

Queensland



Regulatory Impact Statement for SL 1999 No. 56

Fisheries Act 1994

FISHERIES (SPANNER CRAB) MANAGEMENT PLAN 1999

Title

Fisheries (Spanner Crab) Management Plan and consequential amendments to the *Fisheries Regulation 1995*.

Authorising law

The proposed legislation is made under the provisions of the *Fisheries Act 1994* (“**the Act**”), in particular Sections 32 (‘Making of management plans by fisheries agencies, etc.’) and 223 (‘Regulation making power’).

Policy objectives

Policy objectives are set out below.

- (a) To ensure spanner crab stocks are used in an ecologically sustainable way; and
- (b) To manage the fishery to give optimal, but sustainable, community benefit; and
- (c) To manage the fishery to achieve optimal, but sustainable, economic efficiency; and
- (d) To ensure a fair division of access to spanner crabs among

commercial, recreational and Aboriginal and Torres Strait Islander fishers; and

- (e) To monitor and review spanner crab catch.

Legislative intent

Policy objectives will be achieved by the proposed legislation by—

- (a) retaining current arrangements for the recreational spanner crab fishery; and
- (b) retaining current arrangements for the commercial spanner crab fishery concerning the spawning closure, minimum size and berried females; and
- (c) retaining current arrangements concerning a daily catch quota of spanner crabs for managed area B; and
- (d) retaining current arrangements concerning an annual quota for spanner crab catches within the area described as managed area A¹ of the Queensland spanner crab fishery; and
- (e) introducing Individual Transferable Quotas (ITQs) for managed area A; and
- (f) introducing fees associated with the allocation of ITQs that reflect the attributable costs of managing the fishery.

Consistency with the authorising law

The proposed legislation provides for management measures to ensure the sustainability of spanner crab resources. It was developed through a

¹ The Queensland spanner crab comprises two managed areas.

Managed Area A: all waters south of latitude 23⁰ south, and east of longitude 151⁰ 45 east.

Managed Area B: means the following tidal waters - (a) waters north of managed area A and east of longitude 142⁰ 31 49" east; (b) waters north of latitude 10⁰48 south between longitude 141⁰20 east and longitude 142⁰3149" east; (c) waters in the Gulf of Carpentaria between the 25 n mile line and the shore, south of latitude 10⁰48 south.

clearly defined process involving an ‘expertise-based’ Queensland Fisheries Management Authority, a community-and industry-based Crab Management Advisory Committee (Crab MAC) and public consultation.

Through this process, the Act’s objectives (below) will be met.

- (a) Sustainability of the resource, by applying management measures under the proposed management plan and current fisheries legislation; and
- (b) Achieving optimum community, economic and other benefits, by ensuring the interests of all stakeholders are addressed in the proposed legislation; and
- (c) Equity in access through the selective application of input and output controls provided under regulation, including, licensing powers temporal and spatial based fishing closures, apparatus controls and quota allocation/restrictions.

Consistency with other legislation

The proposed legislation is not inconsistent with the policy objectives of other legislation.

Risk identification and evaluation of management alternatives

The principles and guidelines embodied in ‘Principles and Guidelines - Regulatory Risk Identification, Analysis and Evaluation for Regulated Activities in the Queensland Public Sector (RRIAE)’, which are to be applied when carrying out Regulatory Impact Statements (RIS) in accordance with ‘RIS Guidelines’, draw heavily on the Australian New Zealand Standard on Risk Management (AS/NZS 4360), but allow for alternate risk identification, analysis and evaluation methodologies, where justified by agencies in appropriate submissions to State Cabinet.

The management alternatives for achieving the policy objectives are set out below—

- (a) No regulation; or
- (b) Self regulation; or
- (c) Current arrangements; or

(d) Introduction of an ITQ management regime.

Although no regulation may be considered as an alternative management mechanism, it raises serious difficulties. The need for government involvement in fisheries management stems primarily from the 'open access' nature of fisheries resources. Experience worldwide has shown that, where there is 'open access' to fisheries resources, individuals harvesting the resource have little incentive to conserve fishery stocks. This arises because they have no direct ownership of the resources and little incentive to protect them for the future.

As these stocks become fully utilised, competition between fishers often leads to resource depletion. Left unmanaged, the resulting increase in fishing effort is reflected in lower individual catches in all fishing sectors and overcapitalisation and reduced financial returns in the commercial fishing industry, and can place at risk the indigenous groups' satisfaction of custom and tradition.

The role of governments, as custodians of the resource, is to ensure that fisheries resources are used in an ecologically sustainable manner and as efficiently as possible. In doing so, governments are responsible for ensuring that the basis for sharing the resource among all users is clearly defined and is accepted as equitable. Ensuring that the allocation of fisheries resources and their level of utilisation are consistent with the needs of present and future generations has been shown world-wide to require effective regulation.

Self-regulation by user groups would be unlikely to resolve the fundamental conflict about competition for access to the resource. This is particularly so when there is no private ownership and no way for individuals in the various groups to 'capture the benefit of their good management, unless all parties are compelled to do the 'right' thing.

In fact, fisheries management currently involves heightened debate and, indeed, legal action about the respective legal 'rights' of commercial, recreational and indigenous users and their access to, or share of, the resource.

In this situation, self-regulation is unlikely to succeed and all governments in Australia and overseas have rejected it. However, the actual extent and form of regulatory intervention do vary from place to place.

This is not to say that user groups do not promote various self-regulation

management interventions. This is commonly the case, with various fishing groups having proposed many current management arrangements. However, an appropriate regulatory framework is required for these arrangements.

Industry believes that current arrangements threaten the long-term viability of the industry. Current arrangements have created a competitive atmosphere whereby product is caught and sold regardless of market price. This has resulted in reduced economic benefits derived from harvesting the spanner crab resource. In addition, this competitiveness has seen the annual quota of the fishery reached in nine months, resulting in long fishery closures. These closures are threatening export markets, owing to the inconsistent supply of product.

Public education programs, increased enforcement and voluntary standards or codes of practice are not considered to be adequate alternatives in ensuring the long- term ecological sustainable use of the spanner crab resource.

Introduction of an ITQ management regime

Introducing ITQs into managed area A represents a change in access arrangements. To cater for these new arrangements, the QFMA will be required to issue new authorities².

The issue of authorities can have a profound socio-economic impact on authority holders. This fact highlights the importance of authorities being issued or amended in a way that is fair and that is seen to be fair. To this end, the QFMA established an Independent Assessment Advisory Committee (IAAC) to advise it on the most appropriate basis for issuing authorities affecting allocation of the Total Allowable Commercial Catch (or

² Section 49 of the Fisheries Act 1994 ("the Act"), states that 'A regulation or management plan may prescribe the authorities that may be issued under this Act'. The Act defines an authority as 'a licence, permit, quota or other authority in force under this Act'. Subsection 50(3) of the Act allows the QFMA to issue authorities and Section 63 provides for the amendment of authorities.

Authorities are simply the vehicle by which authorisation is granted to do specific things that are permitted under a regulation or management plan (or stated in the authority). For example, an authority may be a quota, specifying the percentage of a total allowable catch the holder is allowed to harvest.

Annual Quota) as ITQ in the spanner crab fishery.

The IAAC comprised a retired Federal Court judge; an economist; and a member of the New Zealand fishing industry.

The QFMA directed the IAAC to ensure that the issuing of authorities resulted in fair access to spanner crab resources and that ‘significant and differential impacts on individual fishers are minimised, to the extent that it is feasible to do so, unless there are reasons, justifiable with respect to objectives, functions or other considerations outlined in the Act or other relevant legislation, that dictate otherwise’.

The IAAC consulted widely with stakeholders and relevant parties with an interest in the spanner crab fishery and invited written submissions on the allocation issue. When developing its recommendations for the issue of authorities in the fishery³, the IAAC considered the information supplied through the consultative process.

The IAAC also recognised that the QFMA is required, in carrying out its functions, to pursue the objectives specified in the Act.

The proposed formula to be used in allocating ITQ, which effectively represents a ‘share’ in the fishery, recognises an existing authority holders commitment and current economic position in the fishery⁴.

It is proposed that an authority holders commitment to the fishery be recognised by providing a base allocation of 500 kg. This is equal to (and recognises) the minimum criterion of entry to the managed area A of the fishery when spanner crab fishery symbols were initially issued in December 1995.

It is further proposed that an authority holders current economic position in the fishery be recognised by allocating a proportionate share of the Annual Quota; that is, an ITQ based on spanner crab catch history. This proportionate share will be based on each authority’s total spanner crab catch history between 1 January 1990 to 4 October 1996 compared to the total spanner crab catch history during that period for all authorities in

³ The IAAC recommendations are incorporated into the ITQ arrangements represented in Appendix 2.

⁴ Recognition of an authority holders present relative economic position affords a way to achieve the statutory objective of fair access to the spanner crab fishery.

managed area A.

The qualifying period of 1 January 1990 to 4 October 1996 was determined through extensive consultation with authority holders. This seven-year period is less likely to obscure relative economic positions at the present time. Catch history before 1990 was considered unreliable owing to the reported inaccuracy in catch reporting and the failure to submit logbooks before this date. Catch history after 1996 was considered inappropriate, as management arrangements introduced at that time induced a concentration of fishing effort in periods limited by management rules and, for smaller boats, by weather conditions.

Introduction of fee structure that reflects attributable fishery management costs

In managed area A, 237 primary commercial fishing boats are authorised to take spanner crabs for trade or commerce. In managed area B, a total of 485 boats are authorised to take spanner crabs. This latter figure includes 196 boats also authorised to fish in managed area A.

The annual spanner crab catch has varied between 436 t (1988) and 3647 t (1994). Most of the commercial catch of spanner crab is exported live to overseas markets. Taiwan is the major export market, accounting for about 80% of all exports. Live and frozen product has a small but growing domestic market.

The fishery's gross value of production (GVP), at the wholesale level, is estimated at \$18 million a year.

The current annual cost of managing the spanner crab fishery's commercial sector is about \$380000. Government and industry currently share these costs, with industry contributing about \$200000 a year.

An ITQ management regime in managed area A will, initially, increase management costs by about \$60 000 per annum, bringing the total cost of managing the fishery's commercial sector to about \$440 000 a year.

This additional cost of managing the fishery's commercial sector and the proposal that industry meets the attributable management costs mean an increased annual cost to industry of about \$240000.

It is proposed that industry meet the attributable costs of managing the fishery's commercial sector. These costs include direct management costs,

research and enforcement. Consequently, it is proposed that a fee structure, based on the allocation of ITQ, be introduced into *Fisheries Regulation 1995*.

Under this fee structure, the cost of an individual authority will reflect the expected return from the authority's use. This means that those authorities that allow for a greater catch will attract a proportionally higher fee than those authorities that allow for a smaller catch. That is, those individuals who are authorised to catch less pay less. The proposed fee will be based on a dollar per ITQ unit basis, where an ITQ unit confers an entitlement to take a certain weight of spanner crabs.

However, this additional cost will be offset to some degree by a number of factors including, an increase in the gross value of production (GVP) of the fishery, due to consistency in market supply and better product quality, and the financial gains associated with ITQ allocation and trading.

National competition policy

The Competition Principles Agreement, a key part of the National Competition Policy, requires as a guiding principle that legislation (including regulations) should not restrict competition unless it can be demonstrated that—

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

Fishery overview

The Queensland spanner crab fishery comprises two managed areas. A definition of these managed areas is provided in Section 3.4.

A total of 237 primary commercial fishing boats are authorised to take spanner crabs for trade or commerce in managed area A. In managed area B, a total of 485 boats are authorised to take spanner crabs. This latter figure includes 196 boats also authorised to fish in managed area A.

The annual spanner crab catch has varied between 436 t (1988) and 3647 t (1994). Less than 10% of the fishery's total catch is caught in

managed area B.

Most of the commercial catch of spanner crab is exported live to overseas markets. Taiwan is the major export market, accounting for about 80% of all exports. Live and frozen product has a small but growing domestic market.

The fishery's GVP, at a wholesale level, is estimated at \$18 million a year.

Current management arrangements

There are a range of management arrangements currently in place that regulate commercial fishing activities in the fishery. Managed area A is managed by way of a competitive Annual Quota. The Annual Quota is determined using changes in stock abundance over time, in five defined regions within managed area A of the fishery.

These regions reflect phases in the development and expansion of this fishery, and the distribution of major ports and shore-based facilities.

Changes in stock abundance are assessed using a regression analysis of CPUE (kg/ pot lift) data derived from the above regions over a specified time period (5 financial years). This data is expressed as both an individual assessment region index and a pooled index.

A set of Review Rules related to percentage changes in the above indices has been established to determine whether the Annual Quota requires adjustment.

The Annual Quota arrangement was implemented in December 1995 due to industry concerns over the future sustainability of the fishery. The competitive nature of the fishery has resulted in an unviable commercial fishery as product is caught and sold regardless of wholesale price. The oversupply of spanner crabs on domestic and export markets has also resulted in a drop in the wholesale price of the product. This has led to job losses and a reduction in the economic development and well being of the economy reliant on the harvesting of this resource.

Commercial operators are also subject to a daily quota, which is currently eight containers a day (250-300 kg), and can only fish Tuesday to Friday each week.

Over the past 4 years, the competitive nature of the fishery has resulted in intermittent closures. These closures have effected export markets, owing to the inconsistent supply of product.

Commercial operators in managed area B are also subject to a daily quota, which is currently 16 containers a day (500 kg). The area is, however, open seven days a week and is not subject to an Annual Quota.

A one month spawning closure is in place for both managed areas.

Objectives of proposed legislation

The main objective of the proposed legislation and, in particular, the introduction of an ITQ management regime is to provide greater certainty for the long-term sustainability of spanner crab resources and enhance community and economic benefits available from the harvesting of spanner crab resources.

The proposed allocation of the Annual Quota as ITQ should see an immediate reduction in the economic inefficiency of commercial fishing operations. Commercial fishers would be able to reduce their average fishing costs per tonne of crabs by catching their quota at times when crabs are available and catch rates are relatively high. Some commercial fishers may prefer to catch their quota during the “off season” in other fisheries or to plan their operations around times of the year when the market demand for crabs is stronger and prices higher. Such adoptions of individual fishing operations would improve the economic performance of the fishery.

Economic gains will also be derived through the trade in ITQs. Under the proposed legislation, fishers will have the opportunity to adjust the scale of their operations through purchases or sales of ITQ. This will enable fishers to further reduce their average fishing costs by matching their ITQ holdings to the catch levels at which their boats and crews perform most productively.

The introduction of ITQs will result in a more continuous flow of product throughout the year as forced closures are removed and operators adapt to market requirements. Greater continuity of supply may further improve market access and facilitate the development of new markets. Higher prices may result. Continuity of supply may also encourage the entry of additional processors into the industry, increasing price competition.

The objectives of the proposed Spanner Crab Fishery Management Plan are stated in Section 3.3.

Proposed legislation

Details of the proposed legislation are provided in Section 3.7.

Impact of restriction on business, community and the resource

One of the main objectives of managing a natural resource is to balance the competing needs of the community in its requirements for the supply of fish for consumption and trade and the development of the economy against the needs of the community to ensure the fishery remains sustainable and environmentally sound. The proposed legislation contains a range of management measures designed to achieve this balance without unduly restricting competition and peoples freedom.

There are two sectors in the spanner crab fishery that are subject to management intervention - the catching sector and the marketing sector.

In the catching sector, an Annual Quota for managed area A is currently in place. The level of an Annual Quota is set using annual estimates of relative stock density provided through a compulsory commercial logbook program that records catch-and-effort information. Commercial fishers are also subject to a daily quota. The daily quota is used to prolong the taking of the Annual Quota to assist in maintaining market supply. A limit on the number of licences that may be issued also exists, however, these licences are transferable. While this does involve restrictions its purpose is to protect the public interest in ensuring the fishery remains sustainable while allowing sufficient development through the use of the spanner crab resources to provide jobs and income throughout the economy. The type and number of apparatus that can be used are also restricted for the same purposes.

In the case of the marketing sector, it is a requirement for persons engaging in the purchase of spanner crabs at the wholesale level to hold a licence. There is however, no limit on the number of these licences that may be issued and they are also freely transferable. Again the purpose for the licence is to provide management information at the marketing, wholesale and processing levels to supplement and validate data available from the catching sector for use in the better management of spanner crab resources.

From the above it can be seen that it is necessary to impose restrictions in order to protect and properly manage the spanner crab fishery from over-exploitation. The public interest is served however, in ensuring a sustainable resource for future generations while allowing sufficient harvesting levels to provide necessary food supplies, ensuring a viable commercial catching sector, generating economic development and well being of the economy. Arguably, the proposed management regime is not anti-competitive in its intent, but does involve necessary restrictions in order to protect spanner crab resources. The proposed management regime is also less restrictive than the current management regime. The benefits and costs of the proposed management regime are outlined below.

An assessment of the benefits and costs of the proposed legislation is provided in Section 3.9.

Alternatives to the proposed legislation

Alternatives to the proposed legislation are discussed under Section 3.7.

Other jurisdictions

The use of ITQs to address issues of over-capacity and over-harvesting has been successful in a number of fisheries throughout the world. In Australia, a number of fisheries are managed by ITQs, including the Commonwealth managed Southern Bluefin Tuna Fishery and the South East Trawl Fishery (16 species are managed by ITQs), the South East Non-Trawl Fishery (key species to be managed by ITQs), the South Australian Southern Zone Rock Lobster Fishery and all State managed abalone fisheries.

ITQs are also proposed for the Commonwealth managed Southern Shark Fishery and Bass Strait Central Zone Scallop Fishery.

Consultation

The proposed legislation has been subject to extensive consultation with all relevant stakeholders. A summary of the consultation process that has been undertaken is set out below. The proposed legislation will also be the subject of further public consultation through the release of a draft management plan for the fishery in this Regulatory Impact Statement

(RIS).

In May 1995, QFMA established a Crab Management Advisory Committee (Crab MAC) to advise it on the appropriate management arrangements for the sustainable use of crab fisheries resources throughout Queensland. Crab MAC members include commercial and recreational fishers, a seafood marketer, and representatives of the State government.

In response to industry concerns about the future sustainability of the fishery, the QFMA in 1995 introduced an Annual Quota of 2000 tonnes to managed area A of the fishery.

In December 1996, QFMA released a Management Options Paper (MOP) for the Queensland spanner crab fishery. Calls for written submissions on the MOP were advertised through Queensland newspapers and media releases. Copies of the MOP were sent to all spanner crab fishery symbol holders and major interest groups. Copies were also made available to the public on request. Public meetings were held in Gladstone, Bundaberg, Mooloolaba and Southport to seek comment on the issues included in the MOP.

In February/March 1997, Crab MAC considered all responses to the MOP including comments obtained from public meetings. On the basis of these comments, Crab MAC released a Draft Management Plan for the fishery in April 1997.

Calls for public comment on the draft plan were advertised through Queensland newspapers and media releases. Copies of the draft plan were sent to all spanner crab fishery symbols holders and major interest groups. Copies were also made available to the public on request. Public meetings were held in Bundaberg, Caloundra and Southport to seek comments on the proposals in the draft plan.

The plan proposed the introduction of an ITQ system, however, due to industry's adverse reaction to the proposed formula to allocate the Annual Quota as ITQ, it did not proceed in its proposed form.

In November 1997, industry voted to support the introduction of an ITQ system and requested that an independent committee be established to determine the most appropriate way to allocate ITQs.

In March 1998, QFMA appointed an Independent Assessment Advisory Committee (IAAC) to engage in public consultation and advise on the most appropriate way to allocate the Annual Quota as ITQ to commercial fishers.

The IAAC held public meetings in Bundaberg, Maryborough, Mooloolaba and Southport to seek comment on the most appropriate way to allocate the Annual Quota as ITQ to commercial fishers. The IAAC also invited written submission on the issue through advertisements in Queensland newspapers and media releases.

In June 1998, the IAAC reported back to the QFMA recommending that ITQs be allocated on the basis of catch history in the fishery between 1 January 1990 to 4 October 1996. The QFMA Board accepted the report and requested that relevant recommendations be incorporated in a second draft management plan for the fishery. This RIS forms part of this second draft plan.

The majority of spanner crab fishery symbol holders support of the introduction of ITQs. However, some fishery symbol holders are still unhappy with the proposed allocation formula.

Review of arrangements

Under the provisions of the *Statutory Instruments Act 1982*, the proposed legislation will be subject to review. A management plan for the fishery is scheduled for introduction early 1999 and its provisions will be subject to review throughout its proposed life of 10 years.

Application of proposed legislation

Relevant provisions of the management plan will apply to all commercial fishers authorised to fish in the fishery.

Cost-benefit assessment

The benefits and costs of the proposed legislation are summarised below. This is done qualitatively and is followed by a quantitative assessment, as far as this is practical.

Benefits to government

- Enhanced capacity to reflect ecologically sustainable development principles in fishery management; and

- A greater range of management mechanisms to ensure the long-term objectives of the *Fisheries Act 1994*; and
- Enhanced capacity for management to be more responsive to needs of the resource; and
- Control over terms and conditions of access for fisheries; and
- Enhanced capacity for compliance.

Costs to government

- Developing and reviewing the Queensland Spanner Crab Fishery Management Plan as subordinate legislation; and
- Community education and consultation associated with developing and reviewing management; and
- Research and enforcement contributions.

Note. These costs would be incurred regardless of the proposed management arrangements, because current arrangements are only interim.

Benefits to industry

- Less government intervention in industry operations; and
- Reduction in the present cost of production through the removal of current daily quotas; and
- Greater certainty in the long-term sustainability of spanner crab resources; and
- Increased profitability in individual commercial fishing operations; and
- Enhanced ability for management arrangements to respond to industry needs; and
- Enhanced capacity for financial and strategic planning by fishery participants; and
- Greater control over the direction of industry development; and
- Reduction of licence numbers in the fishery.

Costs to industry

- Greater contribution to management costs attributable to the commercial fishing sector (see Section 3.10); and
- Upgrade of sea-to-land communication by small number of fishers.

Benefits to society

- Increased community confidence in the ability of government, management agencies and resource users to manage spanner crab resources; and
- Reduced contribution to management costs.

Costs to society

- Reduced crew employment.

Management costs

The introduction of an ITQ management regime will require an initial investment of funds before real savings are attained. Therefore, a time perspective needs to be considered as part of the analysis.

Increased management costs, including administration, enforcement and research, will be high initially, but will be offset in the long-term by future increases in industry contributions at an approved level of cost recovery.

While the allocation of ITQ will limit the historical catching capacity of some participants, it will give these participants a form of financial security that will enhance their financial and strategic planning capacity. Further benefits will lie in improved market prices through a more consistent supply and better quality of product.

Other benefits lie in greater protection for the fishery from over-exploitation and, as a result, greater confidence in the long-term sustainability of spanner crab resources.

Greater protection of the resource will also protect and enhance any traditional and cultural rights of indigenous people associated with spanner crab resources.

The proposed legislation does not represent a significant change in the fundamental methods of fisheries management applied previously. It does, however, provide for greater protection of spanner crab resources and greater security and flexibility for fishery participants.

The benefits lie with a greater certainty in the long-term sustainability of spanner crab resources through improved and more flexible management methods; participants' enhanced capacity for financial and strategic planning; and a reduction in society's contribution to costs of management.

The main objective of the proposed legislation and, in particular, the introduction of an ITQ management regime is to provide greater certainty for the long-term sustainability of spanner crab resources and enhance community and economic benefits available from the harvesting of spanner crab resources.

The introduction of an ITQ management regime will, initially, increase total costs for industry. Generally, it will not, however, significantly increase total management costs as a percentage of the fishery's GVP. Higher industry contributions incurred as a result of ITQs will be offset by financial gains associated with ITQ allocation and transfer.

Of course, if the alternative of 'no regulation or self-regulation' is considered, the costs of management would fall from \$380 000 to perhaps \$100 000, leaving only costs of research, education, communication and some management processes. However, the risk to the fishery's future sustainability would increase and threaten the value of all its sectors.

This would be an unacceptable risk for the government as custodians of the fishery for current and future generations. Such an approach has not received any support from government, industry or the community.

Fundamental legislative principles

The proposed legislation is consistent with Fundamental Legislative Principles.

The proposed legislation does not extinguish the right for Aborigines and Torres Strait Islanders to take, use or keep spanner crab resources, in accordance with Aboriginal tradition or under Island custom.

ENDNOTES

1. Laid before the Legislative Assembly on . . .
2. The administering agency is the Department of Primary Industries, Forestry and the Fishery.