Licence holders to determine if a winter closure will be implemented each winter for the duration of this fishery management plan

Licensing receivers and processors

Rock Lobster Fishery Access Licence holders sell their catch to commercial fish processors, wholesalers and retailers. There is no requirement in Victoria for a fish receivers licence for the rock lobster fishery.

There is little evidence of a significant compliance problem with rock lobster receivers and this management plan does not recommend licensing receivers and processors. If new information is identified during the annual compliance review, this arrangement may be reviewed, and action taken, if appropriate.

Action

Fisheries Victoria to monitor current arrangements for receivers and processors of rock lobster during annual compliance reviews and take appropriate action if required

Enhancing quota trading, investment and industry development

The separation of quota entitlements from the fishery access licence has potential to enhance quota trading, investment and industry development. Other initiatives such as the introduction of a transparent web based quota trading system have potential to improve effectiveness of the quota trading market.

Action

Fisheries Victoria and Seafood Industry Victoria to explore the potential costs and benefits of initiatives and where appropriate, implement measures to enhance quota trading, investment and industry development

Eastern rock lobster

Along with southern rock lobster, small quantities of eastern rock lobster are taken off eastern Victoria, particularly east of Cape Conran.

The Fisheries Act defines a rock lobster as an animal of the genus *Jasus* which, until recently, included eastern rock lobster. There is now evidence that eastern rock lobster should be included in the genus *Sagmariasus*. The definition of rock lobster will be changed to an animal of the family Palinuridae, which includes eastern rock lobster and will also align it with Offshore Constitutional Settlement arrangements.

The Total Allowable Commercial Catch for rock lobster includes catches of the eastern rock lobster which, under this management plan, will be recorded separately in the daily catch log. If the annual catch of eastern rock lobster exceeds one tonne, a management review will be triggered and controls to manage the fishery will be introduced if necessary. Fisheries Victoria will collaborate with New South Wales Fisheries to co-operatively manage eastern rock lobster stocks.

Actions

Fisheries Victoria to change the definition of rock lobster in the Fisheries Act to include all species of the family Palinuridae

Fisheries Victoria to undertake a management review if the annual catch of eastern rock lobster exceeds one tonne, and, if necessary, implement specific controls to manage the fishery

Fisheries Victoria to collaborate with New South Wales Fisheries to co-operatively manage eastern rock lobster stocks

Introduce and monitor economic performance indicators

An important objective of this plan relates to economic efficiency, industry profitability and the ability of the industry to move toward optimal economic efficiency. Financial performance of the fishery, particularly in respect of the effects of management and the decision framework for setting Total Allowable Catch, is regularly monitored and the information obtained considered when catch limits and other management arrangements are discussed.

At the present time, routine monitoring of the financial performance of the industry or the individual operators is not undertaken. Within the first year of this management plan, the rock lobster industry and Fisheries Victoria will undertake an economic survey and analysis of the fishery and develop indicators of economic and financial performance. These indicators will be used to inform future management decisions.

The Fisheries Cost Recovery Standing Committee will advise DPI on an appropriate cost sharing arrangement for economic performance monitoring for the fishery.

Actions

Seafood Industry Victoria to undertake an economic survey and analysis of the rock lobster fishery and develop indicators of economic and financial performance within the first year of this fishery management plan

The Fisheries Cost Recovery Standing Committee to advise DPI on an appropriate cost sharing arrangement for economic performance monitoring for the fishery

Facilitate market access for rock lobster products**Commonwealth export accreditation**

Most of the product from the Victorian rock lobster fishery is exported live to Asia. It is therefore essential that the fishery maintains its export accreditation under the Environment Protection and Biodiversity Conservation Act.

The 2003 management plan is an accredited management regime under the Environment Protection and Biodiversity Conservation Act and the fishery was granted an exemption from the export control provision of that legislation for a period of five years from March 2004.

On behalf of the rock lobster industry, Fisheries Victoria sent the previous rock lobster fishery management plan for re-assessment in early 2009. A new exemption from export controls was granted by the Commonwealth in April 2009.

Following its declaration by the Minister for Agriculture, Fisheries Victoria will submit this management plan for reassessment under the Environment Protection and Biodiversity Conservation Act. As the industry is a major beneficiary of export approval, subsequent re-assessments will be an industry responsibility under this plan.

Actions

On behalf of the rock lobster industry, Fisheries Victoria to send the *Victorian Rock Lobster Fishery Management Plan* for assessment under the Environment Protection and Biodiversity Conservation Act

Seafood Industry Victoria to lead subsequent re-assessments of the fishery under the Environment Protection and Biodiversity Conservation Act

Marketing rock lobster

DPI has no statutory responsibility for marketing rock lobster catches. Fisheries Victoria will facilitate, on a case-by-case basis, strategic proposals by industry to improve its marketing capability providing management of the resource is not compromised.

Action

Industry, with the assistance of Fisheries Victoria, to improve its capacity to market rock lobster products

Strategy 4: Maintain recreational and Aboriginal use

Maintain recreational opportunities

Until recreational catch estimations are fully integrated into the management decision framework, the current management regime and the current regulations applying to the recreational fishery will remain. With the exception of the alignment of the bag and possession limits, access to the recreational rock lobster fishery will remain under the current conditions of the RFL unless new access provisions are introduced as part of the resource sharing regime.

Fishing effort will continue to be managed primarily through the daily bag and possession limits and the existing size limits and closed seasons.

A regulatory anomaly exists, however, between the possession limit *in, on or next to* Victorian waters and the daily bag limit. To simplify compliance, the possession limit *in, on or adjacent to* Victorian waters will be reduced to two to align it with the bag limit.

In general, the legal minimum length will remain consistent with the commercial sector unless all relevant stakeholders are consulted and it is determined that it is in the interest of the fishery to do otherwise.

Actions

Fisheries Victoria to maintain the current management regime (with the exception of the alignment of the bag and possession limits) for the recreational rock lobster fishery until recreational catch is integrated into the management decision framework

Fisheries Victoria to introduce regulations that align the daily bag and possession limits *in, on or next to* Victorian waters

Noting the need to protect the spawning biomass, Fisheries Victoria to maintain the recreational fishery legal minimum length consistent with the commercial sector

Estimate the recreational catch

This management plan confirms the principles established in the previous plan of resource sharing and a portion of the Total Allowable Catch allocated to the recreational fishery –the Total Allowable Recreational Catch. Under this plan, the Total Allowable Recreational Catch remains at five and ten per cent of the Total Allowable Commercial Catch in the Western Zone and the Eastern Zone, respectively. The Total Allowable

Recreational Catch represents an upper limit reference point which, when exceeded, triggers a management review. In practical terms, however, management of a Total Allowable Recreational Catch requires an estimation of the recreational catch. A reliable estimate of the recreational catch is not currently available and is a source of uncertainty in stock assessments.

Within the first two years of this management plan, Fisheries Victoria will prepare a discussion paper for public comment outlining options for estimating the recreational catch. The discussion paper will include options for identifying the number of participants in the recreational rock lobster fishery.

The paper will nominate a DPI-preferred option which will be recommended in the absence of a significant level of stakeholder agreement or consensus of an alternate option.

Once estimations of the recreational catch are available, Fisheries Victoria and recreational stakeholders will discuss integration of the estimates into the stock assessment process and the management decision framework.

Actions

Within the first two years of this management plan, Fisheries Victoria to prepare a discussion paper for public comment outlining options for estimating recreational catch

Fisheries Victoria and recreational stakeholders to discuss integration of the resultant estimates into the stock assessment process and the management decision framework

Integrating traditional fishing access with other management arrangements

This fisheries management plan reflects the Victorian Government's current policy on fisheries resource access by Aboriginal Australians. Customary fishing practices by Aboriginal people and communities are not identified as a distinct type of fishing activity under current Victorian legislation. Non-commercial fishing by Aboriginal Victorians is therefore managed as recreational fishing at present.

Fisheries Victoria is developing an Aboriginal Fishing Strategy that will inform future management arrangements regarding customary fishing by Aboriginal Victorians.

For specified cultural and ceremonial purposes, members of the Aboriginal community may be issued with general fisheries permits that allow rock lobster to be taken beyond the recreational bag limit.

Action

Fisheries Victoria to continue to authorise fishing for specified cultural and ceremonial purposes under a general permit issued to members of the Aboriginal community

Objective 3: Cost-effective and participatory management

Strategy 5: Promote stakeholder participation in decision-making **Provide opportunities for stakeholder participation**

Industry Code of Practice

It is not practical to have all operational matters prescribed in regulations or as conditions specified in licences. During the life of this management plan, an overarching Code of Practice will be developed that documents and demonstrates the methods employed by the rock lobster industry to operate in an environmentally and socially sustainable manner. This Code of Practice will incorporate sound biosecurity practices that may include encouraging the industry practice of using endemic species for bait to prevent the introduction and translocation of exotic species and diseases.

Action

Seafood Industry Victoria to produce an overarching Code of Practice that documents and demonstrates the methods they employ to operate in an environmentally and socially sustainable manner

Fishery co-management arrangements

Co-management is recognised in Victoria and worldwide as an integral feature of contemporary fisheries management. Co-management has been defined as “an arrangement where responsibility for resource management is shared between the government and user groups” (Sen and Nielsen 1996). Co-management models attempt to make the decision-making process more open, less hierarchical and more decentralised than would otherwise be the case. Co-management provides a two-way channel for communication between stakeholders and government, resulting in better information for government and increased commitment to decisions by stakeholders.

DPI is committed to co-management and effectively engaging stakeholders in decision-making and will continue stakeholder consultation through the annual Fishery Management and

Stock Assessment Workshops and the Total Allowable Catch Forum. The Total Allowable Catch Forum will continue to provide authoritative input into the quota setting process.

Action

Fisheries Victoria to continue consulting with stakeholders through the annual Fishery Management and Stock Assessment Workshops and the Total Allowable Catch Forum

Management Advisory Forum

There are currently no formal regular meetings between the Seafood Industry Victoria and DPI on matters related to rock lobster fishery management. The annual management workshop may not be an effective or efficient means to address the issues that may arise during the fishing season.

Meetings between key stakeholders representatives and Fisheries Victoria to assist in achieving responsive and adaptive fishery management outcomes for the rock lobster fishery will be convened on an as-needed basis under this management plan. A Management Advisory Forum or equivalent will provide a forum for stakeholder representatives to communicate and provide advice to DPI.

Actions

Fisheries Victoria, in consultation with the commercial and recreational sectors, to establish a Management Advisory Forum or equivalent within the first year of this fishery management plan to provide for stakeholder representatives to regularly communicate with and provide advice to Fisheries Victoria

Ongoing responsibility for the operation of the forum to be transferred to relevant stakeholders within two years of establishing the Management Advisory Forum

Strategy 6: Deliver and monitor cost-effective management arrangements

Recovery of fishery management service costs

In accordance with the principles of cost recovery, Rock Lobster Fishery Access Licence holders will continue to contribute to the cost of management, compliance and research through an annual levy imposed at licence renewal.

The annual levy will continue to be determined through the Regulatory Impact Statement process following advice from the Fisheries Cost Recovery Standing Committee.

Action

Fisheries Victoria to continue to determine the annual Rock Lobster Fishery Access License levy through the Regulatory Impact Statement process following advice from the Fisheries Cost Recovery Standing Committee

Cost-effective identification of commercially taken rock lobster

Illegal, unregulated and unreported take of rock lobster threatens the integrity of the quota and commercial licensing systems and the sustainability of the resource. Should there be a need to more effectively track lobster from the point of capture to sale, Fisheries Victoria will, during the life of this management plan, undertake a review of cost-effective methods, including tagging.

Action

Should there be a need to more effectively track lobster from the point of capture to sale, Fisheries Victoria to undertake a review of cost-effective methods to track rock lobsters from the points of take to sale

Identification and prioritisation of research and development projects

Research and development supporting this fishery management plan will focus on providing information for managing and developing Victoria's rock lobster fishery within a framework of ecologically sustainable development.

Research and development related to securing the resource will involve determining the impacts of fishing on the ecosystem (including rock lobster) and understanding the links between the ecosystem and fisheries productivity. Research related to the allocation of the resource will involve understanding the economic and social values of the fishery.

To facilitate expansion of and co-investment in research and development projects, concepts and full proposals will be considered each year by the Fisheries Research and Development Reference Group. Investment will be guided by priorities of Fisheries Victoria and relevant stakeholders.

Actions

The Marine Advisory Forum, in consultation with relevant stakeholders, will develop a five-year plan for establishing priorities for investment in research and development in the rock lobster fishery

Fisheries Victoria, through the Fisheries Research and Development Reference Group, will engage with the commercial and recreational fishery and aquaculture sectors to identify, develop, fund and report on projects in which the sectors are co-investors

Investment in and delivery of research and development

Funding for research and development on rock lobster has in the past been provided mainly through Fisheries Victoria, the Fisheries Research and Development Corporation and relevant stakeholders. As competition for limited research and development funds increase, projects are becoming larger, more strategic and requiring multidisciplinary approaches. Greater emphasis on efficient and effective use of research and development resources, collaboration to enhance capability, demonstration of the benefits of research and development and expanding the funding base is required.

Actions

Fisheries Victoria will explore opportunities for more efficient and effective use of research and development resources, to enhance capability and to demonstrate the impacts of research and development

Fisheries Victoria and relevant stakeholders will identify funding opportunities and facilitate increased investment in research and development that supports the rock lobster fishery

Monitor aquaculture opportunities

Farming fast growing tropical rock lobster species is commercially viable in countries where labour costs are low and puerulus can be economically harvested in the wild. Aquaculture techniques for the slower growing southern rock lobster are not commercial and the on-growing of puerulus to market-size is not economically viable at this time.

There has been progress in culturing juvenile southern rock lobster from eggs, but this is still in the experimental stage.

While there is no commercial rock lobster aquaculture in Victoria, it may be possible that an industry develops in the future. National and international developments in rock lobster aquaculture research will continue to be monitored and reviewed.

Actions

Industry to monitor national and international developments in rock lobster aquaculture research

All proposed translocations (i.e. human-assisted movements of animals) of rock lobsters for aquaculture or other purposes will be assessed in accordance with the *Guidelines for Assessing Translocations of Live Aquatic Organisms in Victoria* (Department of Primary Industries 2009b).

Strategy 7: Achieve compliance with legislation

Review and implement the rock lobster compliance strategy

Successful fisheries management in Victoria depends heavily on achieving high levels of compliance with legislation. This is best achieved through a combination of maximising voluntary compliance and creating deterrent strategies.

Fisheries Victoria, in consultation with the peak bodies, will review the current compliance strategy for the rock lobster fishery during 2009/10.

Compliance activities will focus on the main threats identified during a formal compliance risk assessment. Compliance activities for the rock lobster fishery will include targeted operations based on intelligence reports.

The review of the compliance strategy will consider a cost-benefit analysis of using VMS and other new technology more broadly for compliance in the rock lobster fishery.

Action

Fisheries Victoria to review the current compliance strategy for the rock lobster fishery during 2009/10 and target compliance activities based on a formal compliance risk assessment and intelligence reports

Report against the performance measures on an annual basis

The previous rock lobster compliance strategy was established following the introduction of quota management to the fishery. Because there was a need to educate the rock lobster fishing industry, the strategy focused on landing inspections. The quota is now well understood by industry and compliance operations should be based on intelligence reports and risk assessments. Under this management plan, Fisheries Victoria will prepare annual compliance reports for the rock lobster fishery which will be presented and discussed at the annual management workshop.

Action

Fisheries Victoria to prepare an annual compliance report for the rock lobster fishery that will be presented at the annual management workshop

Develop an education and communication strategy

High levels of voluntary compliance require effective education and compliance programs which promote awareness and understanding of management objectives and strategies, and a sense of shared responsibility for maintaining healthy fisheries for future generations.

Industry, in consultation with Fisheries Victoria, will develop an education and communication strategy for the rock lobster fishery during 2008-09.

Action

Industry to develop an education and communication strategy for the rock lobster fishery

Summary⁵ of the Victorian Rock Lobster Fishery Management Plan

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
Sustainability of the rock lobster resource	1. Rebuild the stock biomass	Fisheries Victoria to develop improved methods of standardising catch per unit effort in the first year of this management plan	Catch per unit effort provides an adequate measure of rock lobster abundance	Improved methods for determining rock lobster abundance	First year of plan	Fisheries Victoria		Rock lobster research budget ⁶
		Fisheries Victoria to use regional assessments to measure spatial differences within zones	Spatial differences within zones are adequately incorporated into biomass estimates	Calculations of stock biomass build rate detect changes within zones	First year of plan	Fisheries Victoria		Rock lobster research budget
		Within the first year of this management plan, Fisheries Victoria and relevant stakeholders will establish a resource assessment working group for the purpose of improving fishery assessments and will report to the Management Advisory and TAC Forums	A defined biomass build-rate is used to set annual Total Allowable Commercial Catch levels	The estimated available biomass reaches 40 per cent of B ₁₉₅₁ within agreed time frames	First year of plan	Fisheries Victoria		Rock lobster research budget

⁵ Performance indicators, targets, implementation schedules and funding sources are provided for actions where the lead agency is DPI.

⁶ The DPI rock lobster research budget in 2007/08 was approximately \$572,400; of this amount, about \$257,600 was recovered from the rock lobster industry.

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Ongoing responsibility for the operation of this working group to be transferred to relevant stakeholders within two years				Relevant stakeholders	Fisheries Victoria	Rock lobster management budget ⁷
		Fisheries Victoria will use the decision rules specified in the previous rock lobster fishery management plan in determining the Total Allowable Catch in 2010	Total Allowable Catch in 2010 set in accordance with the previous <i>Rock Lobster Fishery Management Plan</i>	Decision rules introduced in this management plan are tested prior to implementation	2010	Fisheries Victoria		Rock lobster management budget
		Fisheries Victoria will run the new decision framework in parallel with the rules specified in the previous rock lobster fishery management plan in 2010	Decision framework established in this management plan is run in parallel with the rules specified in the previous plan	Performance of decision rules introduced in this management plan is compared against the rules specified in the previous plan	2010	Fisheries Victoria		Rock lobster management budget
		Fisheries Victoria will in consultation with relevant stakeholders, undertake a review of the new decision framework in 2010	Working group is established to review decision rules	Decision rules introduced in this management plan are assessed as adequate for the purpose of fishery management	2010	Fisheries Victoria	Relevant stakeholders	Rock lobster management budget

⁷ The cost attributed to the managing the rock lobster fishery in 2007/08 was approximately \$620,500; of this amount, about \$198,700 was identified as being cost-recoverable from the rock lobster industry.

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Following the 2010 review, and after the incorporation of any changes, Fisheries Victoria will in consultation with relevant stakeholders, implement the new decision framework in setting the Total Allowable Catch in 2011	Decision rules introduced in this management plan are implemented with agreed amendments if required	Decision rules introduced in this management plan are an effective management tool for the rock lobster fishery	2011	Fisheries Victoria	Relevant stakeholders	Rock lobster management budget
		Fisheries Victoria to review and assess the appropriateness and effectiveness of fishery management tools	Management tools are regularly reviewed to ensure they are appropriate to manage the fishery and or rebuild stock biomass	Appropriate management strategies ensure sustainable management of rock lobster resource	Ongoing	Fisheries Victoria		Rock lobster management budget
		Seafood Industry Victoria to prepare a Code of Practice that will include appropriate practices for returning undersize rock lobster and berried females to the sea alive				Seafood Industry Victoria	Fisheries Victoria	
		Fisheries Victoria will continue to use onboard observers to monitor rock lobster discards and consider this information during annual stock assessments	Rock lobster discards levels monitored by onboard observers; data incorporated into stock assessment model	The stock assessment model becomes a more effective predictor of stock biomass	Ongoing	Fisheries Victoria		Rock lobster research budget

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Industry will monitor means, including changes to pot design, to reduce rock lobster mortalities				Industry	Fisheries Victoria	
		Seafood Industry Victoria to develop measures to manage deaths in coffs and wet wells early in the life of the plan				Seafood Industry Victoria	Fisheries Victoria	
		Fisheries Victoria to introduce the requirement that, from 1 July 2011, operators must deduct from their quota the estimated weight of rock lobsters that will be stored in coffs or wet wells	Measures to manage deaths in coffs and wet wells are incorporated into a Fisheries Regulations as required	Reduced mortalities in coffs and wet wells will improve the sustainability of the rock lobster industry	By 1 July 2011	Fisheries Victoria	Seafood Industry Victoria	Rock lobster management budget
	2. Maintain the ecological integrity of the fishery ecosystem	Seafood Industry Victoria to incorporate the <i>Victorian Rock Lobster Fishery Code of Practice for Reducing Whale Entanglements</i> into the industry Code of Practice that will be developed for the commercial fishery				Seafood Industry Victoria	Fisheries Victoria	
		Industry to report incidental interactions with protected species using the <i>Protected Species Interactions</i> form				Industry		

Victorian Rock Lobster Fishery Management Plan

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Fisheries Victoria to continue to use onboard observers program to monitor the impacts of by-catch on the fishery	Levels of by-catch and by-product taken by rock lobster fishers is monitored by onboard observers	Levels of by-catch and by-product taken by rock lobster fishers are understood and appropriately influence fishery management decisions	Ongoing	Fisheries Victoria	Seafood Industry Victoria, Industry	Rock lobster management budget
		Fisheries Victoria to review the final report on rock lobster habitat and take appropriate action as necessary	A study of rock lobster habitats will be considered and appropriate actions developed	Assist in the sustainable harvest of rock lobster by maintaining the ecological integrity of reef habitats and adjacent marine biological communities on the Victorian coast	Following the release of habitat study	Fisheries Victoria	Seafood Industry Victoria, Industry	Rock lobster management budget
		Fisheries Victoria will continue to monitor the potential impacts of climate change on the rock lobster fishery and will develop a response if required	Fisheries Victoria continues to monitor the potential impacts of climate change on the rock lobster fishery and will develop a response if required	Industry practices and stock assessment model are appropriately modified in response to climate change	Ongoing	Fisheries Victoria	Seafood Industry Victoria, Industry	Rock lobster management budget

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Fisheries Victoria will give high priority to collaborative research with adjacent jurisdictions that is aimed at understanding the potential impacts of climate change on the rock lobster fishery	Collaborative research aimed at understanding the potential effects of climate change is undertaken	A better understanding of the effects of climate change on the rock lobster fishery is reached	Ongoing	Fisheries Victoria		Rock lobster research budget
		Within the first year of this management plan, Fisheries Victoria to review the rock lobster fishery ecological risk assessment in consultation with relevant stakeholders	A review of the rock lobster fishery ecological risk assessment is undertaken	Risks facing the rock lobster fishery are adequately understood and inform fishery management	First year of the plan	Fisheries Victoria	Relevant stakeholders	Rock lobster research budget
		This review will consider the adequacy of its assessment of the ecological risks associated with cetacean entanglements	A review of the rock lobster fishery ecological risk assessment that addresses cetacean entanglements is undertaken	Ecological risks associated with cetacean entanglements are understood and inform fishery management	First year of the plan	Fisheries Victoria		Rock lobster research budget
Resource access and utilisation	3. Facilitate an economically efficient commercial fishery	Fisheries Victoria will continue to provide a mechanism for fishery operators to vary Rock Lobster Fishery Access Licence in specified circumstances	The process of varying Rock Lobster Fishery Access Licence in specified circumstances is made more efficient	An economically efficient commercial fishery	Ongoing	Fisheries Victoria		Rock lobster management budget

Victorian Rock Lobster Fishery Management Plan

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Fisheries Victoria to re-align the licensing and quota periods to begin on 1 July and finish on 30 June the following year	The rock lobster licensing year and quota period to begin on 1 July and run until 30 June the following year	Alignment of the licensing year and the quota period will improve rock lobster fishery administration and fishery management	First year of the plan	Fisheries Victoria		Rock lobster management budget
		Fisheries Victoria to amend the Initial Quota Order for the Western Zone from 4000 quota Units to 3633.48 quota units	The Initial Quota Order for the Western Zone rock lobster fishery is amended in accordance with the requirements of the Fisheries Act	The Initial Quota Order for the Western Zone rock lobster fishery reflects the correct number of quota units in the fishery	First year of the plan	Fisheries Victoria		Rock lobster management budget
		Starting in 2010, Fisheries Victoria to conduct a poll of Rock Lobster Fishery (Western Zone) Access Licence holders to determine if a winter closure will be implemented each winter for the duration of this fishery management plan	There is a demonstrated high level of support by the commercial rock lobster industry for winter closures of the fishery	An economically efficient commercial fishery	Ongoing	Fisheries Victoria	Industry	Rock lobster management budget
		Fisheries Victoria to monitor current arrangements for receivers and processors of rock lobster during annual compliance reviews and take appropriate action if required	Current arrangements for receivers and processors are reviewed annually	Receivers and processors of rock lobster are appropriately authorized	Ongoing	Fisheries Victoria		Rock lobster management budget

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Fisheries Victoria and Seafood Industry Victoria to explore the potential costs and benefits of initiatives and where appropriate, implement measures to enhance quota trading, investment and industry development	The costs and benefits of initiatives to improve the effectiveness of quota trading are considered and where appropriate, implemented	Appropriate initiatives improve effectiveness of the quota trading market	Ongoing	Fisheries Victoria	Seafood Industry Victoria	Rock lobster management budget
		Fisheries Victoria to change the definition of rock lobster in the Fisheries Act to include all species of the family Palinuridae	All rock lobster are included in the family Palinuridae	Ensure that legislative power to regulate all species of rock lobster landed in Victoria is included in the Fisheries Act	First year of plan	Fisheries Victoria		Rock lobster management budget
		Fisheries Victoria to undertake a management review if the annual catch of eastern rock lobster exceeds one tonne, and, if necessary, implement specific controls to manage the fishery	The eastern rock lobster fishery is sustainably managed	Ensure the eastern rock lobster fishery is managed sustainably	During life of plan	Fisheries Victoria		Rock lobster management budget
		Fisheries Victoria to collaborate with New South Wales Fisheries to co-operatively manage eastern rock lobster stocks	The eastern rock lobster fishery is sustainably managed	Ensure the eastern rock lobster fishery is managed sustainably	Ongoing	Fisheries Victoria	Seafood Industry Victoria	Rock lobster management budget

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Seafood Industry Victoria to undertake an economic survey and analysis of the rock lobster fishery and develop indicators of economic and financial performance within the first year of this fishery management plan				Seafood Industry Victoria	Fisheries Victoria	
		The Fisheries Cost Recovery Standing Committee to advise DPI on an appropriate cost sharing arrangement for economic performance monitoring for the fishery	Economic monitoring of the rock lobster industry is appropriately resourced	Appropriate cost-sharing arrangements between industry and Fisheries Victoria	Ongoing	Fisheries Cost Recovery Standing Committee	Seafood Industry Victoria	Rock lobster management budget
		On behalf of the rock lobster industry, Fisheries Victoria to send the Victorian Rock Lobster Fishery Management Plan for assessment under the Environment Protection and Biodiversity Conservation Act	Management plan submitted for assessment under the Environment Protection and Biodiversity Conservation Act before the current accreditation expires in March 2009	Maintain authority to export rock lobster	First year of plan	Fisheries Victoria		Rock lobster management budget
		Seafood Industry Victoria to lead subsequent re-assessments of the fishery under the Environment Protection and Biodiversity Conservation Act				Seafood Industry Victoria		

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Industry, with the assistance of Fisheries Victoria, to improve its capacity to market rock lobster products				Industry	Fisheries Victoria	
	4. Maintain recreational and Aboriginal use	Fisheries Victoria to maintain the current management regime (with the exception of the alignment of the bag and possession limits) for the recreational rock lobster fishery until recreational catch is integrated into the management decision framework	Current management arrangements for the recreational rock lobster fishery remain and are maintained until recreational catch is integrated into the management decision framework	The rock lobster management decision framework is informed by an understanding of all impacts on the resource	Ongoing	Fisheries Victoria		Rock lobster management budget
		Fisheries Victoria to introduce regulations that align the daily bag and possession limits in, on or next to Victorian waters	The daily rock lobster bag and possession limits in, on or next to Victorian waters are aligned	To remove a regulatory anomaly whereby the rock lobster possession limit becomes the de facto bag limit in, on or next to Victorian waters	First year of plan	Fisheries Victoria		Rock lobster management budget
		Noting the need to protect the spawning biomass, Fisheries Victoria to maintain the recreational fishery legal minimum length consistent with the commercial sector	Unless there is a need to protect spawning biomass, legal minimum length to remain consistent with the commercial sector	Legal minimum length and other relevant controls are appropriate to ensure sustainable recreational rock lobster take	Ongoing	Fisheries Victoria		Rock lobster management budget

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Within the first two years of this management plan, Fisheries Victoria to prepare a discussion paper for public comment outlining options for estimating recreational catch	A discussion paper outlining options for estimating recreational catch is prepared	Ensure that recreation catch is adequately understood for the purpose of fishery management	First two years of plan	Fisheries Victoria		Recreational Fishing Grant Program \$10,000 <i>(estimated cost)</i>
		Fisheries Victoria and recreational stakeholders to discuss integration of the resultant estimates into the stock assessment process and the management decision framework	Implement agreed method(s) to estimate recreational take of rock lobster	The stock assessment model accurately considers recreational take of rock lobster	Second year of plan	Fisheries Victoria	VRFish, recreational stakeholders	Rock lobster management budget
		Fisheries Victoria to continue to authorise fishing for specified cultural and ceremonial purposes under a general permit issued to members of the Aboriginal community	Take of rock lobster beyond recreational bag limits for specified cultural and ceremonial purposes is appropriately authorised	Reflect the Victorian Government's policy on resource access by Aboriginal Australians	Ongoing	Fisheries Victoria		Rock lobster management budget
Cost-effective, participatory management	5. Promote stakeholder participation in decision-making	Seafood Industry Victoria to produce an overarching Code of Practice that documents and demonstrates the methods they employ to operate in an environmentally and socially sustainable manner				Seafood Industry Victoria	Fisheries Victoria	

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Fisheries Victoria to continue consulting with stakeholders through the annual Fishery Management and Stock Assessment Workshops and the Total Allowable Catch Forum	Stakeholder consultation continues through the annual Fishery Management and Stock Assessment Workshops and Total Allowable Catch Forum	Demonstrate commitment by DPI to effectively engage stakeholders in decision-making processes	Ongoing	Fisheries Victoria	Seafood Industry Victoria, Relevant stakeholders	Rock lobster research budget (<i>Stock Assessment Workshop</i>) Rock lobster research budget (<i>Fishery Management Workshop and Total Allowable Catch Forum</i>)
		Fisheries Victoria, in consultation with the commercial and recreational sectors, to establish a Management Advisory Forum or equivalent within the first year of this fishery management plan to provide for stakeholder representatives to regularly communicate with and provide advice to Fisheries Victoria	A Management Advisory Forum or equivalent is established	A mechanism is put in place whereby stakeholder representatives are able to regularly communicate with and provide management advice to Fisheries Victoria	First year of plan	Fisheries Victoria	Relevant stakeholders	Rock lobster management budget
		Ongoing responsibility for the operation of the forum to be transferred to industry within two years of establishing the Management Advisory Forum			Within two years of establishing the Management Advisory Forum	Fisheries Victoria	Relevant stakeholders	

Victorian Rock Lobster Fishery Management Plan

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
6. Deliver and monitor cost-effective management arrangements		Fisheries Victoria to continue to determine the annual Rock Lobster Fishery Access Licence levy through the Regulatory Impact Statement process following advice from the Fisheries Cost Recovery Standing Committee	Annual Rock Lobster Fishery Access Licence levy is set in accordance with the principles of cost recovery	Rock Lobster Fishery Access Licence holders and government will equitably contribute to the cost of management, compliance and research through an annual levy imposed at licence renewal	Ongoing	Fisheries Victoria	Seafood Industry Victoria	Rock lobster management budget
		Should there be a need to more effectively track lobster from the point of capture to sale, Fisheries Victoria to undertake a review of cost-effective methods to track rock lobsters from the points of take to sale	A review of methods to track rock lobster from the points of take through to retail sale is undertaken	Cost-effective management of the rock lobster fishery	During life of plan	Fisheries Victoria	Rock lobster management budget	
		The Marine Advisory Forum, in consultation with relevant stakeholders, will develop a five-year plan for establishing priorities for investment in research and development in the rock lobster fishery	A five-year plan for establishing industry priorities for investment in research and development is produced	Identify research needs using clear mechanisms that ensure the needs of management and stakeholders are met	First year of plan	Marine Advisory Forum	Fisheries Victoria, Seafood Industry Victoria, VRFish	Rock lobster research budget

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Fisheries Victoria, through the Fisheries Research and Development Reference Group, will engage with the commercial and recreational fishery and aquaculture sectors to identify, develop, fund and report on projects in which the sectors are co-investors	The commercial and recreational sectors are formally engaged in identifying, developing, funding and reporting of research and development projects in which the sectors are co-investors	An enhanced ability to plan research and investigate funding opportunities is achieved	Ongoing	Fisheries Victoria	Relevant stakeholders	Rock lobster research budget
		Fisheries Victoria will explore opportunities for more efficient and effective use of research and development resources, to enhance capability and to demonstrate the impacts of research and development	Research needs are considered using clear mechanisms that ensure the needs of management and stakeholders	Research that ensures the needs of management and stakeholders are considered is funded, conducted and reported against	Ongoing	Fisheries Victoria	Seafood Industry Victoria, VRFish	Rock lobster research budget
		Fisheries Victoria and relevant stakeholders will identify funding opportunities and facilitate increased investment in research and development that supports the rock lobster fishery	Research and development investment in cooperative research is obtained	Expanded the funding base for research beyond traditional sources	Ongoing	Fisheries Victoria	Seafood Industry Victoria, VRFish	Rock lobster research budget

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Industry to monitor national and international developments in rock lobster aquaculture research				Industry	Fisheries Victoria	
		All proposed translocations of rock lobsters for aquaculture or other purposes will be assessed in accordance with the <i>Guidelines for Assessing Translocations of Live Aquatic Organisms in Victoria</i>	The environmental risks of all proposed translocations are assessed and understood	Translocation risks are understood and considered when proposed translocations are considered for approval	Ongoing	Translocation Evaluation Panel	Fisheries Victoria, Industry	Fisheries Victoria fisheries management budget
	7. Achieve compliance with legislation	Fisheries Victoria to review the current compliance strategy for the rock lobster fishery during 2009/10 and target compliance activities based on a formal compliance risk assessment and intelligence reports	Compliance activities focus on the main threats identified during a formal compliance risk assessment	Fulfil community expectations that non-compliance is cost-effectively managed to ensure that fishery resources are maintained at sustainable levels and aquatic habitats protected	First year of plan	Fisheries Victoria	Seafood Industry Victoria, VRFish	Rock lobster compliance budget ⁸

⁸ The cost attributed to compliance activities for the rock lobster fishery in 2007/08 was approximately \$275,300; of this amount, about \$98,700 was identified as being cost-recoverable from the rock lobster industry.

<i>Objective</i>	<i>Strategy</i>	<i>Action</i>	<i>Performance Indicator</i>	<i>Target</i>	<i>Implementation Schedule</i>	<i>Lead Agency</i>	<i>Key Partner(s)</i>	<i>Funding Source</i>
		Fisheries Victoria to prepare an annual compliance report for the rock lobster fishery that will be presented at the annual management workshop	An annual compliance report will be presented at management workshops	Fulfil community expectations that non-compliance is cost-effectively managed to ensure that fishery resources are maintained at sustainable levels and aquatic habitats protected	Ongoing	Fisheries Victoria		Rock lobster compliance budget
		Industry to develop an education and communication strategy for the rock lobster fishery				Seafood Industry Victoria	Fisheries Victoria	

Glossary

Available biomass: The mass of the rock lobster stock that is above the legal minimum length and therefore available to the fishery.

Ecologically Sustainable Development: The use of natural resources in a manner that maintains the life-support systems of nature and does not diminish the potential of the resource to meet the needs and aspirations of future generations.

Fishery: The act, process and or industry of catching fish. In Victoria, fisheries are defined by the species to be taken, the equipment used or area as specified in the Fisheries Regulations.

Catch per unit effort: A measure of fishing success with a type or unit of fishing gear. Catch per unit effort in the lobster fishery is measured as the weight of lobster captured per potlift.

Input controls: Indirect restraints on catch including regulation of the amount or type of fishing gear (e.g. numbers of pots) and fishing period (e.g. closed seasons).

Limited entry fishery: A fishery where the number of operators or vessels is restricted.

Output controls: A direct limit on catch in a fishery (e.g. a Total Allowable Catch) or on an access licence holder (e.g. individual transferable quota).

Reference point: An indicator level of fishing (or stock size) to be used as a benchmark for assessment or decision making.

Spawning biomass: The mass of stock that has reached sexual maturity and contributes to recruitment.

Stakeholder: An individual or organisation, including peak bodies, with a vested interest or an historical association with a fishery resource.

Total Allowable Catch: The mass of rock lobster that may be taken by commercial and recreational fishers.

Total Allowable Commercial Catch: The mass of rock lobster that may be taken within a quota period by commercial access licence holders according to the final quota order.

Total Allowable Recreational Catch: The mass of rock lobster that may be taken by recreational fishers. The Total Allowable Recreational Catch is limited to five and ten per cent of the Total Allowable Commercial Catch in the Western Zone and the Eastern Zone, respectively.

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Appendix 1: Ecological risk assessment of the Victorian rock lobster fishery

Following is a summary of an ecological risk assessment of the Victorian rock lobster fishery (Jenkins et al. 2005).

An ecological risk assessment of Victoria's rock lobster fishery concluded that fishing practises pose a low risk to by-catch populations, populations of protected and endangered species, reef habitats and reef ecosystems.

Victoria's *Rock Lobster Fishery Management Plan* (RLFMP) places a strong emphasis on the ecological sustainability of the fishery, which considers the effect fishing has on:

- target species
- by-product and discards
- protected and endangered species
- habitats, and
- communities and ecosystems.

This approach also considers the impacts that other threats may have on the habitats and ecosystems on which rock lobster depend, and the consequences these processes may have for the fishery.

A panel of experts undertook an ecological risk assessment of the Victorian rock lobster fishery to identify and rank the major ecological threats for this fishery. Expertise was drawn from Fisheries Victoria, the Commercial Rock Lobster and Giant Crab Fishery Committee of the Fisheries Co-Management Council, and from the Tasmanian Aquaculture and Fisheries Institute.

The expert panel identified 60 ecological threats, which are grouped into the following categories:

- impacts of rock lobster fishing by-catch on the environment
- impacts of rock lobster fishing on protected and endangered species
- ecological risks to reef habitats, and
- ecological risks to the reef ecosystem.

The panel determined how likely each threat was to occur and the scale of impact it would have, to establish the level of risk the threat posed to the fishery. Six risk categories were recognised:

- negligible
- low

- moderate
- high, and
- extreme.

Of the 60 threats identified, 41 arose from rock lobster fishing gear and fishing techniques.

Fifteen of these threats were to by-catch species. All were determined to have a "Negligible" or "Low" risk ranking, indicating they would have no impacts on by-catch population size or dynamics.

The expert panel identified seven threats to endangered and threatening species. These threats primarily related to dolphins, seals, birds, turtles and whales becoming entangled in rock lobster fishing gear. The panel, while recognising that these interactions could have strong consequences for individual animals, considered that at the population level, consequences would be very low and rated these risks as "Negligible" or "Low".

Two ecological threats to reef habitat from the impacts of rock lobster gear and fishing methods were identified. These related to the disturbance caused by fishing gear to shallow and deep-water reef communities. The risk to shallow reef habitat was determined to be "Negligible", whereas that for deep-water reefs was assessed to be "Low".

This difference in the risk ranking arose from the experts' concern that very little is known about deep-water reef habitats. The expert panel considered that while the area of deep reef impacted by rock lobster pots was relatively small; long-lived coral and gorgonian species are very susceptible to damage and have very slow regeneration rates.

The expert panel considered 17 threats arising from the activities of the rock lobster fishery to reef ecosystems. The majority (15) of these threats were determined to pose a "Negligible" or "Low" risk. The expert panel determined that two threats arising from rock lobster fishing activities did pose a "Moderate" risk to reef ecosystems.

Rock lobster are considered to be a keystone species in that their feeding activities can have a significant effect on the structure of reef ecosystems. Any significant reduction in the number of rock lobster may have severe consequences for reef ecosystems. For example, a

decrease in rock lobster abundance may lead to an increase in sea urchins and a reduction in algal cover. This scenario was considered to be very unlikely to occur in the foreseeable future because the current management regime is aimed at rebuilding lobster stocks.

The expert panel considered the translocation of marine pests in the fishery also posed a “Moderate” risk. An industry code of practice has been developed and it was considered that adherence to this code will be essential to containing this risk.

The remaining 19 ecological threats identified by the Expert Panel arise from activities that are unrelated to the rock lobster fishery.

Fourteen threats to reef habitats were identified arising predominantly from coastal activities and 11 were determined to pose a “Negligible” or “Low” risk. Three threats however were determined to pose a “Moderate” risk to reef habitats:

- disposal of offshore dredge sediments
- increased turbidity and sedimentation associated with coastal development, and
- changes to rock lobster habitat through the introduction of marine pests.

The expert panel determined that climate change poses an “Extreme” risk to reef habitat and the rock lobster fishery. The panel concluded that climate change could increase water temperature directly affecting the survival and distribution of rock lobster and the other plants and animals that live on the reefs. Indirectly climate change could alter ocean current patterns that deliver larvae to the juvenile habitat and increase extreme weather events that could cause damage to shallow reef habitat in particular.

A further five processes were identified, which threaten reef ecosystems. The panel determined that oil and mineral exploration and extraction poses a “Negligible” risk, whereas freshwater run-off carrying harmful chemicals (heavy metals and pesticides) onto reef ecosystems and the effects of seismic testing both posed a “Low” risk.

Oil spills were considered to be a rare event, but with the potential to have a severe effect on the reef ecosystem, and were determined to pose a “Moderate” overall risk, as were the effects of other fisheries’ practices on reef ecosystems. Effects from other fisheries could include damage to rock lobster habitat or ecosystems and effects of removing other fishery species from the ecosystem.

Fisheries Victoria will use this risk assessment as a guide for the development of management strategies for the Victorian rock lobster fishery.

Appendix 2: Preparing the Victorian Rock Lobster Fishery Management Plan

This plan has been prepared in accordance with the requirements of the Fisheries Act. Fisheries Victoria, a division of DPI, is responsible for preparing fisheries management plans.

Recognised peak bodies identified in the Fisheries Act and the Fisheries Co-Management Council were invited to join the Steering Committee for the purposes of providing advice to the Executive Director Fisheries Victoria on the content of this fisheries management plan and responding submissions on the draft plan. The Fisheries Co-Management Council provided advice to DPI in relation to the conformance of the draft plan with the requirements of the Fisheries Act.

Requirements of the Fisheries Act

The Fisheries Act specifies that a fishery management plan must:

- define the fishery to which it relates
- be consistent with the objectives of the Fisheries Act and with any Ministerial guidelines issued with respect to the preparation of the management plan (Appendix 3)
- include the management objectives of the management plan
- specify the management tools and any other measures to be used to achieve the objectives of the plan
- include guidelines for the criteria to be used in respect of the issue of licenses and permits and in respect of the renewal, variation or transfer of licenses
- as far as is known, identify critical components of the ecosystem relevant to the plan and current or potential threats to those components, and existing or proposed preventative measures
- specify performance indicators, targets and monitoring methods
- as far as relevant and practicable, identify any other biological, ecological, social and economic factors relevant to the fishery covered by the plan, including its current status, human uses and economic value; measures to minimise its impact on non-target species and the environment; research needs and priorities; the resources required to implement the plan.

The Fisheries Act indicates that each fishery management plan may:

- specify the manner in which fishing capacity is to be measured and the fishing capacity so measured
- specify the duration of the management plan
- specify procedures and conditions for review of the plan
- include any other relevant matters.

Steering Committee

Membership of the stakeholder-based Steering Committee was comprised of:

Chair:

Mr Ian Cartwright, Thalassa Consulting

Committee members:

Mr Anthony Ciconte, Seafood Industry Victoria

Ms Megan Clinton, Victorian National Parks Association

Mr Dallas D'Silva, Department of Primary Industries

Dr John Hawkins, Fisheries Co-Management Council

Mr David Johnston, Seafood Industry Victoria

Mr David Lucas, Fisheries Co-Management Council

Mr Lawrence Moore, VRFish (Victorian Recreational Fishing Peak Body)

Ms Lyn Warn, Fisheries Co-Management Council

Scientific and management advisors:

Mr David Hobday, Department of Primary Industries

Mr David Molloy, Department of Primary Industries

Executive Officers:

Mr Bill Lussier, Department of Primary Industries

Mr Anthony Plummer, Department of Primary Industries

Planning process

The preparation of a fishery management plan is outlined in Part 3 of the *Fisheries Act 1995*. The following steps have been endorsed by the Fisheries Co-Management Council for preparing the new *Victorian Rock Lobster Fishery Management Plan*:

1. FCC endorsement of proposed planning process.
2. Fisheries Victoria calls for nominations and appoints a Steering Committee including an independent chair.
3. Preparation of a *Victorian Rock Lobster Fishery Management Plan* review.
4. Issue Ministerial guidelines for or with respect to the preparation of the new management plans by notice in the *Government Gazette*.
5. Fisheries Victoria and Steering Committee prepare draft plan.
6. FCC endorsement that the planning process has been followed for the preparation of the draft plan.
7. Ministerial endorsement for public release of draft plan.
8. Publish notice of intention to declare plan, which includes release of draft plan for public comment.

9. Consideration of public submissions with steering committee input .
10. Finalise draft management plan.
11. FCC endorsement that the planning process has been followed for development of the final draft management plan.
12. Final draft plan submitted to Minister for consideration for declaration.
13. Minister declares management plan.

Review and risk assessment

Prior to preparing this management plan, Fisheries Victoria conducted:

- (i) a review of the first *Victorian Rock Lobster Fishery Management Plan* (Department of Primary Industries 2007a); and
- (ii) a risk assessment of the rock lobster fishery.

The review assessed past outcomes and the Steering Committee identified continuous improvement opportunities for the management of the fishery.

An expert-based ecological risk assessment was undertaken to identify and rank the major ecological threats for this fishery (Appendix 1; Jenkins et al. 2005). Fisheries Victoria undertook a supplementary risk assessment to rank the major ecological, environmental, economic, social, community and governance components of the fishery in accordance with the principles of ecologically sustainable development.

Appendix 3: Ministerial guidelines used to prepare this management plan

I, Peter Appleford, as delegate of the Minister for Agriculture, pursuant to section 28(2) of the *Fisheries Act 1995* (the Act), issue the following guidelines with respect to the preparation of a rock lobster fishery management plan and a giant crab fishery management plan.

1. Fisheries Victoria of the Department of Primary Industries will be responsible for the preparation of the fishery management plans. The plans must be consistent with the objectives of the Act.
2. The management plans must be consistent with all existing Government legislation and Departmental policies.
3. The Fisheries Co-management Council will oversee the process for the preparation of the fishery management plans. The plans must comply with Part 3 of the Act.
4. The fishery management plans will be prepared with input from all major affected stakeholder groups.
5. The fishery management plans will recognise the ongoing economic and or social importance of all sectors, including commercial, recreational, Indigenous and conservation interests.
6. The fishery management plans will give consideration to the principles of ecosystem-based fisheries management.
7. The fishery management plans will take account of the Department of the Environment, Water, Heritage and the Arts guidelines for assessing ecologically sustainable management of fisheries.
8. The fishery management plans will identify risk-based mitigations to threats to the fishery.
9. The fishery management plans will identify research themes and information needs to support the sustainable management of fisheries resources.
10. The fishery management plans will include processes for reporting to the Victorian community on achievements of the plans.

Dated 24 September 2008

Delegate of the responsible Minister:

DR PETER APPLEFORD

Executive Director Fisheries Victoria