



Tasmania

*Subordinate Legislation Act 1992*

## **COST-BENEFIT STATEMENT**

**FOR**

### ***REVIEWING THE TASMANIAN COMMERCIAL DIVE FISHERY MANAGEMENT PLAN***

**A COST-BENEFIT STATEMENT ON THE PROPOSED ISSUES FOR  
REVIEW TO BE INCORPORATED INTO THE *FISHERIES (COMMERCIAL  
DIVE) RULES 2005***

**Prepared by Marine Resources, Wild Fisheries,  
Department of Primary Industries, Water and Environment. Hobart**

**August 2005**

## **CONSULTATION TO BE UNDERTAKEN**

The DPIWE will:

Consult directly with the Tasmanian Fishing Industry Council; and

Consult directly with the 55 Commercial Dive licence holders; and

By notice in the Gazette and in three newspapers circulating generally in Tasmania:

- provide the opportunity for members of the public to obtain a copy of the Regulatory Impact Statement and the proposed Rules; and
- invite submissions within at least 60 days of the date of the notice from members of the public on the proposed Rules.

Make the Regulatory Impact Statement available on the Department of Primary Industries, Water and Environment's website ([www.dpiwe.tas.gov.au](http://www.dpiwe.tas.gov.au)).

**COMMENTS OR SUBMISSIONS IN RESPECT OF THIS COST-BENEFIT STATEMENT MUST BE LODGED BY 7 NOVEMBER 2005 WITH:**

The Secretary  
Department of Primary Industries, Water and Environment  
GPO Box 44  
HOBART TAS 7001  
*ATTENTION: Wild Fisheries Management Officer (Commercial Dive)*

or by e-mail to:

[greg.ryan@dpiwe.tas.gov.au](mailto:greg.ryan@dpiwe.tas.gov.au)

## **COST-BENEFIT STATEMENT FOR THE REVIEW OF THE COMMERCIAL DIVE FISHERY MANAGEMENT PLAN**

### **INTRODUCTION**

In this statement, some of the alterations proposed in the *Fisheries (Commercial Dive) Rules 2005* are assessed for proposed changes to the current commercial dive fishery management.

The changes included in this statement are those that have been assessed as having a potentially significant impact on the holders of commercial dive licences, the Government and the community as a whole.

The Department also recognises the very important role that it plays as a custodian of marine resources. There are very clear expectations on behalf of the community that our marine resources and their habitats should be conserved, and fishing activities managed according to the principles of ecologically sustainable development.

Further, there is also a need to provide for a whole range of non-extractive activities relating to education, recreation and appreciation by users that place an intrinsic value on the resource and its management.

Primarily, the Tasmanian Government relies on regulations to prevent overfishing of wild fish stocks and to ensure proper, appropriate, rigorous, and sensible regulation of fishing activity.

As mentioned above, the major objectives of Tasmania's fisheries legislation relate to sustainable use of our resources, economic development and encouraging public involvement in the development of our management arrangements. These objectives also require the Tasmanian Government to take account of the community's needs and interests in respect of our living marine resources. All of the objectives require, in some way, the Tasmanian Government to intervene by regulations, at minimum cost to the community, to ensure that these objectives are met.

The assessment undertaken here is required under an agreement between the Department of Treasury and Finance and the Department of Primary Industries, Water and Environment (DPIWE). The agreement specifies that Fishery Management Plans and subsequent Rules developed under the *Living Resources Management Act 1995 (LMRMA)* are not declared subordinate legislation for the purposes of the *Subordinate Legislation Act 1992 (SLA)*, provided that the conditions of the Agreement are met.

Under the Agreement all proposed changes to draft management plans and rules are required to be submitted to Treasury's Regulation Review Unit (RRU) for assessment. Where the RRU identifies the proposed changes as likely to impose a significant cost, burden or disadvantage on any sector of the community, a cost benefit analysis, justifying the identified changes as being in the public benefit, is required to be drafted and presented to the RRU for endorsement. Once endorsed by the RRU, the

official public consultation process can begin. The RRU has endorsed this cost benefit statement.

Public consultation for Fishery Management Plan reviews follow a statutory process that is described in the *Living Marine Resources Management Act 1995*. In this review of the Commercial Dive Fishery Management Plan, the proposed alterations to the plan and the cost benefit analysis will be released to all stakeholders and the general community.

Any person who would like to comment on any aspect of the issues under review is invited to make a submission to the Department. A report on all submissions received will be compiled and presented to the Minister for Primary Industries and Water.

This analysis has been included in the formal Commercial Dive Fishery Management Plan draft document and will stand for public consultation for a period of at least 60 days. *Comments are sought on the content and analysis presented in this cost-benefit statement.* Obviously many aspects cannot be quantified, but importantly, the significant factors have been identified, discussed and weighed against each other. The following issues, have been analysed in this cost-benefit statement

- Limiting the size of the fishery to 55 licences and altering licence arrangements;
- Introducing Total Allowable Catch principles for zones to ensure sustainable stocks are maintained for sea urchins and periwinkles;
- Restricting the type of equipment to be used for sea urchins;
- Applying minimum size limits for sea urchins and periwinkles (but giving the Minister power to apply size limits to other species) and
- Allowing zone closures over critical periods.

## **ISSUES ASSESSED IN THE REVIEW OF THE COMMERCIAL DIVE FISHERY MANAGEMENT PLAN**

### **LIMITING THE SIZE OF THE FISHERY TO 55 COMMERCIAL DIVE LICENCES AND ALTERING LICENCE ARRANGEMENTS**

#### *(a) LIMITING THE SIZE OF THE FISHERY*

Restricting the number of commercial dive licences to 55 represents a restriction on competition. In accordance with Tasmania's obligations under National Competition Policy (NCP), legislation should not restrict competition unless it can be demonstrated that:

- (a) the benefits of the restriction to the community as a whole outweigh the costs; and
- (b) the objectives of the legislation can only be achieved by restricting competition.

In accordance with the NCP principles, it is noted that there are many cases where it is desirable to restrict competition and to not allow market forces to operate unhindered. Such restrictions may be necessary in cases where the absence of restrictions would lead to over-exploitation of the resource, eg. open access fishing. This example is known as a case of 'market failure' and usually requires government regulation in some form, often involving restrictions on competition.

Restrictions on competition are, therefore, not necessarily undesirable but it is necessary to assess whether they are in the public benefit. For this reason, NCP requires all jurisdictions to examine restrictions on competition to ensure that only those that are in the public benefit remain. This involves examining the costs and benefits associated with the restrictions and assessing whether the community as a whole is better off retaining or removing them.

Given this, the information below has been provided to demonstrate that the licensing restriction is unavoidable to retain the commercial dive resource and is to the benefit of the public.

#### **Commercial industry**

Commercial dive fishing licences are used primarily for the taking of sea urchins but other species harvested by commercial divers include periwinkles, whelks and the introduced Japanese seaweed *Undaria pinnatifida*. There are also a number of species harvested by commercial divers under permit including clams, native flat oysters and wild pacific oysters.

In 1993, the Minister introduced a moratorium on the issue of commercial dive fishing licences. The current number of licences is 55. The new management plan proposes capping the number of licences at its current level thus maintaining the

status quo. This restriction on the number of licences provides security for existing licence holders in relation to stocks available to each owner, maintaining sustainable resources and stabilising the licence market.

It must also be recognised that the sea urchin and periwinkle fisheries generally have a very narrow profit margin which is significantly influenced by international markets and competing overseas suppliers. The TACC however, is based on what a sustainable system can support and is not influenced by markets or the number of divers who are given access to the resource. The data available from past catches and indications from market pressures show that a fishery without restrictions on the number of licences would make the industry non-viable and remove all security from current licence holders.

Another serious concern for the industry in the past has been the threat from latent effort to sustainable stocks. The management proposals have overcome this issue by adopting a combination of a Total Allowable Commercial Catch (TACC) and a cap on licence numbers which has been developed to allow a cost effective monitoring strategy to operate effectively in the small fishery. The reason for the dual strategy is further developed under the following section on “The Community”.

### **The Community**

Restricting commercial dive licence numbers will mean a cost for new entrants for initial entry into the industry. However, the licence now provides a more reliable and viable asset for community members once they become involved. The market also provides an efficient and transparent mechanism that is independent of Government for individuals to enter the fishery if so desired (the measures relating to transferability of licences also facilitate this outcome).

The licence provides fishers a level of security and an access right only - the *Living Marine Resources Management Act 1995* provides that the ownership of the resource remains with the State (i.e. the community).

One of the main concerns shared by this Department and the Department of Environment and Heritage is the potential threat from latent fishing effort. History has demonstrated that in this financially marginal fishery, failure to cap the number of licences leads to the majority of licence holders not actively participating in the fishery but simply maintaining possession with a view to possible future benefits. However the potential remains for all licence holders to exercise their rights to take fish at any time. In the event that there is a change in market forces and all licence holders increase their effort in the industry there is the very real potential to decimate stocks beyond the point of sustainability. This possibility led to the 1993 moratorium being introduced by the Minister to limit licence numbers

While this threat is partly negated by the placement of a Total Allowable Catch, the economically marginal nature of the commercial dive industry means that the development of an individual quota system is not economically feasible. The costs to establish, maintain and police such a detailed system could not be supported by the

industry and would be an unjustifiable burden on the community. The alternative option for management is to introduce a TACC that requires minimal costs to establish and monitor, such as the proposed “Monte Carlo” system where all fishers are required to keep the combined catch of all licence holders below an annual limit. The system, while efficient and economical for the relatively small industry, does rely on the data being relayed to the Department for processing so it can then advise the industry of progress toward the TACC.

The process is however, not instantaneous and under the circumstance where there is no limit to the number of licence holders in the industry, the threat to sustainable stocks is considerable. A sudden increase in the demand for commercial dive product may eventuate in all latent effort becoming active simultaneously which may result in massive effort being suddenly invested in the industry irrevocably changing the balance of natural systems over a very short period which may deprive the community of access to numerous species for generations to come. The sustainability of the commercial dive industry is a key benefit to the community. Together with the TACC, a limit to licence numbers is a key resource protection tool.

Maintaining the status quo of 55 licences, although presenting a barrier to entry, is not considered to impose a significant cost to the public. There is no evidence to suggest that there are significant numbers of potential entrants wanting to enter the commercial dive sector that cannot. Prior to the moratorium being established in 1993, there were 127 licence holders, the majority of whom did not actively participate in the industry. Once the regulation was introduced that licences needed to be renewed each year and failure to renew would lead to the licence lapsing, there was a gradual decline in licence numbers to the current levels. With the markets for the commercial dive fishery remaining relatively marginal and stable in recent years, the demand from non-licence holders to attain new commercial dive licences has been very low. This is reflected in the relatively low value of the commercial dive licence in comparison to other fisheries licences such as abalone and rock lobster licences.

A further cost presented by open access models, is that it may provide a lower economic return for individual fishers and ultimately to the community (either directly or indirectly). A fishery that is not economically viable does not generally receive the support from participants which can lead to illegal fishing practices and product disposal, placing the fishery under increased pressure and depriving the community of the benefits to which it is entitled along with a current and future natural resource.

Providing transferability makes full ownership and security in the industry available to community members for the first time since the early 90s. A rigorous mechanism to enter the fishery is also provided through this model. Allowing transferability provides for the market to facilitate transfer of access rights in a transparent and equitable manner.

In the event that a licence becomes available through a breach of the rules by a licence holder or failure to renew a licence etc. that licence will be re-allocated through a public tender process.

## Government

In the short term, the government may be forgoing potential revenue from sale of new licences but this means there will be reduced burden on administrative processes and the limiting of licences greatly increases the likelihood of a sustainable industry providing employment for the state well into the future.

The costs to the Government for administering licence renewals will remain at the current level, but some additional income will be derived through a research levy on licence holders.

The low profit margins generally experienced in the commercial dive industry currently means there is no scope for licence holders to return 'rents' back to the community for the privilege of access to the resource. The low value of the commercial dive fishery only allows for some recovery of fees through the licence renewals for the administrative costs and some research for the industry.

**Table 1:** Summary of costs and benefits associated with limiting licence numbers.

	<b>Commercial fishery</b>	<b>Government</b>	<b>The Community</b>
<b>Costs</b>		Short term loss of income from new licence sales.	Entry into the industry by means of acquiring a new licence not an option.  Prevents possible efficiencies and innovation being introduced into the sector by new entrants
<b>Benefits</b>	Greater security for licence holders to maintain a living. Increased value on licences.  Greater security for licence holders in a more sustainable industry.	Long term revenue from licence renewals.	Potential for employment and investment for generations well into the future.  Potential for investment in the Industry and greater security for such investments.  Reduced requirement for monitoring, compliance and administration.  Reduced threat to natural systems from latent effort.

*(b) ALTERING LICENCE ARRANGEMENTS - NO SUPERVISORS*

**Commercial industry**

Prior to the draft plan there was provision for licence holders to allow other divers to operate under their licence. This has had the advantage of allowing the licence to be utilised when the owner was either not able or willing to dive and provided access to the fishery to other community members. However, it did have some draw backs in that the person actually diving had little control over the period they would be granted authority to dive and in the fact that there was no true ownership in the industry for these operators.

The changes to the arrangements will prevent the supervising of licences except under special circumstances. This will promote one class of diver in the industry with full security of ownership. It should help all divers to adopt a more responsible attitude towards a long-term view for the industry and encourage a greater degree of care toward the environment and stock preservation.

There are provisions under the new rules for licence holders to temporarily nominate a supervisor on a licence under some circumstances. In the event that a licence holder is unable to dive due to temporary injury or illness, the diver may put forward a request in writing to the Minister asking for approval to allow a second party to supervise a licence for up to three months.

Currently, there are 15 divers operating under a supervisor licence. These divers will now for the first time since the early 90s, have the opportunity to purchase a licence and gain some security and ownership in the industry. It also provides a means for those who no longer wish to participate in the industry to gain benefits from the sale of the licence.

**The Community**

A person can no longer enter the industry as a supervisor on a licence. Under previous arrangements, a supervisor could be appointed by the owner of a commercial dive licence to dive in his stead. However, the introduction of transferable licences provides them with an alternative that provides them with greater security and a tangible asset.

**Government**

The removal of the supervised licences will see a reduction in administrative requirements.

**Table 2.** Summary of costs and benefits associated with no supervisors.

	<b>Commercial fishery</b>	<b>Government</b>	<b>The Community</b>
<b>Costs</b>	Licence holders no longer have the option of allowing divers to operate under their licence unless they obtain specific permission.		The option of community members gaining entry into the fishery through a supervised licence is no longer available.
<b>Benefits</b>	All commercial divers have the same rights and increased security.  All divers have a long term interest in maintaining a sustainable industry.	Reduced administrative costs and demands with no supervised licences to be administered or maintained.	

*(c) ALTERING LICENCE ARRANGEMENTS - TRANSFERABLE LICENCES*

**Commercial industry**

All licences are to be transferable and of equal standing entitling all licence holders equal access to sea urchin, periwinkles and whelks in Tasmanian state waters. The single licence type will provide an even playing field at the start of the developing fishery, affording everyone equal opportunity. The concept of a single tiered and transferable licence type also presents all licence holders with equal ownership over the industry, providing further incentive for stakeholders to safeguard and value a sustainable industry which would be reflected in future licence prices.

**The Community**

Transferable licences will provide the community with a means of gaining entry into the fishery.

**Government**

There will be some administrative tasks and cost associated with the transfer of licences. The Government will also benefit from stamp duty for each licence sale. The stamp duty is set at around 4% of the sale price but this percentage can vary as the sale price passes through various thresholds. At this stage it is impossible to determine the benefits attributable to stamp duty, as the cost or number of licences that may be initially placed on the untried market is still to be determined.

**Table 3.** Summary of costs and benefits associated with transferable licences.

	<b>Commercial fishery</b>	<b>Government</b>	<b>The Community</b>
<b>Costs</b>		Administration costs associated with sale and purchase of licences	
<b>Benefits</b>	Provides value for investment in licence.  Equal share of ownership in the industry for all licence owners.	Stamp duty from sales	Access into the industry

### **INTRODUCING TOTAL ALLOWABLE COMMERCIAL CATCH PRINCIPLES FOR ZONES TO ENSURE SUSTAINABLE STOCKS ARE MAINTAINED FOR SEA URCHINS AND PERIWINKLES**

#### **Commercial industry**

There have been three separate total allowable commercial catch limits set by the draft management plan, one for each of the three newly proposed zones. Two of the zones encompass areas that have traditionally yielded over 90% of harvest and the third zone is largely an undeveloped area that constitutes around 75% of Tasmanian State waters. The sum of the TACCs from all three zones actually surpasses the catch required in past years and should not present a major difficulty for licence holders. The difference is that the three zone strategy will encourage fishers to disperse fishing pressure to a much greater extent and to identify new harvest areas that will help the industry develop to its full potential. This may mean that divers may have to travel further and invest some time in finding new grounds but the benefits are significant for the sustainability of the industry. It should be noted that the TACCs allocated to the two developed zones still allow 75% of the total catch to be taken from traditional grounds leaving only 25% to be caught from the remainder of State waters which are largely an untapped resource.

As is the case with the current management arrangements, there will be no individual quota applied to individual licences in this fishery. The size of the fishery and marginal profits attained neither warrant nor could support the required monitoring and compliance systems associated with an individual quota system. The proposed strategy of the TACC being accessible by all divers is fully supported by the industry who have acknowledged this to be the fairest and most efficient course of management. Daily catch returns submitted by divers to the Department will allow the catch to be accurately tracked so that the zones can be closed as the TACC is reached. Divers will be informed through Public Notice of all pending closures.

The need to develop and maintain sustainable commercial dive fisheries is to the benefit of the environment, licence holders and the Tasmanian community. The fact that the species targeted by the fishery, are in the main, reliant on export markets, underlines another important reason for the development of sustainable industries.

Permits are required to export any Australian wildlife under the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. All industries involved in the export of native Australian fish species must be assessed by the Commonwealth Department of Environment and Heritage (DEH), for ecological sustainability. The TACC plays a key role in the management strategy and ensures that enough stock remains in the wild to perpetuate the industry.

**The Community**

Steps to ensure the industry is sustainable will bring economic benefits to the State and help provide catch for recreational fishers.

**Government**

There would be an increase in monitoring requirements by compliance officers and managers to ensure the catch is kept within the limits set. There will also be a need for periodic placement of Public Notices to advise the industry of each year's TACC and zone closures.

**Table 4.** Summary of costs and benefits associated with Total Allowable Catch.

	<b>Commercial fishery</b>	<b>Government</b>	<b>The Community</b>
<b>Costs</b>	<p>Some restriction on the amount of stock that may be removed from specific areas.</p> <p>There may be the need to travel further to meet catch demand.</p> <p>There may be more time invested in locating new fishing grounds.</p>	<p>Monitoring of catch by compliance and management officers.</p> <p>Placing of Public Notices.</p>	
<b>Benefits</b>	<p>The development of a sustainable industry providing long term security and increasing value on licences /investment.</p> <p>Help to gain approval for export markets.</p>		<p>Long term economic benefits to the State associated with a sustainable industry.</p> <p>Catch available for the recreational sector.</p>

## **RESTRICTING THE TYPE OF EQUIPMENT TO BE USED FOR SEA URCHINS**

### **Commercial industry**

Limiting equipment to the use of tongs or hand may restrict some operators working in deeper water where their time on the sea floor is more limited. Under these circumstances some divers find it beneficial to use rakes that are able to scoop material into bags at a much faster rate. However, discussions with divers have strongly indicated that this practice is highly undesirable and to the detriment of the industry as a whole. The rakes are far less discriminatory than the prescribed methods and can result in the take of rubble, undersize specimens and by-catch. These materials are included in the weight deducted from the TACC for no return that penalises all divers by reducing the actual number of urchins and periwinkles available to them over the year.

### **The Community**

The use of specific equipment will help safeguard the environment by promoting minimal disturbance to the benthos.

### **Government**

There would be a minor increase in monitoring by compliance officers.

**Table 5.** Summary of costs and benefits associated equipment restrictions.

	<b>Commercial fishery</b>	<b>Government</b>	<b>The Community</b>
<b>Costs</b>	A minority of divers will need to adjust their fishing technique.	Minor increase in monitoring by compliance officers to check for rakes.	
<b>Benefits</b>	Catch will be more specific allowing the industry to take full benefits of the TACC.		Environment undergoes minimal disturbance.

## **APPLYING MINIMUM SIZE LIMITS FOR SEA URCHINS AND PERIWINKLES (BUT GIVING THE MINISTER POWER TO APPLY SIZE LIMITS TO OTHER SPECIES)**

### **Commercial industry**

The smaller urchins often have only small amounts of roe that may not be viable for processing. These young specimens if permitted to be taken would however, still be included as part of the TACC for little return. Allowing the stock to grow to maturity also provides them with an opportunity to spawn that will contribute to recruitment in the fishery. The minimum size limits would therefore promote sustainability, increase processing efficiency and the annual value of the fishery.

## The Community

The size limits will help ensure breeding stock is available to supply recreational fishers with catch.

## Government

There would be a minor increase in monitoring by compliance officers.

**Table 6.** Summary of costs and benefits associated with minimum size limits.

	<b>Commercial fishery</b>	<b>Government</b>	<b>The Community</b>
<b>Costs</b>		Minor increase in compliance requirements to monitor size of fish captured.	
<b>Benefits</b>	The minimum limit will ensure divers take the specimens of greater value and provide the younger stock with the opportunity to develop and spawn.		Long term economic benefits to the State associated with a sustainable industry.  Catch available for recreational sector.

## **ALLOWING ZONE CLOSURES OVER CRITICAL PERIODS.**

### Commercial industry

Another management strategy to be introduced for sea urchins is the closure of the two developed sea urchin zones (Central Eastern Zone and South Eastern Zone) for 3 to 4 month period following spawning. This would provide a number of advantages for the industry and the environment. Firstly, the condition and grade of the roe following spawning is of poor quality and of little value. Leaving the urchins unharvested provides the stock with the opportunity to regain condition promising far better returns when harvesting recommences after zones re-open. Secondly, the closure of the developed zones will encourage the exploration of the undeveloped zone. This would again help to disperse the fishing pressure. The undeveloped zone, which has a separate TACC, will remain open throughout the year or until the TACC is reached and should be able to satisfy processor requirements over the closure period. The incentive to explore the untapped resource comprising some 75% of Tasmanian State waters will enable the urchin industry to develop to its full potential in a controlled and sustainable manner.

It is anticipated that the closure of the two developed zones will generally occur from around the end of January through to the end of May. However, there may be differences in spawning times from year to year and even from one developed zone to the next as conditions vary. The Minister will therefore announce through Public

Notice, the closing and opening times of the two developed zones each year, following discussions with researchers and the industry.

Under this management plan, The Minister also has the power to close specific areas within zones for specific species. This may occur after discussions with industry or following the activation of a trigger point. It will therefore add extra protection to ensure the sustainability of the industry.

A survey was sent to all licence holders to seek their views on the closure and over 90% of all respondents were in favour of the proposed closures. Divers felt that the closures provided security by protecting their resource over periods of poor return and allowed the urchins to re-gain condition and consequently value for the industry without threat from other divers. It should also be noted that data from past three years shows that the three months for proposed closures have yielded only 2% to 6% of total live weight of the years catch. As this is the period following spawning, the vast majority of this catch would produce very little roe and of B grade quality which provides very little if any return for divers or processors.

### **The Community**

Steps to ensure the industry is sustainable will bring economic benefits to the State and help provide catch for recreational fishers.

### **Government**

There would be a minor increase in monitoring by compliance officers. Public Notices will also need to be displayed at the closure and opening of zones or areas.

**Table 7.** Summary of costs and benefits associated with zone closures.

	<b>Commercial fishery</b>	<b>Government</b>	<b>The Community</b>
<b>Costs</b>	Loss of access to developed fishing zones during periods of low return.	Monitoring of catch by compliance and management officers.  Placing of Public Notices	
<b>Benefits</b>	Protects stock until they have regained condition and value.  No divers have access to stock at these times providing security for the industry.		Long term economic benefits to the State associated with a sustainable industry.  Catch available for recreational sector.
<b>Cost Neutral</b>	In practice, maintains status quo in fishery.	Maintains status quo.	