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COST RECOVERY IN SOUTH AUSTRALIA'S
COMMERCIAL FISHERIES

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Major recommendations

That the following guidelines apply to the determination of commercial fishing licence fees for each licencing year.

- 1. Prior determination by government of the minimum financial requirements needed to ensure that core responsibilities listed under Section 20 of the *Fisheries Act 1982* are met.**
- 2. Determination of total commercial fisheries management costs through application of the approved cost attribution percentages for the commercial catching sector to the overall budget.**
- 3. From 1 July 1996 commercial fishery licence fees to fund 100% of commercial fisheries management costs from 1996/97, with licence fees for individual fishing sectors to be based on the attributable cost method with the exception of government endorsed integrated management committee (IMC) contingency funds and the "fisheries development fund" which are to be based on the relative gross value of production (GVP) of each sector.**

1. Background

In July 1992 the South Australian Fishing Industry Council (SAFIC) and the then Department of Fisheries agreed on a number of principles for cost recovery. The general principle of cost recovery is that individual service recipients pay a fee for government service that is approximately equivalent to the costs of activities for which direct benefits are received. Another alternate approach to determining fees is to charge clients in proportion to the level of benefit received rather than the costs *per se*. The July 1992 agreement on principles for cost recovery was as follows:-

1.1 Fishers will pay on a fee for service basis. That is, all recoverable costs fairly accounted for attributing (sic) against particular fishers or groups of fishers, where the benefit and likely distribution of the benefit is defined, will be borne by those individuals or groups of fishers.

1.2 The government should recognise that commercial fisheries provide benefits to the community and therefore the fishery should not be closed other than for proven biological need. If a fishery must be closed for biological reasons it should be closed to all participants.

1.3 All costs suggested for any industry sector must be fully considered by the relevant management committee. No party will automatically be responsible for the costs of management. The management committee will make recommendations to the Minister for Primary Industries regarding expenditure for the fishery.

1.4 Where a service is to be provided for the general well-being of the resource and is not attributable to a specific sector eg research into pollution or oceanography then these costs will be determined on a case by case basis through consultation with the peak industry body.

1.5 The commercial industry will not bear the costs of management for the recreational sector. If the government chooses not to charge the recreational sector then those charges must be set against the recreational sector and charged to consolidated revenue.

1.6 Where a recreational research component is not included by commercial based research services to assist the resource as a whole (both recreational and commercial) then a proportion of that research effort must be set against the recreational sector. For example the only data base for the marine scalefish fishery originates from and is

costed against the commercial sector, yet it benefits both sectors. Hence any cost centre must clearly identify beneficiaries and have costs set against them.

1.7 There is a recognition of the valuable contribution and potential value of aquaculture to the seafood industry and accordingly industry is prepared to consider each project on its merits with a view to supporting the establishment of that industry. However, the values, objectives and relationship of each aquaculture project to the wild fish sector must be clearly stated and subsequently assessed by industry.

1.8 The zero based budget approach is to be adopted on an annual basis. Incremental budgeting is not acceptable although consideration must be given to the requirements of principle 10.

1.9 The government should support the fishing industry to an equal extent that support is provided to other primary producers.

1.10 A long term strategic plan should be developed for each fishery and its associated cost centres.

1.11 The element of social justice needs to be recognised in the fishing industry as well as other sectors of the community. That is, the fishing industry has a legitimate expectation to be protected by the government from adverse outside influences just as every citizen has a right to be protected from theft and assault in the street. Costs of social justice are borne by governments as this is a responsibility of their general mandate.

1.12 Governments need to recognise the concept of "benchmark responsibility". This is where a fishery has no fishers (eg a collapsed fishery). The government will have an ongoing responsibility to manage that resource. This cost is a benchmark cost and should be borne by governments while the fishery remains closed but may be recouped from that industry when that industry becomes sufficiently viable.

1.13 Costs must be defined as recoverable and non-recoverable. Recoverable costs to be determined to the satisfaction of the industry representatives for a particular fishery.

1.14 Industry will only participate with a higher financial input where it can have a major input into a review of current administrative structures with a view to achieving high levels of cost effectiveness eg consideration should be given to an alternate form of management structure involving much greater industry participation.

The above "agreement" on cost recovery principles was tied in with a broad agreement to confer a higher level of responsibility on fishery management committees in terms of decisions on fisheries management policy and the funding of government services through licence fees. It was, in effect, aimed at the commercial and recreational fishing industries having joint responsibility with government for managing the State's fisheries. This agreement was struck between the then Director of Fisheries and representatives of the rock lobster, prawn, abalone and scalefish fisheries in July 1992.

2. Determining costs for each sector

Although a number of reviews have been conducted on cost recovery in fisheries in recent years,¹²³⁴⁵ there remains considerable ambiguity in terms of the rationale behind determining appropriate charges for the commercial fishing industry, once the costs of resource management have been determined. There is general recognition, however, of the following two principles:-

- Given the monopoly power which belongs with the managing agency in terms of service provision, there should be a high level of consultation with commercial fishers over the type and level of services which are to be paid for; and
- the level of contribution towards costs should relate to the level of benefit received. Previous studies by the Australian Bureau of Agricultural and Resource Economics (ABARE) have shown that commercial fishers obtain at least 90% of the market benefits of management, with few economic benefits passed on to processors or consumers.

It is considered that there are a number of inherent problems in terms of the applicability of current theory on cost recovery in fisheries. Unlike the predominantly commercial offshore fisheries managed by the Australian Fisheries Management Authority (AFMA), it is not considered equitable, logical or practical to consider costs in relation to market benefits and direct services to the commercial fishing sector only. Previous economic studies have made a basic assumption that the benefits of managing fish stocks on behalf of recreational fishers and the community are "non market" and have assumed costs to be intra marginal to the costs of managing the commercial sector.

While this assumption may have little bearing on outcomes in Commonwealth fisheries which have a predominantly commercial and offshore management focus, it is an important consideration in State managed fisheries which generally have large numbers of recreational fishers and other interest groups competing for access to the resource and receiving direct social and market benefits.

This is particularly relevant to the scalefish fishery in South Australia, both freshwater and marine.

In the absence of commercial fishing, recreational fishing and aquaculture, it is considered that cost of activities associated with managing fish stocks under the Fisheries Act would be limited to costs associated with the protection of stocks from factors other than fishing, such as pollution and the introduction of exotic species - responsibilities which are shared with other agencies (eg Department of Environment and Natural Resources) and which would represent about 10% of the current fisheries management budget. This is the public good component of services provided by government.

¹ ABARE (1990) Resource rent in fisheries. Discussion paper 90.10 Commonwealth of Australia 35pp.

² ABARE (1991) Submissions 91.4 to the Industry Commission Report "Cost recovery for managing fisheries". Commonwealth of Australia 32pp.

³ AFMA (1993) Cost recovery in Commonwealth managed fisheries. Discussion paper 24pp.

⁴ Haynes, J., G Green and L. Wilkes (1986) Beneficiaries of fisheries management. Discussion paper 86.1 Commonwealth of Australia 42pp

⁵ Industry Commission (1992) Cost recovery for managing fisheries. Report No. 17.

Approximately 90% recovery of total management costs by all sectors would therefore appear to be a reasonable expectation in South Australia's fisheries.

Determining the costs of fisheries management is best addressed by considering what costs would apply if the activity did not exist - costs over and above this amount are to be met by the users themselves. It is convenient to separate management costs into resource management costs and industry management costs, as suggested in the 1992 Industry Commission Report on Cost Recovery. The Industry Commission recommended that *resource management* costs should include activities associated with the main objective of achieving yields that are sustainable in the longer term, with the efficient allocation of resources and capital used in fisheries. It involves a determination of *what* amount of fish should be caught by *whom*.

Industry management costs include activities related to optimising the profitability of fishing or "adding value" to the fishery such as marketing or fishing strategies which maximise the value of the catch. Industry management involves *how* fish are caught or processed, rather than *what* is caught by *whom*. In output controlled fisheries (eg southern zone rock lobster and abalone) how fish are caught does not influence how much is caught nor by whom, whereas in input controlled fisheries, how fish are caught has a direct bearing on how many are caught and by whom.

As mentioned earlier, the contribution from commercial licence fees to government services remained at around \$3.6 million from 1991/92 to 1994/95. Although licence fees have increased during this time, most of this increased revenue was provided to SAFIC for disbursement of funds to associations etc related to industry management. The amount collected through licence fees for SAFIC/industry associations increased from \$0.38 million in 1991/92 to around \$1.2 million in 1994/95. Most of this increased revenue was spent on the employment of industry executive officers by fisher's associations and on the commissioning of research programmes (Spencer Gulf prawn).

The initial development of resource management policies is a core responsibility of government, and should not be contracted out to individual fishing sectors. Rather, individual sectors and interest groups should be consulted extensively through the management committee process, which must be administered by government if it is to remain accountable to all stakeholders.

Once management and research plans are developed and approved by the Minister for each fishery, however, and a mechanism for contracting out is agreed upon, it is possible that a higher level of industry management activity could be contracted out without placing government resource management responsibilities at risk.

In early 1994, negotiations were held with industry over cost recovery in an attempt to reach agreement on attributable costs and required services⁶ (see tables 1 to 3). This exercise attributed a total cost to the commercial sector of planned government programmes for 1994/95 of about \$4.9 million or 56% of recurrent expenditure on services provided. State government endorsed these attributable costs which included 18% set against the recreational sector and 14% set against the aquaculture sector. This gave a figure of 12% as being for the public good and therefore non recoverable.

⁶ Saunders, P (1994) Guidelines for the determination of fishing licence fees for 1994.

Costs attributable to the aquaculture sector are more clearly defined than those attributable to the commercial or recreational fishing sectors due to the lower proportion of "shared" services. The actual collection of funds from both the aquaculture sector (\$30,000 - < 3% of total) and the recreational sector (\$231,000 - 12% of total), however, was insignificant in 1994/95 relative to the costs incurred.

The 1994/95 cost attribution figures acknowledge that a 90% total recovery of costs (by the three major sectors) is a reasonable target. While recovery of 100% of attributable costs associated with commercial fishing was achieved in 1995/96, in the absence of any charging mechanism this can not currently be considered for the recreational fishery, and government must meet the shortfall in funds. Similarly, the commercial aquaculture industry is generally in the development stage and government must directly fund any shortfalls in revenue if full cost recovery from this sector is not progressed immediately.

3. Cost attribution within the commercial catching sector

Once a determination has been made by government of the total costs of management and the attributable costs that are applicable to each sector, a mechanism must be found to obtain the required funds from each sector. In the commercial fishery, a number of options can be considered.

The options available for cost recovery through commercial licensing include the following:-

- Attributable cost method
- % gross value of production (GVP) method
- % gross goodwill value of licences (GVL) method
- % GVL/direct cost method
- % GVP/direct cost method

Explanations for each option are discussed below.

Calculations of commercial licence fees under each of the above methods are given in Appendix 2 and should be referred to in the following text where necessary. To enable proper comparisons between methods, the calculations provided assume a figure of 56% cost recovery of funds from the commercial sector. The 1995/96 figures include the proposed expansion of \$0.5 million for additional policy positions in Primary Industries South Australia (PISA) Fisheries identified in the organisational review.

3.1 The attributable cost method

The attributable cost method is the current (1995/96) method of cost recovery. As part of the process of integrated management, this involves negotiating with each industry sector over departmental cost centres and budget spreadsheets each year to determine the range of government services required by industry.

The attributable cost method of cost recovery provides a stronger basis for ensuring efficient and accountable government services and will more readily enable the contracting out of some government services in the future. For these reasons the attributable cost method was preferred option of SAFIC when presented with a choice of 3.1 to 3.4 below.

One criticism with the attributable cost method of cost recovery is the lack of correlation between the ability of each sector to pay and the required level of government service to that sector and the resource on which it is based. If all sectors had comparable economic performance and management need, this would not be a big issue. In South Australia (and, indeed, most other States), however, this is not the case with the profitability of abalone, prawn and rock lobster operations generally much higher than scalefish operations. This is reflected in the relative prices that have been paid for goodwill attached to licences - these reflect the expectation of the purchaser in terms of potential profits.

The scalefish sector appears to be experiencing difficulties in meeting the full attributable costs of management at the 1995/96 funding levels. In addition to this, the scalefish sector requires substantial effort reduction and licence holders generally hold insufficient funds to pay for the rationalisation of the fishery under full cost recovery conditions. The government therefore decided to establish an "industry development fund" in 1995/96 to provide scope for funding the required rationalisation - a trust account that all sectors contribute towards in relation to their GVP.

3.2 The % GVP method

The Gross Value of Production (GVP) method charges each individual commercial fishing sector (northern zone and southern zone rock lobster, abalone, Gulf St Vincent, Spencer Gulf and West Coast prawn and scalefish) a share of the total costs attributed to the commercial industry according to the total value of production in that sector relative to the State commercial catch. It uses the value of production to determine *relative* fees, rather than the actual costs attributed to managing each sector.

While the % GVP method does take some account of individual sector's ability to pay, this is distorted by the differences in the cost of fishing associated with different industries. Abalone licence fees, for example, would reduce by 41% relative to the attributable cost method - this relates to the low costs of production and the relatively few licence holders in the fishery. This is considered to be an unreasonable result, given the high level of resource rent generated by individual abalone licences - only a very small proportion of which has been "lost" through the borrowing of capital to purchase licences

3.3 The % GVL method or benefit based cost recovery.

The Gross Goodwill Value of Licences (GVL) method charges each individual commercial fishing sector a share of total management costs according to each sector's share of the total goodwill value of licences in the commercial industry. The ability of each sector to pay for management is based on the economic performance of the sector - as determined by the total profit or rent obtained from the fishery. Rent is capitalised in the form of transferable licences. These licences, while not considered an unequivocal property right, attract considerable payments as described earlier. These payments indicate the expectation of the purchaser in terms of future profits.

It is proposed that the ability of a particular fishing sector to pay for the costs of management is related to the value of goodwill associated with fishing licences (GVL) that can be transferred in the fishery. This is the closest measurement readily available of the economic rent that is extracted from a fishery, and hence the viability of individual licences.

A potential difficulty with the % GVL method relates to the accurate determination of licence value in each sector. Although all licence transfers attract stamp duty and the amount paid is scrutinised carefully by the State Taxation Office, there are very few licence transfers in some fisheries (eg only three in abalone over the last five years) and

value estimates based strictly on prices paid for licences will not be up to date. The % GVL method spreads current costs according to the accrued benefits of management - for example, if funds are spent by the collective industry now on improving the economic performance of the scalefish fishery, the scalefish fishery will eventually pay a higher proportion of costs, thereby returning some of the costs to those sectors which contributed.

3.4 The direct cost/ % GVL (or %GVP) method

One problem with the % GVL method is that highly sector specific "industry management" activities which aim to maintain or enhance the viability of established profitable fisheries should be encouraged, yet at the same time should not be funded by all sectors. This can be overcome by attributing the full costs of these activities to these specific sectors and charging for resource management costs according to %GVL. Only the abalone task force costs and the rock lobster quota monitoring costs would be directly costed in terms of 1994/95 services provided by government. Costs associated with the "real time management" of the Spencer Gulf Prawn Fishery which aim to improve the profitability of fishing through optimal harvesting strategies would also fit into this category.

Recommendations

- 1. Prior determination by government of the minimum financial requirements needed to ensure that core responsibilities listed under section 20 of the *Fisheries Act 1982* are met;**
- 2. Determination of total commercial fisheries management costs through application of the approved cost attribution percentage for the commercial catching sector to the overall budget; and**
- 3. From 1 July 1996 commercial fishery licence fees to fund 100% of commercial fisheries management costs from 1995/96, with licence fees for individual fishing sectors to be based on the attributable cost method with the exception of government endorsed IMC contingency funds and the "fisheries development fund" which are to be based on the relative GVP of each sector.**

4. Level of resources needed

New policy positions required by PISA Fisheries for the 1995/96 financial year increased total fees about \$0.5 million, assuming constancy of research and compliance programme funding.

It is considered that the fishery management committees and Fisheries Research Advisory Board should commence a programme of determining research priorities and measuring the performance of fisheries research programmes in South Australia before additional funds are provided from either general revenue or compulsory licence fees. A similar exercise must be conducted on compliance programmes through the management committees. In particular, those programme areas which neither the commercial nor recreational sector perceived a direct benefit and therefore attributed a low percentage of costs during 1994/95 should be reviewed. The reasons why a low percentage of costs were ascribed need to be explored - if they are in fact reasonable, the government must apply cost benefit analyses to these programmes to decide whether they should continue or not.

One example of this would be the large research vessel which is funded predominantly by general revenue, despite the fact that the vessel conducted a large amount of research on all fisheries. The cost effectiveness of research conducted on this vessel must be investigated, and the option of private charter explored in more detail. Other research programmes which receive little direct funding include inland waters, aquatic ecology, aquaculture and both West Coast and Gulf St Vincent prawns.

If the need for new research programmes is identified, a level of costs could be attributed to those sectors which benefit, even indirectly, from the work. This applies particularly to research work conducted on aquatic ecology and aquaculture - all wild fishing sectors and aquaculture benefit from work conducted on ecological processes etc and should therefore pay for a reasonable proportion of costs. Aquaculture research costs should be completely funded by the industry unless additional resources are provided specifically by government for this purpose.

5. Resource rents

Resource rents refer to those profits obtained from a community owned natural resource such as minerals, petroleum, groundwater and fisheries that are in excess of profits that may be likely to be obtained through investment in the general economy.

The current method for determining commercial licence fees does not recover above 100% of the attributable management costs associated with commercial fishing, and therefore there is no nett payment for resource rent across the industry.

6. Transferable licences and property rights

As a result of restricted entry management, many fishers gained exclusive commercial access to a resource that eventually became transferable in all major fisheries.

Transferable fishery licences are generally considered to be a form of property right although the exact nature of this property right is difficult to define. AFMA have established Statutory Fishing Rights (SFR's) which persist for the life of a management plan. Some doubt remains,

however, in terms of the extent to which the courts would consider a SFR a property right, given that the Minister and/or Board retains the legislative power to close the fishery if necessary. If a property right exists, it is as a defined percentage share of access to the resource - if overall access to the fishery is reduced in half, an individual's percentage share is not effected but their level of access certainly is. To this extent a fishery licence will never be viewed as property in the same manner that a parcel of freehold land is.

Regardless of the extent to which a licence represents an unequivocal property right and whether or not a taxation on resource rents should apply, it is considered that the taxpayer should not be expected to subsidise research and management costs associated directly with the commercial fishery.

The above proposal recognises that different commercial catching sectors have different abilities to pay for the costs of management. This is recognised through the establishment of the industry development fund which results in all sectors paying into a trust account according to the relative production of different sectors to pay. Funds from this account are expended on improving the economic performance of the fishery as a whole. The government identified the Gulf St Vincent Prawn Fishery and the Marine Scalefish Fishery as two fisheries which required financial assistance to improve their economic performance. Over time, as each individual sector improved overall profitability levels towards a maximum, it is probable that the need for such a fund could disappear.

The Minister for Primary Industries has indicated that he will consult with the peak body SAFIC before funds are expended from either the contingency fund or the development fund.

7. Processor fees

The beneficiaries of commercial fisheries management and research include processors and exporters of fish in addition to retailers and allied industries such as boat builders and fuel/gear distributors etc. Most of these benefit indirectly from management and recovery of costs can be difficult administratively. The processing sector is perhaps the most direct beneficiary of management outside of the commercial and recreational fishing sectors.

While it is difficult to attribute either direct costs or direct benefits to the processing sector, this sector is clearly a beneficiary of management and there are increasing costs associated with monitoring quotas and landed product at processor's establishments. The number of processors in South Australia is considered to be too high by the peak association with inefficiencies and high compliance costs associated with this. Rather than attempt to limit access to processors' licences (as is the case in Western Australia), both the Office of Deregulation and the peak processor's association agreed that a more efficient, competitive approach geared around high access fees would be a more appropriate means of both achieving an optimum number of processors and reaching a reasonable level of cost recovery. As a result, Cabinet agreed to increase fees from \$525 to \$2,000 in 1994 but this was disallowed by the Legislative Council.

Since that time, the association has involved the smaller processors more and proposed a differential fee system as follows:-

base registration	\$550
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abalone endorsement	\$750
rock lobster endorsement	\$750
prawn endorsement	\$750

The base registration provides for processing of scalefish only and must be held by all processors. Endorsements on this registration attract additional fees of \$750 for each endorsement.

This fee system was approved by State Cabinet for the 1995/96 year.

8. Other methods of cost recovery

Other potential methods of cost recovery or revenue generation associated with the commercial fishery include:-

- Royalties from landed fish products (\$/kg) to pass adjustment or management costs on to the consumer. This method could be applied to the scalefish fishery on the King George whiting and snapper fisheries as an alternative to licence fees and assist with reducing effort on these species. Funds needed to reduce effort on these species would be obtained from the royalties and higher costs to the consumer would likely dampen demand on these species in favour of other less heavily exploited species; and
- recognition that stamp duty paid on licence transfers relates to increased fishing effort and capitalisation of an industry and therefore incurs management costs which must be recovered. Additionally, if government maintains that a fishery licence is not an unequivocal property right, stamp duty could in fact be recognised as a transfer fee which is needed to help fund the management of the fishery. In Western Australia it has been proposed that stamp duty associated with licence transfers should be returned to the fisheries management budget in recognition of this.

No specific recommendation is made in this paper in relation to the above matters, but these should be considered as alternatives to recovering all commercial fishery management costs through licence fees on the commercial fishers themselves.