

Rock Lobster Management Plan Review

**Preliminary Proposals for
New Management Measures for the
Tasmanian Rock Lobster Fishery**



Discussion Paper - April 2010

How do I make a comment?

Please forward your written comments on this Discussion Paper by the close of business on **8 June 2010**. Your comments should be sent to:

- Mail DPIPWE – Rock Lobster Review
GPO Box 44
Hobart TAS 7001
- Fax (03) 6223 1539 Marked for attention to Rock Lobster Review
- Email fishreview@dpipwe.tas.gov.au Subject – Rock Lobster Review
- Hand deliver DPIPWE, 1 Franklin Wharf, Hobart TAS 7000
- Or attend a **Recreational Fishery Forum** – refer to meeting schedule below;

Date	Location	Venue	Meeting Time
Mon, 10 May	Strahan	Strahan Village, Esplanade	7:00 pm – 8:30 pm
Tue, 11 May	Smithton	Smithton RSL	7:00 pm – 8:30 pm
Wed, 12 May	Burnie	Burnie Arts and Function Centre	7:00 pm – 8:30 pm
Thu 13 May	Launceston	DPIPWE Prospect Office, Prospect	7:00 pm – 8:30 pm
Mon 17 May	Taranna	Tasman Community Centre, Amy Street	6:30 pm – 8:00 pm
Tue 18 May	Hobart	Royal Yacht Club of Tasmania Marieville Esplanade, Sandy Bay	7:00 pm – 8:30 pm
Thu 20 May	St Helens	Portland Hall, Cecelia St	7:00 pm – 8:30 pm
Tue 25 May	Triabunna	Triabunna RSL, Vicary Street	6:30 pm – 8:00 pm
Thu 27 May	Dover	Esperance Multi-Purpose Health Centre	6:30 pm – 8:00 pm

- Or attend a **Commercial Port Meeting** - refer to meeting schedule below.

Date	Location	Venue	Meeting Time
Wed 28 Apr	Bicheno	Beachfront Hotel	2.30 pm
Thu 29 Apr	Triabunna	Spring Bay Hotel	9.30 am
Thu 29 Apr	Eaglehawk Neck	Lufra Hotel	2.00 pm
Mon 3 May	King Island	Parers Hotel	1.00 pm
Tue 4 May	Stanley	Stanley Seaview Inn	9.30 am
Tue 4 May	Launceston	Abel Tasman Airport Motor Inn	3.30 pm
Wed 5 May	Margate	Kingborough Bowls Club, Channel Highway Margate	10.30 am

What is in this Discussion Paper

The following table provides a brief summary of issues and preliminary proposals that are discussed in this paper.

Section / Issue	Preliminary Proposal		Page
	Recreational	Commercial	
Statewide declines in rock lobster stocks	<ul style="list-style-type: none"> • Reduced statewide bag limit from 5 to 4 • Reduced possession limit from 10 to 8 	<ul style="list-style-type: none"> • TACC monitoring and adjustments 	9
Declining rock lobster stocks in the east / south east region	<ul style="list-style-type: none"> • Bag limit of 2 <i>or</i> • Bag limit of 3 with November closure 	<ul style="list-style-type: none"> • Options including seasons, gear, fishing block caps and size limits 	13
Spreading urchin barrens on the east coast	<ul style="list-style-type: none"> • Maximum size limit of 138mm in a designated area between Eddystone Point and Whale Head 	<ul style="list-style-type: none"> • Maximum size limit of 138mm in a designated area between Eddystone Point and Whale Head 	17
Soft Shelled Rock Lobsters		<ul style="list-style-type: none"> • September closure • Designated area between Cape Queen Elizabeth to Cape Sorell 	18
Offshore incentives; Carryover provisions; Quota Year		<ul style="list-style-type: none"> • Use of 10 extra pots and fishing in a closed season within a designated west coast offshore zone • Remove or amend carryover provisions • Options for new quota year 	19, 20 & 21
Possession limits for non-licensed fishers	<ul style="list-style-type: none"> • Reduced to 2 • House limit of 4 • No possession if under 10 years of age 		22
Diving apparatus; Carrying of buoys; Landing lobster in Victoria	<ul style="list-style-type: none"> • No snoods or nooses allowed on vessels • Not allowed to have other person's buoys on a vessel unless they are present • Restrictions for biosecurity and compliance reasons 		23 & 24
More flexible management arrangements	<ul style="list-style-type: none"> • Minister to alter size limits by public notice 	<ul style="list-style-type: none"> • Minister to alter size limits by public notice 	25

Introduction

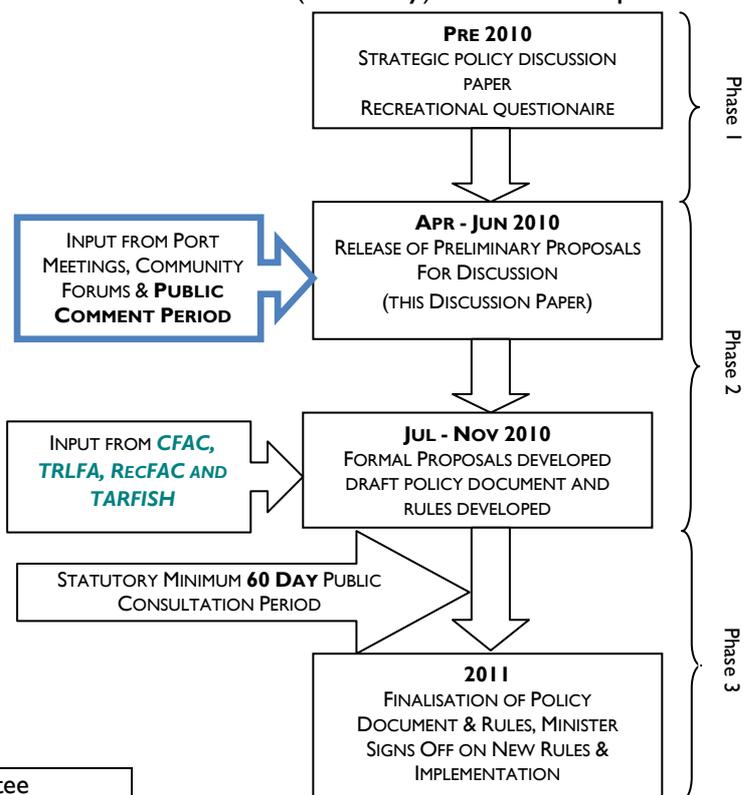
The aim of this discussion paper is to;

- Provide information on the Department’s preliminary proposals for management measures that could be used to address some of the key issues facing the rock lobster fishery;
- Seek feedback on these preliminary proposals (do you think that they are effective, practical, equitable or not supported); and
- Seek suggestions for alternative ideas that you think could address the issues in a better way.

This is part of the second consultation phase of the Rock Lobster Fishery Review, which also includes community forums and commercial port meetings. Documents relating to the first phase are available on the Department’s website; www.fishing.tas.gov.au.

Feedback from this consultation phase will be an important component to assist the Department in the development of formal management proposals for Ministerial consideration in the new draft policy document and draft rules for the fishery. These documents will be released for public comment in the third (statutory) consultation phase of the review.

A major challenge for the fishery is to halt the current declines in stock abundance and restart stock rebuilding. This will require a reduction in catch at a both a statewide and targeted regional level. There are different management actions that could be used to achieve these reductions and these actions may not affect everyone equally. The Department acknowledges that there will be a range of views within the community on how the impacts of the catch reductions will or should affect particular fishers. The final content of the new management plan (policy and rules) is determined by the Minister at the end of the review process.



CFAC: Crustacean Fisheries Advisory Committee
TRLFA: Tasmanian Rock Lobster Fisheries Association
RecFAC: Recreational Fisheries Advisory Committee
TARFish: Tasmanian Association for Recreational Fishing

What is happening in the rock lobster fishery?

The Tasmanian rock lobster fishery is extremely important to the State of Tasmania. It provides social and economic benefits in regional communities, supplies a valuable export market and is highly valued by recreational fishers. From 1997 to 2006 the statewide rock lobster biomass doubled, although this increase was not evenly distributed around the State. Since 2006 however, scientific assessment indicates that stocks have been declining due to the impact of prolonged low levels of recruitment. This low recruitment to the fishery is exceptional and the reasons behind it, are not fully understood. Over this time, a number of related challenges have arisen, including; spreading long spine urchin barrens, falling commercial and recreational catch rates and increased east coast sea surface temperatures. These are the key factors driving the need to develop new management approaches in this review, to ensure the ongoing sustainability of the fishery into the future.

How do we know what is happening?

Fishery Assessment Report: This report looks at the fishery in detail and provides the major scientific information that many management decisions are based on.

Recreational Survey: This is a statistically valid method of estimating the recreational catch. Participants keep a diary of their fishing activities and relay details during regular telephone interviews.

Stock Assessment Model: This is a complex computer model that takes into account a large range of variables and utilises past and current data to predict future trends in the fishery.

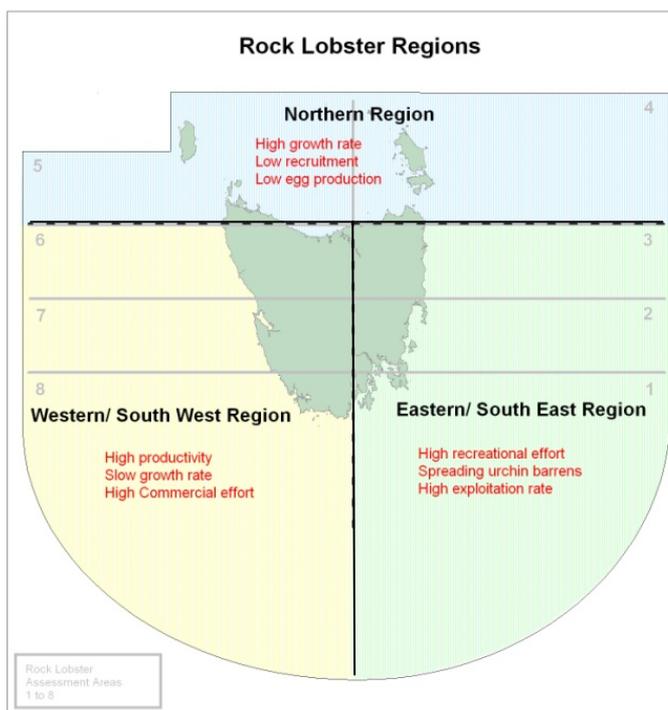
The Tasmanian Aquaculture and Fisheries Institute (TAFI) produces an annual **fishery assessment report** on the Tasmanian rock lobster fishery.

The assessment process primarily utilises commercial catch and effort data and length frequency data collected by observers on board commercial vessels. This data along with data obtained from the **recreational rock lobster fishery survey** is also utilised by a **stock assessment model** which produces future projections about the stocks under different catch scenarios.

The most recent assessments of the commercial and recreational fisheries both highlight a number of declining indicators which point to a need for the changes outlined in this document.

While the stock assessment model looks at data provided for discrete parts of the state, (areas 1 – 8 on the map), for general management purposes the state has been divided into broad regions that generally share similar characteristics.

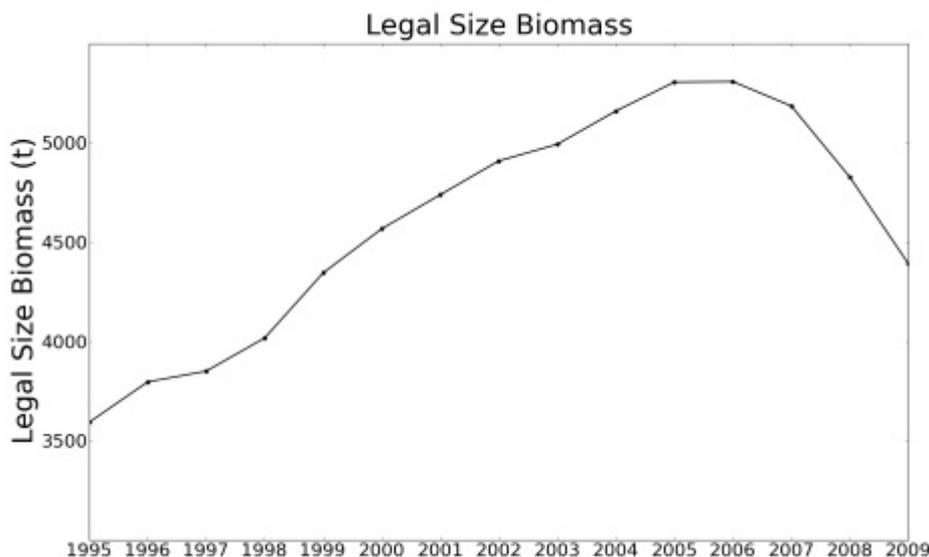
The 2008/09 stock assessment report provides information on a number of key indicators that have significant bearing on the future of the fishery. The outlooks from these key indicators, as provided in the report, are outlined below:



Legal Size Biomass

The graph below illustrates changes in legal size **biomass** over the last 15 years. It shows that stock levels are continuing to decline from a peak in 2006. Regionally, the 08/09 assessment report indicates that the eastern/south east region and south west region experienced the greatest stock declines relative to the previous year.

Biomass: This is the estimated total weight of rock lobster in Tasmanian waters (tonnes). It can be provided as either the total biomass, the legal size biomass or the spawning biomass.



Recruitment

Since 2000, the fishery has experienced a prolonged period of below average **recruitment**. The current trend in recruitment is at or near record lows in most areas. Recruitment is naturally a highly variable factor from year to year, but such a lengthy period of low recruitment has not been observed before.

Recruitment: This is the transition of juvenile rock lobsters through to legal size stocks, which drives future production and biomass.

Spawning Biomass

The spawning biomass, (mature female lobsters) has fallen over the last few years in a similar manner to the legal size biomass. While the relationship between total egg production and future levels of recruitment to the fishery has no clear link, without adequate egg production it would be expected that recruitment will be affected at some point.

Catch and Catch Rates

For the previous two years, the actual commercial catch has been significantly below the **total allowable commercial catch (TACC)**.

TACC: This is the total catch allocated to the commercial sector each year. An equal share is allocated to each quota unit.

Catch rate data from the commercial fishery serves as a proxy for abundance of lobsters and sends a clear signal regarding the state of the rock lobster fishery. The latest stock assessment report highlights the following:

- Statewide catch rates have fallen from a peak of 1.2 kg/pot lift in 05/06 to less than 1.0 kg/pot lift, with the 2008/09 rate similar to 1998/99 levels (i.e. at their lowest level for 10 years);
- Declines in catch rates occurred in all areas, but were most pronounced in the south west and south east areas;
- The decline in catch rates has led to lower daily catches per vessel resulting in an increase in effort to take the same amount of catch; and,
- The average commercial vessel is now working an extra 25 days per year to take the same amount of lobster it took in 2006/07.

Catch Rates:

Catch rates are calculated by dividing the catch (kg) by the effort, with the effort being the number of pot lifts to take that catch.

Survey information from the recreational fishery collected during the 08/09 fishing season also indicates declining trends. Some of the key catch and catch rate information detailed in the 2010 recreational report are outlined below:

- The 2008/09 recreational catch of 107 tonnes represents 7.5% of the combined commercial and recreational take.
- While the number of recreational fishers taking out a licence has significantly increased in recent years, this growth in licence numbers has not translated into a proportional increase in catch -
 - In 1997/98 the recreational catch was 75 tonnes, in 2002/03 the catch was 150 tonnes while in 2008/09 the catch was 107 tonnes.
 - In 1995 there was approximately 8,500 licensed rock lobster fishers, in 2008/09 there were approximately 21,500.
- Since 2002/03, the recreational pot harvest has gradually declined from 1.0 lobster per day to the current level of 0.75 lobsters per day. The harvest rates for divers have remained relatively stable at around 2.25 lobsters per day.
- Recreational potting accounts for 83% of the recreational effort (days fished), and 61% of the catch.
- Recreational diving accounts for 15% of the recreational effort, and 33% of the catch.
- Nearly 60% of the recreational catch comes from the east/southeast region in waters less than 20 metres deep. The recreational catch for this region in waters less than 20 metres deep is approximately equal to the commercial catch for the same waters.

For the recreational fishery, the region of most concern is the east/southeast region. There has been a significant decline in average daily harvest levels. This corresponds with the decline in legal size biomass for the region as reported in the fishery assessment report. This also mirrors the fall in catch rates observed in the commercial rock lobster fishery.

Without more normal levels of recruitment around the state, the biomass will continue to decline, if recent levels of catch in the fishery are not reduced. This has serious consequences for the viability of commercial fishers and the fishing experience enjoyed by recreational fishers. There are also wider implications for the ecosystem of rocky reefs.

Increasing East Coast Water Temperatures

A recent report looking at the vulnerability of the rock lobster fishery to climate change documented that the warming of east coast waters has the potential to effect rock lobster stocks in a number of ways.

East coast water temperatures have been consistently recorded by the CSIRO since 1944 and this has indicated a dramatic increase in sea surface temperatures in that time. The observed warming is almost four times the global average with an increase of over two degrees centigrade since records began. This increase in east coast sea surface temperature has corresponded with a southward shift in the East Australian Current (EAC) drawing warmer nutrient poor water from the north. This warming is expected to have significant effects on east coast rock lobster populations, including:

- Reduced *puerulus* settlement;
- Increased catchability as lobsters become more active as water temperature increases;
- Increase in lobster growth rate; and
- Ecosystem effects such as spreading urchin barrens.

Puerulus: These are the juvenile lobster approximately 5cm long, which settle onto the rocky seafloor after drifting/swimming in the ocean currents for 9-24 months.

The fishery is already experiencing some of the expected effects of increasing water temperatures including reduced puerulus settlement on the east coast (which has been below average for a protracted period), and spreading of long spine urchin barrens (this is described in more detail below).

Modelling indicates that with an increase in water temperature biomass will initially increase due to increased lobster growth, however, in the long term biomass will fall due to the reduced recruitment with significant effects on the fishery and ecosystem. As water temperature increases it is reasonable to look further north as an indicator of what may be expected as a result of increased water temperatures. The study states that by 2030 the north east part of the state is expected to be experiencing water temperatures that are currently found off the Victorian/NSW boarder. The rock lobster populations from this region have historically been relatively low compared with north east Tasmania.

As the effects of increasing water temperature are magnified, the report concludes that the resulting impacts on east coast rock lobster stocks will continue.

Urchin Barrens

The long spine urchin (*Centrostephanus rogersii*) arrived in Tasmanian waters via the East Australian Current (EAC), and as the current has pushed further south along eastern Tasmania bringing warmer water with it, the urchin's range has also spread.

Urchin barrens are formed when the urchin numbers grow to such an extent that they overgraze the reef removing much of the sea weeds that provide food and habitat for many reef dwelling organisms such as rock lobster. This results in barren areas that are unable to support the population of lobsters and other organisms. These barrens can be expansive and extend from the shallows to depths of over 50m. They often start as small barren patches across the reef and as they grow link up to form larger barrens to the point where they cover many hectares.

Recent research has shown that the principle predators of the long spine urchin are large rock lobsters greater than 140mm in carapace length (or approximately 2kg in weight), which are big enough to break the urchin open. Research has also shown that when urchins are removed (or numbers sufficiently reduced), the seaweed and invertebrate cover recovers to its normal state in approximately 18 months.

Further research is currently underway to determine the densities of these large lobsters that are required to reverse and prevent barren formation. As fishing over many decades has reduced the number of large lobsters to very low levels, long term strategies are now required to rebuild large lobster numbers to help control barren formation.

Reference Material

- 2008/2009 Tasmanian Aquaculture and Fisheries Institute (TAFI) Rock Lobster Fishery Assessment Report- http://www.tafi.org.au/images/uploads/RL_Assess_0809.pdf
- *Tasmanian Recreational Rock Lobster and Abalone Fisheries 2008-09 Fishing Season-* http://www.tafi.org.au/images/uploads/0809_RLAB_FISHWISEreport.pdf
- *Tasmania Rock Lobster Fishery Vulnerability to Climate Change Impacts and Adaption Response Options-* <http://www.tafi.org.au/publications/rock-lobster-full.pdf>
- Long Spined Sea Urchin Research- <http://www.zoo.utas.edu.au/urchin/index.html>
- FRDC Project No: 2001/044 Establishment of the long-spined sea urchin (*Centrostephanus rodgersii*) in Tasmania: First assessment of potential threats to fisheries - November 2005
http://www.tafi.org.au/index.php/site/publications/category/research_reports/P20/

The rest of this discussion paper outlines the Department's preliminary proposals on some possible management measures to address the challenges in the fishery and discusses the rationale for the measures.

STATEWIDE PRELIMINARY PROPOSALS

Issue: **Statewide declines in rock lobster stocks**

Aim: **Reduce the total statewide harvest to reverse stock declines and start a process of stock rebuilding**

How: **Commercial Fishery**

- Annual monitoring of the stocks through the stock assessment process
- Annual evaluation of the total allowable commercial catch (TACC) against performance measures
- Adjustment to TACC (if needed to keep the fishery on track)
- Use of other management measures, if TACC adjustments are predicted to be ineffective in part of the fishery

Recreational Fishery

Consider a package of adjustments to the statewide bag limit and possession limits that include:

- Reducing the statewide bag limit from 5 to 4.
- Reducing the possession limit for licensed fishers from 10 to 8 (i.e. two times the bag limit).
- Withdraw the special rock lobster licence, so that the maximum rock lobster a licensed fisher can possess is two times the bag limit.
- Investigate the need and feasibility of an individual seasonal limit for future consideration

Discussion

Commercial Fishery

The 08/09 fishery assessment report indicates that stocks are continuing to decline in all areas around the state and the Department has significant concerns about the biological, economic and social impacts on the fishery if the declines continue.

The major tool to address this statewide decline is the TACC because it explicitly controls the total catch of the commercial sector through the quota management system. The TACC was virtually unchanged for the first 10 years of the **quota system**, with a minor increase

from 1500 to 1523 tonnes in 2001. After a small cut in early 2009, a three year catch reduction strategy was developed by industry and supported by the Minister of the day.

Quota Year	TACC (t)	% Reduction	Reduction in tonnes
2008/09	1523.5		
2009/10	1470.9	3.5%	53
2010/11	1323.9	10%	147
2011/12	1257*	5%*	67*
2012/13	1194*	5%*	63*
Total (t)			330

*Future TACC reductions are dependent on the annual monitoring of the fishery against performance indicators to indicate whether these proposed catch reductions are likely to keep the fishery on track for meeting future biomass and catch rate targets.

The future projections in the 08/09 assessment report indicate these TACC cuts should be sufficient to halt the stock declines and start stock rebuilding at a statewide level, within a 3 – 5 year timeframe, subject to reasonable recruitment. However, this projection may be overly optimistic if the current low levels of recruitment continue. It is also important to note that the statewide TACC is not the sole answer. It does not adequately address a number of important regional issues in the fishery – specifically the low productivity in northern areas, the impact of urchin barrens and localised overfishing and inshore fishing pressure from all sectors, particularly in the east/south east region.

Quota Management System (QMS): This system was introduced in March 1998 which then led to a period of substantial stock rebuilding. The QMS shares the TACC between the commercial fishers based on their quota holding.

Recreational Fishery

While the regional targeted measures discussed in this paper are expected to significantly contribute to addressing the statewide stock declines, the Department believes it is appropriate to discuss whether adjustments to general recreational management are warranted, so that the sector can contribute to statewide inshore stock rebuilding.

The Department acknowledges that the estimate of total statewide recreational catch is within the notional share of the rock lobster resource allocated to the recreational fishery called the **TARC**. However, the Department believes this should not preclude discussion or consideration of measures to address significant issues in the fishery.

TARC: This is the Total Allowable Recreational Catch. It is a notional share of the resource allocated to the recreational sector representing a minimum of 170t or 10% of the Total Allowable Catch (TAC) if it is greater than 1700t.

In addition to addressing stock decline, some measures may also be used to address some apparent inequities in catches within the recreational rock lobster fishery. The aim is to maintain and improve catch rates for recreational fishers at a level that corresponds with reasonable recreational fisher satisfaction levels. Divers have the greater capacity to catch their bag limit than pot fishers. Pot fishers may have a lower average daily take but have the ability to fish more frequently. Some recreational fishers have exceptionally high annual catches.

It seems appropriate to consider possible measures that limit individual catches, to spread the harvestable resource in a fair and reasonable (equitable) manner.

Bag limits, size limits and season closures are the most feasible tools to manage the recreational catch and are easy for recreational fishers to understand. Minor adjustments can periodically be made to limit the overall recreational catch to assist in arresting the general decline and to share the catch, as well as addressing amongst other matters.

Bag Limit: This is the maximum number of rock lobster that can be taken by a licensed fisher in one day.

A bag limit reduction does not necessarily equate to a pro rata corresponding reduction in the total recreational catch. For example a bag limit reduction of 5 to 4 may not result in a 20% reduction in total recreational catch. Although it is not possible to predict exact catch reductions, it is possible to model the potential impact by applying different bag limits to previous survey catch data.

- a statewide bag limit of 4 could result in a theoretical reduction in the total recreational catch of between 6 – 8 %
- a statewide bag limit of 3 could result in a theoretical reduction in the total recreational catch of between 14 - 17 %

Whilst bag limits are a primary management tool to limit catch, **possession limits** are often considered a compliance tool in respect of bag limits, as it is often easier to prove possession limits rather than when or where a person had taken fish. Possession limits also limit overall catch to a minor degree, as they prevent a person from taking their bag limit day after day. The current possession limit for licensed recreational fishers is 10.

Possession Limit: This is the total number of rock lobster that a person may have. It applies everywhere, including on the water and at home. The possession limit for a licensed and an unlicensed person are different.

Currently, the purchase of a special rock lobster licence allows fishers to be in possession of up to 15 rock lobster (3 times the daily bag limit) for a nominated 2 week period. Given the current concern regarding the declining stock status and the compliance risks of having a large amount of valuable lobsters that potentially can be traded, the continuation of this special licence is questionable.

Individual recreational catches are highly variable. The average annual catch is around 6 - 7 rock lobsters. Some fishers however take what many consider an excessive amount of rock lobster – well beyond “reasonable and fair levels”. Respondents to the recreational questionnaire indicated that between 26 to 50 lobsters per season is regarded as a fair and reasonable maximum annual take by recreational rock lobster fishers.

There appears some merit in considering mechanisms that could be used to ensure individuals do not take excessive rock lobsters in any one season, and therefore share the recreational catch in a fairer manner. The possession of relatively large amounts of lobsters may provide opportunities for illegal marketing.

The concept of an individual seasonal limit (i.e. limiting the maximum number of rock lobsters an individual may take in a season) requires debate and further discussion. The need, effectiveness, feasibility, costs and benefits of such a measure require careful

consideration. There are a number of ways that may be used to monitor a maximum seasonal limit, such as tags, log books and technological reporting aids, however, all have potential administrative and practical complexities that would need to be adequately researched and investigated, if the concept of seasonal limit is to be further progressed.

Do you have any views on the package of adjustments proposed for the recreational fishery?

Do you think the concept of an individual seasonal limit is an appropriate mechanism to more equitably share the catch between recreational fishers ?

EAST / SOUTHEAST REGION PRELIMINARY PROPOSALS

Issue: Declining rock lobster stocks in shallow waters of the East/Southeast region

Aim: Reduce the shallow water catch from this region to halt the stock declines and start a process of shallow water stock rebuilding

How: Commercial Fishery

- Seasons: A defined shallow water region could be closed for one or more periods throughout the year (in addition to the current statewide closed season).
- Gear: There could be a restriction on how many pots can be used in a defined shallow water region.
- Fishing block catch caps and closures: Maximum catch caps could be set for particular fishing blocks within the east/southeast region. When the maximum catch level is reached, the fishing block would be closed to fishing for the rest of the quota year.
- Size limits: The minimum size limit could be increased in a defined shallow water region.

Recreational Fishery

Consider adjusting recreational management measures that reduce the recreational catch in the region.

- Introduce a bag limit of 2 for the region.

or

- Introduce a bag limit of 3 for the area, and close the season for November.

Discussion

As the statewide measures discussed in the previous section, may not adequately address **shallow water** stock declines in this region, the Department considers that a targeted management approach is required.

The east/southeast region is broadly defined as the area between Eddystone Point to Whale Head (see map on page 2).

Reasons for this approach include:

- The region is very important to the recreational sector. Around 60%

Shallow Waters:

These are referred to as waters less than 20m deep. The majority of the recreational fishing occurs within this depth.

of the total state-wide recreational rock lobster catch is caught in the region;

- The shallow water area is a high interaction area, around 50 % of the total shallow water catch is taken by recreational fishers and 50% by commercial fishers;
- The commercial catch reduction strategy addresses the statewide stock decline, however targeted shallow water catch reductions may be needed in this region;
- The current legal size and spawning biomass in this region are low relative to other areas;
- The impact of urchin barrens is greatest in this region (this is further discussed in a later section);
- Recreational fishing levels are declining in the region. The catch rate for recreational pot fishers has also dramatically dropped. Survey information estimates a recreational catch decline from 51 tonnes in 2006/07 to 24.5 tonnes in 2008/09;
- Ecological impacts associated with increasing water temperature are expected to be significant in this region; and,
- Responses to the recreational questionnaire indicated the most frequent fisher observations were in relation to decreases in abundance of rock lobster in the east/southeast region.

Halting the current declines and rebuilding stocks in this region will benefit both the commercial and recreational fishery. Higher stock levels are expected to result in increased commercial catch rates and profitability. Similarly, increased shallow water stocks should lead to increased catch rates and enjoyment for recreational fishers. Greater stock abundance should also provide a buffer against periods of low recruitment and may contribute to reducing the risk of urchin barren formation.

The stock assessment modelling in the 08/09 report indicated that a reduction in the statewide commercial catch of around 20% over 3 years would be expected to halt the stock declines in most assessment areas and facilitate stock rebuilding (subject to the actual level of recruitment in the fishery each year. Given the importance and impact of recreational fishing in shallow waters, in this region, a recreational catch reduction that complements the commercial TACC reductions and other potential regional commercial measures requires consideration. Such a catch reduction would be expected to provide a much higher probability of addressing shallow water stock declines in this region.

The development and use of specific targets or goals for future shallow water stock abundance in this region within a particular timeframe is under consideration by the Department.

Possible Commercial Fishery adjustments

The TACC reduction strategy will have some benefits to shallow water east / southeast stocks but because the catch reductions cannot be targeted at a specific region, the Department believes there is a need to examine other targeted management measures that could be considered that would specifically contribute to a reduced inshore east coast catch.

Each of the tools described above, have different pros and cons in terms of their potential effectiveness to address the issue. There are also compliance implications and economic implications for fishers who only fish in this region. All these considerations will need to be examined in detail to determine the best option or package of options.

Do you have any comments on the relative effectiveness of each option proposed above?

Do you have any comments on the compliance and economic implications of each option?

Do you have any suggestions on what other commercial management actions could be used or if a combination of options is a better approach?

Possible Recreational Fishery adjustments

Reducing the recreational bag limit or season are the most feasible management ways to limit the recreational catch in the region. Although it is not possible to predict the exact catch reduction from these measures, it is possible to provide estimates of the possible impact by applying different bag limits to previous survey data.

- A bag limit of 4 has around 5 % impact
- A bag limit of 3 has 9 - 13% impact.
- A bag limit of 2 has 13 - 20% impact.

A bag limit reduction from 5 to 2 approaches the targeted level of catch reduction. An alternative measure is to consider a bag limit of 3 and delay the open season in the region until the end of November. This later approach may be more acceptable as it should lead to higher daily harvest rates for the pre Christmas period.

The recreational lobster survey for the 2008/09 season indicates that the bag limit is rarely reached for recreational pot fishers (1% of fishing trips) on a statewide basis. Divers catch their bag limit on average once in every five dives. As such any adjustment to bag limits may impact fishers differently, depending on the method(s) they use. The daily catch by divers appears less responsive to declining stocks than pot fishers as divers have some capacity to compensate by spending more time in the water to attempt to take their bag limit.

Surveys indicate that around 20,000 lobsters (around 25 % of the total recreational catch in the east/southeast) are harvested in November in the east/southeast. A seasonal closure for the region would, therefore, leave a substantial amount of lobsters in the water. It is difficult to estimate how many of these lobsters would remain uncaught during the season, however a November closure is likely to improve catch rates closer to the Christmas period.

A later season also has advantages in delaying the risks associated with handling soft shelled fish in the south and south east, particularly for dive caught lobsters.

The proximity between the opening of the recreational and commercial seasons in November in this region, is sensitive and the Department acknowledges that many fishers (recreational and commercial) will have strong views on any changes. If a November closure was proposed for the recreational fishery in this region, it is highly likely that a similar shallow water closure would need to be considered for the commercial sector.

You might like to comment on how the different options would impact on your fishing activities and enjoyment.

Do you consider your recreational fishing activities would be improved if more lobsters are left in the water and available for taking closer to the Christmas period?

Issue: Spreading urchin barrens

Aim: Increase the abundance of large rock lobster to help reduce the risk of barren formation

How: For both the commercial and recreational fisheries

- Introduce a maximum size limit for both male and female lobsters of 138mm (carapace length) to protect existing large fish.
- Designate an area for protection of these large rock lobsters between;
 - (near) Eddystone Point in the north
 - Whale Head in the south.
- Not allow any fisher to take rock lobster of greater than 138 mm within the suggested area.

Commercial Fishery

- Develop transiting provisions and reporting requirements for commercial fishers when fishing both inside and outside of the proposed size limit area (compliance measure).

Recreational Fishery

- Not allow recreational fishers to possess lobsters greater than 138mm within the suggested area (compliance measure).

Discussion

The long spine sea urchin (*Centrostephanus rodgersii*) has established large populations on the east coast of Tasmania and is extending its range south. Left unchecked, they form large urchin barrens that are effectively devoid of other marine life that would otherwise be present.

Research studies have shown that large lobsters of around 140mm (approximately 2 kg and above) will predate on adult urchins and given a sufficient density of large lobsters, over time they may have the ability to help control urchin populations and subsequent barren formation.

Introduction of a maximum size limit on lobsters for the eastern / south east region is a first step to help protect the large lobsters in the current lobster population. The second step would be to increase the abundance of these large lobsters to levels that may then start reducing barren formation. The outcomes of a current research project should provide information on the density of large rock lobsters required to be effective.

Do you support the rationale for this proposal?

What are your views on the proposed area?

COMMERCIAL FISHERIES RELATED PRELIMINARY PROPOSALS

Issue: Incidental damage and economic impact of poor quality lobster taken from southern waters during September

Aim: Reduce the risk of these potential impacts through legislation instead of individual self regulation

How:

- In the southern part of the fishery, extend the closed season for male rock lobster to include September.
- Area under consideration - Cape Queen Elizabeth (Bruny Island) around to Cape Sorell (Macquarie Harbour).
- Monitor the transfer of displaced catch and effort.

Discussion

Concern exists within the rock lobster industry that rock lobster caught along the south coast in September are often in a poor and fragile condition resulting in the loss of numerous appendages. This results in reduced growth rates whilst discarded lobsters regrow appendages. The condition of the lobsters at this time precludes them from being exported due to their fragile state. Commercial fisherman and processors report that rock lobster landed from the south coast at this time of year are lighter as they have recently moulted. The reduced weight of lobsters and damage reduces the value of the rock lobster catch landed from this part of the fishery.

Research undertaken by TAFI has demonstrated that the growth rate of lobsters is reduced while they regrow lost or damaged appendages and this may take a number of years.

The management approach for the last 5 years has been one of 'market self regulation'; ie individual fishers and processors should make the appropriate decision relating to the timing /location of fishing together with the quality of the retained catch. However, an increasing number of commercial fishers appear to have concerns about the effectiveness of this approach, so the Department believes it is appropriate to discuss alternative strategies.

It is expected that most of the September catch (20 – 50 tonnes) would be taken from this region later in the quota year. However, if effort is displaced to an area of the fishery where stocks are particularly under pressure, e.g. shallow waters in the east/southeast coast region, additional management measures will need to be considered.

Do you consider this a significant issue that needs to be addressed?

Does this issue extend beyond the proposed area?

Issue: Increased commercial catch and effort from inshore waters

Aim: Increase the proportion of the annual commercial catch that is taken from the west coast deepwater region

How:

- Define a designated deepwater west coast region in the management plan
- Allow the use of additional rock lobster pots in this region (maximum of 60 pots).
- Open this area (or part of) for fishing during the current closed season for male lobsters.
- Alter the giant crab management plan to allow crab fishers who are permitted to use additional crab traps in deep water (120 metres plus) to retain or target rock lobster.

Discussion

Historically, up to 300 tonnes of rock lobster have been taken from offshore areas each season. Since the introduction of quota, in an effort to maximise the value of their quota, fishers have targeted the more valuable inshore dark red lobsters, and the quantity of rock lobster taken from offshore has reduced to around 80 tonnes per season. This has increased the pressure on inshore rock lobster stocks. A research project has been running since 2007 to trial a number of incentives to encourage fishers to fish offshore as well as obtaining additional data from the offshore lobster stocks.

The offshore trial area included water deeper than 70 metres between Low Rocky Point and Cape Grim on the West Coast. The Department is willing to consider if there are benefits in extending this area. Fisherman would be required to make a dedicated trip to the offshore area and would be monitored via a vessel monitoring system.

TAFI rock lobster modelling indicates there are significant gains to be made by reducing the proportion of rock lobster taken inshore and increasing the proportion of rock lobster taken offshore.

Do you agree with the development of incentives encourage fisherman to target offshore lobsters?

Do you have any comments on the offshore area or proposed incentives?

Issue: **Impact of current carryover provisions on the fishery.**

Aim: **To review the carryover provisions in the context of declining rock lobster stocks.**

How:

- Remove the provision for rock lobster carryover units.

or

- Only allow the carryover of a partially caught rock lobster unit - this will only allow those units attached to an actively fished licence to be carried over.

Discussion

Currently, commercial rock lobster fishers are allowed to carryover up to the equivalent of one uncaught rock lobster quota unit into the following season. The original intent of the current carryover provision was to minimise the need for a fisher to make an unviable last trip of the quota year to catch the final kilos of quota they may have remaining. Some entitlement holders attempt to maximise their carryover by “parking” uncaught units on unfished entitlements. Whilst this is not prohibited under the current rules, it is not in the spirit of the original intent of carryover.

This issue has arisen in recent seasons where the TACC has been significantly under caught, resulting in a high level of carryover into the following season. The carryover was 20 tonnes in 2008, 35 tonnes in 2009 and is likely to be close to the maximum of 43 tonnes in 2010. This effectively puts the fishery on the back foot before the new quota year starts, particularly if the TACC has been reduced.

What are your views on the two options in this proposal?

Issue: Economic and administrative impacts of the current quota year (1 March to 28 February)

Aim: Determine if there is a better 12 month period to use

How: Consider the following start/end periods

- May or June - a slow time in the fishery
- Late September or October - coincides with the closed season and reduces the number of times a boat must come in to unload.
- Leave as is - maintains the status quo.

Discussion

The issue has been a topic of discussion for a number of years. From a commercial industry perspective there is a clear view that significant economic gains could be made if the end of the quota year was not so close to the peak market demand period around the Chinese New Year. The Chinese New Year is often held during February and fishers must make decisions about how much quota to hold back to cater for this period of potentially high demand. The current quota year ends during a period of high catch rates and fishing operations are slowed down due to availability of quota. The concept of changing the quota year was recently supported by members of the TRLFA. The Department is also keen to consider ways to improve customer services by spreading periods of peak work flow more evenly across the year.

A number of significant administrative and legislative hurdles would need to be worked through, as the relicensing year for a number of the States fisheries share the same fishing certificate as rock lobster (scalefish, scallop and giant crab). All vessel related licences will need to have the same expiry date.

It is proposed to use the review process to reach a policy position (for the rock lobster fishery) as to whether the quota year should be changed and if so, what the change should be, if and when all the hurdles have been overcome.

What are your views on timing of the quota year?

COMPLIANCE – RECREATIONAL PRELIMINARY PROPOSALS

Issue: Compliance risks in transferring recreational catch for reward.

Aim: Improve compliance, while allowing a fair and reasonable amount of recreational catch to be “gifted”.

How: Possession Limit for Non-Licensed Fishers

- To reduce the possession limit of non-licensed persons (unless a receipt is available) to 2 rock lobsters only.
- Introduce a house limit where there are no licensed fishers living at that address to 4 (unless a receipt is available).
- Persons under the age of 10 cannot be in possession of rock lobster.
- Develop rules around how to deal with house limits where licensed and unlicensed person live at the same address.

Discussion

The current regulations allow a possession limit for any non-licensed person of up to 5 rock lobsters (without a purchase receipt). This provides opportunities to illegally ‘dispose’ of lobsters to unlicensed persons either for profit or trade. A reduction in the possession limit for non-licensed holders will help minimise the opportunity for the illegal selling and/or trading of lobsters whilst still allowing non-licensed people to be gifted up to 2 lobsters.

It appears that there are some households that use other household members to increase the household possession. This provides an avenue to store relatively large numbers of highly valued lobsters.

There is merit in reducing the amount of lobsters that can be possessed in a household of non-licensed fishers. A reasonable amount should be in line with what is being consumed in one meal or the non-licensed possession limit of two adults.

In order to reduce the ability to shift possession over to children, a person under 10 will not be able to possess lobster.

Do you think this is a fair approach and equitable number?

COMPLIANCE – RECREATIONAL PRELIMINARY PROPOSALS

Issue: Rule Enforcement

Aim: Improve existing rules to improve enforcement efficiency

How: Restriction of certain apparatus on recreational vessels

- Prohibit the possession of snoods and nooses on vessel which have diving equipment on board.

Discussion

The current rules state that divers can only take rock lobster with a gloved hand. The intent of this rule is to prevent the take of rock lobster with any other apparatus, particularly snoods and nooses, which increase catch efficiency (and increases the chances of local depletion). In addition, the use of such gear may damage lobsters.

The rule needs to be amended to increase the ability to enforce the rule so that it is illegal to possess devices that are known to take rock lobster illegally.

How: Not allowing vessels to carry other person's marked buoys and standardisation of marking of buoys

- Vessels will only be allowed to carry buoys marked with licence numbers of the actual people on board.
- The legislation will be standardised so that rock lobster pot buoys being used for aboriginal activities, must be marked with a unique code provided by the Office of Aboriginal Affairs.

Discussion

There are concerns that in some instances fishers may have multiple pots being left in the water marked with other people's licence numbers allowing them to fish multiple pots. In other instances, multiple buoys are carried and changed over depending on the 'crew on the day'.

In addition, there is a slight inconsistency across different fisheries rules in regard to the marking of buoys for aboriginal activities.

How: Incorporating the current restriction for possessing rock lobster in part of Bass Strait into the rules.

Discussion

Currently there is a legislative order preventing the possession of rock lobster in part of Bass Strait (North of King and Flinders Island - between 39° 30' S and 39° 12') introduced as a biosecurity measure, in response to the discovery of abalone viral ganglioneuritis virus (AVG) in Victorian waters. It is proposed to incorporate the current biosecurity provisions into the rock lobster management plan. These provisions restrict the possession of rock lobster on waters between Victoria and Tasmania.

This restriction will also assist in overcoming some enforcement difficulties when Tasmanian caught lobsters are being landed in other states that have different possession limits.

What are your general views on all or any of the above rule enforcement proposals?

ADMINISTRATIVE PRELIMINARY PROPOSAL

Issue: Provide flexible/adaptive management arrangements

Aim: To allow the setting of size limits and any associated operating criteria by public notice

How:

- To provide the capacity for the Minister to alter rock lobster size limits by public notice.

Discussion

There are a number of issues that could be addressed through the use of alternative size limits in targeted regions of the fishery. These issues include;

- Stock rebuilding and egg production in Areas 4 and 5;
- Inshore stock abundance SE/E coast; and
- Short term fishing to market opportunities.

As part of a major research project that will be completed later this year, the rock lobster stock assessment model now has the capability to run future projections for different size limit scenarios. This will provide quantitative information on the potential costs / benefits to the fishery of changing size limits and the potential impacts for different areas or sectors.

The Department proposes that a new rule be drafted which would allow the Minister to alter a size limit, for a limited period of time in a region of the fishery. This would provide the flexibility to respond to an issue by trialling a different size limit or making adjustments to a size limit, without the lengthy time and costs associated with a formal change to the rules. The Minister would be required to consult with the peak bodies or FAC's or seek comments from licence holders prior to any change.

Do you support the concept of altering size limits by Public Notice to provide more flexible management responses?

Do you have any other comments relating to this proposal?

Unresolved Issues

The Department is seeking legal advice on whether changes to operational arrangements, that might be needed in conjunction with a size limit change, could also be made by public notice.

Thank you for providing your comment.

For any further information please call:

- Recreational rock lobster enquiries: (03) 6233 9072
- Commercial rock lobster enquiries: (03) 6233 6797

Comment on the paper is welcome until **8 June 2010**. To view the paper visit www.fishing.tas.gov.au, or obtain a copy from Service Tasmania

