

Queensland



Regulatory Impact Statement for SL 2003 No. 212

Fisheries Act 1994

FISHERIES (CORAL REEF FIN FISH) MANAGEMENT PLAN 2003

1 INTRODUCTION

1. As provided under the *Queensland Statutory Instruments Act 1992* (SIA), a RIS must be prepared in respect of subordinate legislation if it imposes an appreciable cost on the community. The measures proposed in the Draft *Fisheries (Coral Reef Fin Fish) Management Plan 2002* (The Draft Plan) are considered likely to impose such a cost and this RIS has been prepared to gauge public opinion about the proposals via their responses.

2. The RIS requirements are set out in Section 44 of the SIA. In accordance with section 44, a RIS must include the following information about the proposed subordinate legislation, in clear and precise language:

- a) the provision of the Act or subordinate legislation under which the proposed legislation will be made (the “**authorising law**”);
- b) a brief statement of the policy objectives of the proposed legislation and the reasons for them;
- c) a brief statement of the way the policy objectives will be achieved by the proposed legislation and why this way of achieving them is reasonable and appropriate;
- d) a brief explanation of how the proposed legislation is consistent with the policy objectives of the authorising law;
- e) if the proposed legislation is inconsistent with the policy objectives of other legislation:

- i. a brief explanation of the relationship with the other legislation; and
 - ii. a brief statement of the reasons for the inconsistency;
- f) if appropriate, a brief statement of any reasonable alternative way of achieving the policy objectives (including the option of not making subordinate legislation) and why the alternative was rejected;
- g) a brief assessment of the benefits and costs of implementing the proposed legislation that,
- i. if applicable and appropriate, quantifies the benefits and costs; and
 - ii. includes a comparison of the benefits and costs with the benefits and costs of any reasonable alternative way of achieving the policy objectives stated under paragraph (f);
- h) a brief assessment of the consistency of the proposed legislation with fundamental legislative principles, and, if it is inconsistent with fundamental legislative principles, the reasons for this inconsistency.

3. Under National Competition Policy (NCP), Queensland and all other Australian jurisdictions are required to adopt legislation that does not restrict competition unless it can be demonstrated by PBT 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.

4. In accordance with the Queensland Government's Public Benefits Test Guidelines, the review should also take account of the Government's Priority Outcomes for Queensland, as follows:

- More Jobs for Queensland - Skills and Innovation - The Smart State;
- Safer and More Supportive Communities;
- Community Engagement and a Better Quality of Life;
- Valuing the Environment;
- Building Queensland's Regions.

5. The Draft *Fisheries (Coral Reef Fin Fish) Management Plan 2003*, if adopted would become subordinate legislation to the *Fisheries Act 1994* (the Act). The Draft Plan has been assessed for restrictive provisions, in line with National Competition Policy (NCP) guidelines. A number of provisions have been identified which impose restrictions on competition. These restrictions are addressed in the following document with a view to obtaining public comment on their treatment through the proposed legislation. On receipt of responses, a final PBT report will be prepared which satisfies the NCP guidelines for legislative reviews.

2 BACKGROUND

6. The Coral Reef Fin Fish Fishery (the Fishery) comprises demersal (bottom dwelling) species of cods, tropical snappers, wrasses and sweetlips, amongst others, including principal species such as coral trout, red emperor, and red throat emperor. Although they occur throughout Queensland waters, these species are most often found within waters of the Great Barrier Reef Marine Park (GBRMP). The species are sought by commercial, recreational and Indigenous fishers and are highly regarded for their eating quality, recreational experience and cultural importance. They also form an important part of the reef visitors' experiences, featuring in underwater viewing, diving and photography, to name but a few examples. A complete list of the species covered by the Draft Plan is enclosed with this document.

7. An important consideration in developing a management plan for this Fishery is that it occurs primarily within the GBRMP, which was listed by the World Heritage Committee on the United Nations (UN) Educational Scientific and Cultural Organisation World Heritage List in 1981. The area and living resources of the GBRMP have been listed to ensure their outstanding universal value (natural and cultural properties) and must be protected against the threat of damage in a rapidly developing world. It also is important to note that Australia is a co-signatory to the International Convention on Ecological Sustainable Development (ESD) and to the UN Code of Conduct on Responsible Fishing Practices.

8. These considerations emphasise our national and international obligations to protect the natural systems and biodiversity in which the Fishery operates. Management of this Fishery is implemented primarily through Queensland fisheries legislation.

9. For sustainable use of fish stocks to be demonstrated, it must be shown that the Fishery does not lead to unacceptable declines in either target

stocks or those stocks that are taken as by-catch or discarded, and that the Fishery does not impact negatively on the ecosystem in which it operates. The problems now apparent in this Fishery (discussed below) impact on fish stocks only, and there is no evidence of any significant negative environmental or ecological consequences arising from the Fishery. As a result, the combination of measures now in place and the proposals outlined in this RIS/PBT and Draft Plan address directly the concerns for fish stocks and the protection of community benefit.

2.1 Status of stocks in the fishery

10. Over the past several years there has been growing concern expressed by all sectors regarding the status of the Fishery. Most managers, stakeholders and researchers have agreed that this Fishery was fully exploited at 1996 effort levels. A warning against further investment and increasing effort in the Fishery was issued on 19 May 1997.

11. Fish targeted in the Fishery come from the following families:

- Cods, groupers and trout (Family Serranidae)
- Tropical snappers and sea perches (Family Lutjanidae)
- Emperors (Family Lethrinidae)
- Wrasses (Family Labridae)
- Parrot fish (Family Scaridae)
- Surgeon fish (Family Acanthuridae)
- Sweetlips (Family Haemulidae)
- Fusiliers and banana fish (Family Caesionidae)

Some of these species are relatively robust to fishing pressure, such as the common coral trout and some parrot fish, due to their life cycle and behavioural characteristics. The majority, such as cods and tropical snappers, however, are particularly vulnerable to anything other than low levels of fishing pressure due to their biological characteristics of early growth to maximum size, long life, relatively large size at sexual maturity, sex changing reproductive strategy, and low natural mortality. Further, most species taken in the Fishery coming from deeper waters are likely to have poor post-release survival rates. Consequently, a cautious approach to harvesting these fish is called for to ensure sustainability.

12. Change in catch per unit of fishing effort (CPUE), for example, kilograms of fish caught per boat day, is commonly used in fisheries

management as an indicator of the status of the fishery and the targeted stocks. Considerable data have been assembled about commercial catches (figure 1a and b) and CPUE (figure 2) of the commercial sector of the Fishery, enabling some overall assessment to be provided. (Data are available for the initial years of the logbook program, namely 1988 and 1989, but are not regarded as complete and thus not reliable for assessment purposes).

13. Although CPUE data for the commercial sector of the Fishery as a whole shows no consistently positive or negative trend in catch rates, those data may disguise trends of declining catch rates of principal target fish species, coral trout and red throat emperor, that comprise approximately 65% of the total catch.

14. With respect to coral trout, the independent expert panel reporting on this Fishery to the Great Barrier Reef Marine Park Authority (GBRMPA) in August 2000 observed that “declines in gross coral trout CPUE demonstrate a pronounced and disturbing declining trend during the 1990s with substantial drops in CPUE for some regions”.

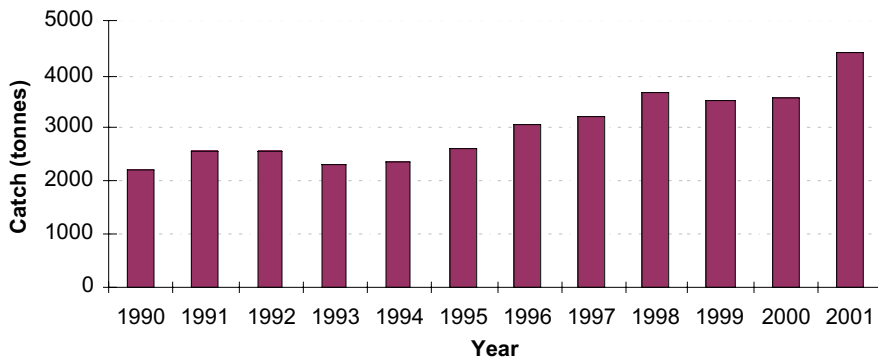
15. The panel, recognising the need for caution in interpreting these trends, indicated that “nevertheless, the CPUE data are indicative of a substantial decline in coral trout abundance”. The panel further observed of CPUE data that “due to an ability to maintain catch rates by moving from reef to reef, CPUE will not reliably demonstrate a decline in abundance until that decline becomes so widespread and substantial as to depress catch rates on a large number of reefs. In addition gross CPUE data alone will not identify serial depletion of reefs”.

16. Further, the Department of Primary Industries “Queensland Fisheries Resources—current condition and recent trends 1988 to 2000” (published 2002) observed of red throat emperor that there is some evidence of a decline both in the total catch and CPUE since 1995. In addition some stocks, for example off Townsville, appear to have declined substantially over the past 2–3 decades.

17. Another indicator of the status of a harvested fish stock is the average size of fish in the population and long-term trends in the number of fish present. Researchers working for the Department of Primary Industries studying trends in common coral trout populations on the Great Barrier Reef (GBR) reported in 2000 that there had been a significant reduction in both average length and the percentage of larger fish in populations between the early 1980s and the late 1990s.

18. The researchers concluded that the results of the study for at least part of the GBR, suggested growth overfishing of common coral trout (that is when fish are captured at too small a size to maximise the total weight that can be optimally taken from a fishery). They further concluded that the strong downward trends in densities of common coral trout in recent years, combined with present low densities of fish and high levels of fishing effort, are a cause for concern.

a) Commercial catch of coral reef fish



b) Commercial days fished

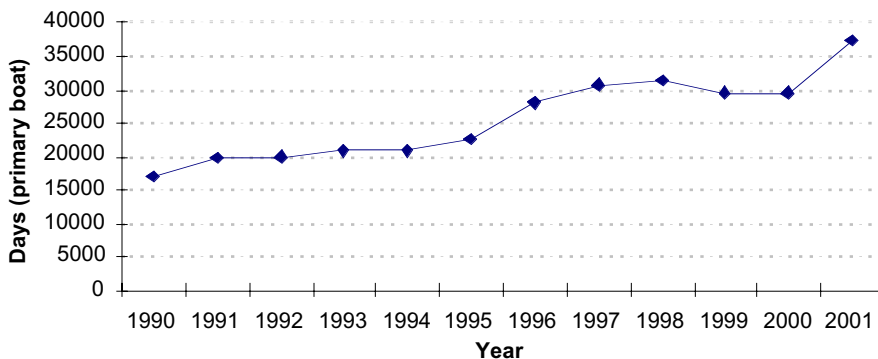


Figure 1: Annual commercial a) catch and b) effort (days fished) for coral reef fish from Queensland waters. Approximately ninety five percent (95%) of the catch and effort is from the Great Barrier Reef Marine Park region.

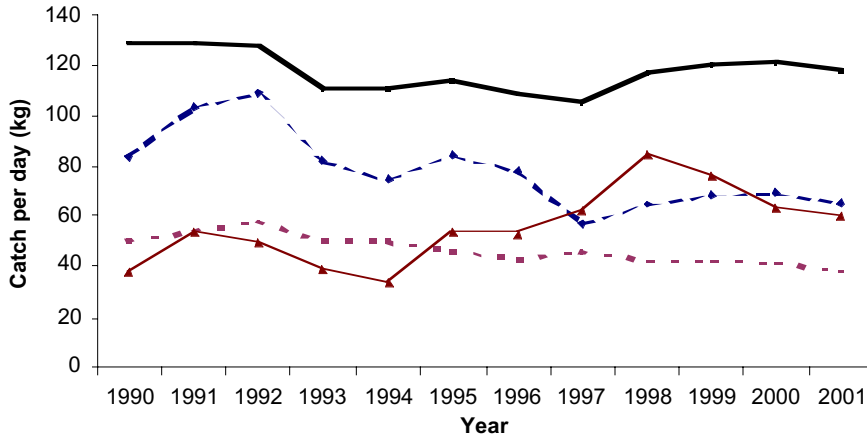


Figure 2: Annual commercial catch rates (kilograms per day) of the key coral reef fishes.

19. A third measure of the impacts of fishing on fish stocks can be gained by comparing harvested populations with populations in comparable locations where harvest is reduced or absent (for example, on the GBR comparisons between reefs in an area closed to fishing, commonly known as green zones, and reefs in an area open to fishing). The Effects of Line Fishing experiment conducted by the Cooperative Research Centre for the GBR World Heritage Area has established that fished populations of common coral trout are on average several centimetres smaller and approximately 20-25% lighter in weight than those fish found in green zones. Further, the average size for common coral trout on fished reefs was found to be relatively close to the minimum legal size. One reason for this may be a shift away from commercial targeting of large fish to smaller specimens in response to market demands for live fish and for gilled and gutted plate-sized fish. An alternative explanation is that the stock has been fished “hard” enough that fish are being harvested as soon as they reach the legal size.

20. In summary, the independent expert panel reporting to the GBRMPA said “given the disturbing trends for the best understood and apparently

quite resilient target species, there is a clear need to adopt a precautionary approach for this Fishery”.

2.2 Fishing effort – the greatest potential threat to the Fishery

21. It is clear there is concern that catch rates of the principal target species are declining but it is also apparent that the value of the Fishery is increasing. This demonstrates that the management strategy currently being pursued depends entirely on a continuing increase in market price to maintain or increase value per unit of effort and community return, which is clearly a high-risk strategy. The outcomes of imprudent management will be loss of commercial viability, reduced recreational satisfaction and ecological imbalance.

22. Fishing effort, both real and latent, in all sectors of this Fishery is the greatest threat to long-term sustainability of coral reef fin fish. The recent take-up of latent effort in the commercial Fishery has been of most concern and has occurred in two distinct periods, the first commencing in 1996 and a more recent jump in 2001. Commercial catch and effort has increased by approximately 45 percent and 35 percent respectively in these two periods. This increase in both the days fished and catches during the late 1990's and early 2000s is a result of market forces and a growing demand for all tropical coral reef fin fish species.

23. Comparable information on the catch and effort of recreational fishers is not available. However, it is clear from the information available that the recreational fishing sector does catch a significant amount of coral reef fin fish species (for example, they land in the order of 2000 tonnes of coral fish of which approximately 300 tonnes is coral trout, representing 15% of the total catch of coral trout). It is also clear that current possession limits for this sector are rarely achieved by recreational anglers. The potential exists for a greatly expanded recreational catch of coral reef fin fish species. However, surveys have shown that landing by the recreational fishing sector has not increased over the last five years. Nonetheless the more accessible locations that recreational fishers are likely to use have the highest risk of depletion as a result due to fishing pressure and environmental (run-off) effects.

24. It is important to note that any information regarding the status of stocks in this Fishery has been derived from research conducted before 2001. In particular, the impact on the stocks due to the significant (25%) increase in commercial catches in 2001 has not been evaluated. It is anticipated that this increased pressure will add to the current downward

trend in stock numbers, especially those parts of the stock that are above minimum legal size limits and available to the Fishery.

25. Coral reef fin fish are particularly vulnerable to fishing effort when they aggregate to spawn, increasing the emphasis on concerns about recent growth in fishing effort and its potential consequences.

26. It is of paramount importance that management arrangements be introduced to halt and reduce the expanding commercial catch and fishing effort in this Fishery and to ensure that the recreational catch does not expand above current levels. The purpose of the proposed initiatives is to ensure stocks are sustained for present and future generations, provide for commercial viability and recreational satisfaction, and to ensure that community benefits are protected.

3 CONSULTATION

27. Consultation commenced with the release of a discussion paper on the Fishery in 1996 and subsequent release of a previous draft management plan and RIS in 1999. The 1999 draft management plan was challenged primarily by recreational fishing interests leading to a need for a review of the proposed arrangements.

28. The Queensland Fisheries Service (QFS) has been receiving advice from its principal advisory committee for the Fishery, the Reef Fish Management Advisory Committee (ReefMAC). ReefMAC has membership from all stakeholder groups, and has been engaged in refining the previous 1999 draft management plan. These refinements have formed much of the basis of the proposals in this RIS/PBT and Draft Plan.

29. This RIS/PBT is released, together with the Draft Plan for public comment and response, over a period of approximately two months. The process has also engaged relevant government agencies at the State and Commonwealth levels.

4 POLICY OBJECTIVES

30. The policy objectives are to:

- (i) Ensure coral reef fin fish stocks are managed in an ecologically sustainable way to maintain or improve stock levels;
- (ii) Manage the Coral Reef Fin Fish Fishery to give optimal, but sustainable, community benefit;

- (iii) Manage commercial fishing and commercial fishing tours of the Fishery in a way that achieves optimal, but sustainable, economic efficiency;
- (iv) Ensure fair access to coral reef fin fish, on a sustainable basis amongst commercial, recreational, Aboriginal and Torres Strait Islander fishers, commercial fishing tour operators and other users of the Fishery;
- (v) Improve the availability and accuracy of information about the Fishery.

5 LEGISLATIVE INTENT

31. The Coral Reef Fin Fish Fishery comprises a large number of demersal reef fish species. Over the past few years information about the performance of this Fishery has led to concern being expressed by the QFS, scientists and stakeholder groups about the status of this Fishery.

32. As a result of these concerns a number of new arrangements are proposed to ensure stocks are sustained for present and future generations. These arrangements are generally characterised as input controls where emphasis is placed on the amount of effort input into the Fishery rather than outputs, in effect, catches.

33. The use of input controls in this Fishery has previously been discussed. The Discussion Paper on the Queensland Tropical Coral Reef Fish Species published by the Queensland Government in June 1996 observed that output controls have not been used for managing tropical coral reef fish in Queensland and elsewhere. Natural fishery characteristics work against the effectiveness of an output-oriented approach for those stocks.

34. More recently the Independent Expert Panel advising GBRMPA on the draft management plan for this Fishery observed

“Most discussion on the management options for the reef line Fishery has focused on input controls, augmented by a range of supplementary regulations. This is not because management by output controls does not offer significant benefits for the reef line Fishery. The Fishery would certainly benefit from a catch quota system that allowed fishers to operate in a more economically efficient manner and maximise the net returns from the resource. The potential for the selection of target species and release of non-target species in this Fishery also offers some

scope for the use of species specific catch quotas. Such quotas can be particularly effective in ensuring that species of differing degrees of sensitivity to exploitation can be subjected to levels of fishing mortality that are appropriate to the biology of each species.

The Panel, however, agreed that given the circumstances of the Fishery, output controls would not be appropriate at this time. The factors that would make the application of output controls problematic include:

- a lack of meaningful estimates of abundance and appropriate harvest levels and the likelihood that such estimates are unlikely to be available in the near future for more than a few species, if any;
- difficulties associated with the setting of total allowable catches due to unpredictable recruitment variation in at least some species;
- an inability to effectively address issues of serial depletion of areas under a quota management system unless a complex system of Total Allowable Catches (TACs) subdivided by zones was adopted; and
- the costs and practical implications of enforcing an output control regime for the reef line Fishery given the number of participants, ease of access to the resource, abundance of landing points and the existence of diverse and accessible markets.”

Given these circumstances, the Panel recommended that, “Input controls be used as a basis for managing the coral reef fin fish fishery”.

Such a system has the principal advantage of not requiring an explicit a priori determination of an acceptable harvest level and specifically benefits from direct feedback from the resource. That is, when abundance (or more precisely availability) is high a particular effort unit will yield a higher return, conversely when availability is low (e.g. after poor recruitment) there will be a reduction in catches. This degree of automatic correction is assisted by potential effects on fisher motives. When catch rates are low a fisher will move on to higher catch rate areas to maximise returns from available effort units and, hence, the extent of localised depletions is reduced. An output control system may, however, encourage local depletion if it is more economically efficient to fish at closer reefs, even at lower catch rates.”

35. The proposals will result in a reduction in effort from all fishing sectors and have been developed after considering the views expressed by

all stakeholders to date. The policy objectives of the Draft Plan (above) are to be achieved through the introduction of a combination of proposed new initiatives. Of those initiatives, the following have been assessed as containing potentially restrictive provisions and require consideration under NCP principles:

36. Preventing the taking of juvenile fish and protecting large breeding specimens from capture through minimum and maximum size limits;

- Restricting the number of commercial licences and the size of boats used in the Fishery;
- Restricting certain commercial licences to the recreational possession limit for reef species where those licences have not been used or have had limited use;
- Restricting the number of units of fishing effort applied by the commercial sector based on past history of coral reef Fishery activities of each licence;
- Restricting the numbers of fish that can be taken by the recreational and charter fishing sectors by specifying the number of fish that may be retained;
- Restricting the form in which fish may be kept while at sea (that is, fish must be kept whole and not filleted or satisfy a minimum fillet size);
- Restricting the types of fishing gear that can be used; and
- Undertaking performance evaluation and review of the strategies adopted.

5.1 Size limits

37. Concerns have been expressed by scientists, managers and fishing interests with respect to current size limits. As a result of new information they believe some of the current size limits are inappropriate and that the absence of size limits on some species may result in their undesirable depletion.

38. It is proposed that where adequate scientific information is available on the biology of a species the minimum legal length will be set at a point to ensure that at least 50% of individuals of that species reach reproductive maturity and are allowed to reproduce before being caught and retained. Maximum size limits are proposed to be set to protect large valuable individuals where it is known that larger individuals contribute

proportionately more to the reproductive potential of the stock, are highly vulnerable to capture or are very long-lived.

39. Minimum and maximum fish size limits apply to all users of coral reef fish including commercial, recreational and charter boat fishers.

40. Recent information on the biology of many cod and groper species inhabiting coral reef systems suggests that size of fish is not an indication of age or maturity and that many of these smaller cods (such as bommie cods) could be very old even though they are only small fish. As a result, it is proposed that a size limit be introduced for all cods to protect this extremely vulnerable group of species. This proposal will effectively preclude the capture of a large proportion of this highly susceptible group of species.

41. A precautionary approach has been taken in setting a minimum size limit where little or no information exists on the biology of a species. However, as a result of concerns expressed by aquarium fish collectors a number of species of significant importance to the aquarium fish industry are not proposed to be subject to size limits where no information is available and over-exploitation is thought to be unlikely.

42. A list of species and their associated size limits is shown in Appendix A of the RIS/PBT.

5.2 Limiting Commercial Licences and restricting commercial boat size

43. It is proposed in the Draft Plan to remove any ability for the issue of new commercial fishing boat licences to engage in line fisheries. In addition, it is proposed to introduce specific boat replacement arrangements for primary fishing boats. The proposal will restrict the upgrade of boat sizes in the Fishery, thus minimising impacts resulting from the introduction of larger primary boats to the Fishery. This restriction on upgrade will be discontinued after 12 months of operation of the Plan, enabling the direct controls on fishing effort to take effect. It is also proposed to maintain the current restrictions on the maximum size and numbers of tender boats that work from existing licensed primary fishing boats.

44. These restrictions are required to contain growth of fishing effort, which in turn has a direct influence on the sustainability of the Fishery. The introduction of new licences or larger primary boats in this Fishery would, in the absence of an effort control scheme, constitute a considerable increase in effective effort. That increase results from increased boat

carrying capacity and the ability of a larger boat to stay at sea longer in more adverse conditions.

45. It is proposed to retain the current legislative restrictions on the transport of live reef fish by carrier boats south of Clump Point (near Tully) and extend those restrictions to preclude the carrying of live coral reef fish throughout the Fishery. This proposal will remove the potential for localised depletion of reefs resulting from concentrations of fishing effort around live fish carrier boats, facilitate detection of offenders taking undersized fish and avoid any environmental degradation of locations resulting from any long-term positioning of fishing infrastructure on or near reefs. It also ensures that commercial fishing effort is not increased by the simple introduction of carrier boats to replace and extend the available fishing time of licensed primary fishing boats.

5.3 Restructuring of the commercial line fishing fleet

Introduction

46. There are approximately 1700 commercial fishing licences attached to boats authorised to take coral reef fin fish in Queensland waters. Of these, approximately 300-400 boats operated prior to 1997, and continue to operate, in the Fishery at a commercial level, obtaining their principal or significant source of income from the Fishery. The remaining 1300-1400 licensed operators have not worked or have had very limited involvement in the Fishery prior to 1997. Of this latter group there are a number of licences which, in recent years, have been activated despite an "Investment Warning" released on 19 May 1997 advising that any future catches and investment in the Reef Line Fishery from that date may not be recognised in the management arrangements which would apply after the review of the Fishery. New participants were advised to take notice of the warning and existing participants were warned that any expansion of their operations in the Fishery might not be recognised for future access allocation purposes. The "Warning" was repeated on 3 September 1998 and has been included on a recent list of current Investment Warnings issued to potential licence holders.

47. Licensed operators in the commercial Reef Line Fishery in Queensland took approximately 4400 tonnes of coral reef fin fish annually, compared with 2000 tonnes in 1990 and 2600 tonnes in 1995. This Fishery is valued in excess of \$50 million annually to the fishermen and much more at the final point of consumption. Commercial catch data shows increased catches and effort in the Fishery of the order of 25 percent in the year 2001 and 45 percent since release of the "Investment Warning" in 1997. This

significant increase has been driven by high prices offered for live reef fish product on the export market, particularly in Hong Kong. Recent expansion and further potential expansion in effort in this Fishery is of considerable concern and requires immediate action to ensure the sustainability of the Fishery and, in particular, key stocks such as coral trout.

48. The Draft Plan proposes that a fishery adjustment provision be introduced to the commercial sector of the Fishery to deal with the expansion of catch and fishing effort that has emerged since the Investment Warning. The proposal deals firstly with controls on operations that largely commenced after the investment warning (latent effort/excess fishing capacity). The proposal secondly involves adjustment of commercial levels of fishing effort in the fishery back to the levels of fishing pressure that existed prior to the warning in 1997 (an effort management scheme).

Latent effort/excess fishing capacity

49. It is proposed that an in-possession limit (a combination of limits on the number of fish that may be taken and retained) will apply as a condition of **ALL** East Coast line fishery licences (excluding the Gulf of Carpentaria). Commercial operators will only be exempt from this possession limit if it is determined that their past catch history is above a prescribed catch level (as defined in section titled “Issuing class (a) fishery symbols” of the Draft Plan).

50. This arrangement is designed to reduce the potential for further increase in effort by the activation of unused line fishery licences whilst at the same time allowing those licence holders to continue to take fish for sale but at non-commercial fishing levels of access. Further, it is proposed that restricted commercial fishers (those on possession limits) not be able to land live fish at any time. The proposals will effectively remove the majority of latent effort in the Fishery by restricting most commercial operators (restricted commercial fishers) who effectively entered the Fishery after the “Investment Warning” of 19 May 1997 or who historically have not landed more than negligible catches (less than 500 kg in specified years) of coral reef fish under their licences.

51. The matter of possession limits on commercial fishers is further discussed in the section later in this document entitled “Fundamental Legislative Principles”.

Effort management scheme

52. Commercial landings of, and fishing effort on, coral reef fish have increased by 45 percent and 35 percent respectively since 1996, including

an increase of 25 percent in 2001. These increases have occurred despite the release of a warning by Government on 19 May 1997 that any expansion of commercial operations or increased investment in the reef line Fishery may not be recognised in future Fishery access arrangements. Almost all of the increases since the investment and effort expansion warning have taken place in the live fish and deepwater sectors of the Fishery.

53. The Draft Plan proposes that this situation be contained and reduced to a level such that long-term commercial catch and effort levels are reduced and capped at 1996 levels. This is achieved by setting limits on line units at a level equivalent to the total number of fishing platform (boat) line units calculated for the year 1996, and then allocating those units to holders of licences for primary fishing boats that are exempted from possession limits (as defined in the section titled “Issuing class (a) fishery symbols” of the Draft Plan). Such allocation is achieved based on an allocation table set out in the enclosed Draft Plan which provides for qualifying licence holders to be granted line units in proportion to their re-evaluated catch. Re-evaluated catch is the outcome of a formula that adjusts the catch of those smaller producers who have maintained lower catch rates than the average of the fleet for similar sized operations. This ensures that smaller producers have their catch adjusted up to minimise being disadvantaged by their past conservative fishing practices.

54. Line units define the period of time that a particular primary boat licence and its associated tender boat licence/s may be used in a specified fishing year, with the initial unit value being set at one unit being equal to one fishing platform day’s use. Where multiple platforms are used by a licence holder on any day, the number of effort units used is equal to the number of platforms (primary and tender boats) used on that day, or part thereof, for fishing for coral reef fish.

55. Persons engaging in the Coral Reef Fin Fish Fishery are required to notify their intention to engage in the Fishery prior to commencing a fishing trip. A similar notification is required on completion of the trip. “Fishing” under the Act includes, amongst other things, “carrying away” and “bringing ashore” the catch. Consequently, an operator is regarded as fishing for coral reef fish when coral reef fish species are held on board the boat. Once landed in port, fishing ceases and the time for determining when effort units are to be decremented from the total is established (that is, the number of units used in undertaking the fishing trip are deducted from the units allocated to the licence for that 12-month period).

56. The notification process outlined above has been chosen to minimise costs to fishers normally associated with more expensive monitoring options such as satellite based tracking (VMS). To provide for steaming time and breakdowns normally associated with fishing activity, a proportion of the line effort units has been incorporated in the number of units in the fishing effort cap. That provision is approximately 7 percent of the number of days in the proposed cap.

57. The 7 percent is derived from logbook data and represents the difference between the maximum number of days had all tenders licensed for use in those fishing operations been used, and the number of days that tender boats were reported as used. That difference has been continued in the proposed cap to cater for potential loss of fishing time whilst at sea. Such an assumption is considered adequate to cover both steaming time and breakdowns that normally occur. No other cost effective notification process is available to fishers at sea to enable them to account for steaming time and breakdowns whilst maintaining the integrity of the effort management system.

58. The Draft Plan proposes to prohibit the transshipping of coral reef fish at sea as a further necessary limitation for the integrity of the effort management system.

59. The effort management scheme is designed to contain the catch and fishing effort of commercial fishers at pre-1997 levels. To facilitate that outcome and to gain important information about the Fishery, the Draft Plan proposes an upgrading of the existing compulsory logbook scheme for all commercial fishers whether fishing under bag limits or not. The principal changes are a requirement that logbook records of catches and fishing effort be maintained daily and progressively on the boat, and that those records be lodged within 14 days of the end of each month. An offence has been provided to account for cases where licence holders fail to do so or failure to cause the person in charge of the fishing operation to do so.

60. The Draft Plan also proposes an independent monitoring scheme to complement these reporting measures by way of returns from licensed buyers of purchases of coral reef fish. The scheme requires a licensed fisher landing coral reef fish to provide a landing docket to a licensed fish buyer with that docket accompanying the product until it is further distributed by the licensed buyer. It is proposed that the licensed buyer of coral reef fish be required to keep a daily return of purchases of coral reef fish species and

to lodge such returns weekly accompanied by the landing dockets provided by the licensed fisher for that product.

61. Export data and publicly available data about imports of live fish and their origins kept by other countries are available as a secondary and independent validation process for coral reef fish product exported, but do not adequately satisfy reasonable standards of verification in the long-term. There is no independent verification of commercial landings of coral reef fish distributed to the domestic market under existing arrangements. The proposed approach is similar to the buyer-reporting scheme used for the spanner crab fishery.

62. Further, provision has been made in the Draft Plan to ensure that the effort management scheme achieves its goal of returning commercial catch levels to those of 1996. A review event is triggered in the evaluation and review section of the Draft Plan should the total commercial catch of the fishery exceed 3061 tonnes (whole weight), the 1996 level, in any year. Such review would have regard to the objectives of the Act and in particular to provisions relating to sustainable use of stocks and fairness of access for each sector.

63. Licensed aquarium fish collectors will not be subject to the provisions to restructure the commercial fishery sector and for the effort management scheme contained in the Draft Plan.

5.4 Possession limits

64. Most recreational fishers do not reach current possession limits (bag limits) and such limits have little effect on the total recreational harvest under present fishing strategies. However, this gap between real catches and potential catches reflects the latency that exists in the recreational and charter fishing sectors. As outlined previously, the Draft Plan endeavours to reduce the latent fishing effort in all sectors through possession limits and the capping of commercial effort.

65. Possession limits are proposed to apply to recreational fishers, restricted commercial fishers and recreational fishers whilst on charter boats. Possession limits now in place are to be strengthened to ensure that fishing effort is contained to ease pressure on fish stocks. It is proposed that both the limit on the total number of fish that can be in possession and individual limits on the possession of certain species be reduced.

66. Where the information is available, possession limits have been proposed to be set at a point where 90 percent of angler trips have caught less than, or equal to, the possession limits specified (for example, a limit

of seven coral trout) without participants on those trips having to forego catches. A precautionary limit of five fish is proposed where there are not enough data available.

67. The Draft Plan also proposes a reduction of the total fish possession limit from 30 to 20 coral reef fin fish. A list of the proposed possession limits for individual species are shown in Appendix A of the RIS/PBT. It is important to note that, regardless of the proposed possession limits for individual species, no more than the proposed possession limit of 20 fish in total can be kept.

68. It is proposed that recreational fishers on charter boats on extended trips of greater than 48 hours duration have double the permitted possession limits, both in terms of individual species limits and total possession limits.

69. Special provision has been proposed for species regarded as being rare in nature and iconic to the Fishery. The Draft Management Plan provides for no-take of potato cod, Maori wrasse and barramundi cod applying to all sectors.

5.5 Format of landed fish

70. It is often difficult to identify individual fish species and even more difficult to determine the total length of a fish once it has been filleted. This causes considerable difficulties for enforcement of minimum size limits and where an individual species possession limit has been reached. Filleting potentially compromises both size and possession limits, which are considered two of the most important management tools this Draft Plan proposes.

71. It is proposed that all fishers, other than commercial fishers not restricted by possession limits and fishers on extended commercial fishing tours, retain fish in a whole form or in accordance with a prescribed fillet size of no less than 40cm (one size for all coral reef fish). The general fillet size has been provided to enable fishers to fillet very large fish in order to fit them in their cooler. It is considered that any coral reef fish with a fillet of 40cm or greater would be above the minimum size limit thus maintaining the integrity of the measure. In cases where fish are filleted the entire skin, unscaled, must be left on the fillet for identification to improve the integrity of the possession limit. The Draft Plan provides that two fillets equal one fish.

72. To maintain the integrity of the proposed maximum size limit of 80cm on blue spot trout (the juvenile of this species is commonly called a

footballer trout as a result of its unique markings) it will be required that it be kept whole or in gilled and gutted form only, that is, it cannot be filleted in any circumstances at sea. The reasoning is that this species is caught primarily in the outer regions of the GBR and it is reasonable to assume that a boat travelling to these areas would be larger than average. In most cases, coolers on board these boats would be capable of storing a blue spot trout of 80cm or less in total length.

73. It is important to maintain the integrity of the size limit for blue spot trout given its biology where the change from female to male does not occur until 80cm. There are concerns that if the integrity of the maximum size limit is not maintained the sex ratio of this species could be adversely changed as a result of fishing pressure.

74. In relation to the maximum size limits on other species (e.g. cods) it is likely that most fish above the maximum size limit would be returned to the water unharmed. It is considered by most fishers that cods of size greater than the maximum size limits will be unpalatable and will carry a high risk of ciguatera poisoning. Consequently, there is little incentive for a person to take and fillet a fish over the maximum size limit for these species, thus high compliance with this proposed measure is likely.

75. The charter boat sector has raised concerns about the prospect of losing the ability to fillet fish on extended trips as many of their clients travel large distances to participate in these types of fishing experiences. There is a need for clients to be able to transport their catches on aircraft or other modes of transportation when returning home. The requirement to keep fish whole in this situation would impose considerable transportation burdens on this group of people. In turn, this may have an effect on the numbers of clients attracted to the extended charter experience thus potentially having adverse affects on the viability of this group of charter operators.

76. For this reason, it is proposed that fishers on charter boat fishing trips of duration greater than 48 hours be able to fillet all their catch and be excluded from the fillet size restriction. In these circumstances, the entire unscaled skin must be left on the fillet and each fish (two fillets) must be packaged individually and labelled by species for the purpose of identification. Given the numbers of operations participating in extended charters and the way in which these operations are conducted, it is considered that there is a low risk that this provision will compromise minimum and maximum size limits for reef fish species.

5.6 Apparatus available for use

77. It is proposed that most fish species covered by the Draft Plan may only be taken by handline or rod and line. Recreational fishers only may also use a hand held spear or spear gun to take coral reef fish. It is also proposed that a person be limited to the use of a maximum of 6 hooks in any configuration and use not more than 3 lines at any time. This proposal is consistent with current fishing practices but is a reduction in the apparatus presently allowed for use. The measure will contribute towards the reduction in latent fishing capacity flowing from the removal of the gap between legislation and practice.

78. Provision is made in the Draft Plan for those licensed fishers using multiple hook apparatus in offshore waters beyond the 200metre depth contour to continue to do so.

5.7 Aquarium fish authority holders

79. The taking of fish for display purposes (aquarium fish) has been recognised in the Draft Plan by proposing to allow holders of those authorities to take and possess coral reef fish as ornamental specimens only, under the condition that other requirements (size limits) of the Draft Plan apply to those authority holders.

5.8 Serious fisheries offences

80. It is possible for offences determined as “serious fisheries offences” to attract greater penalties in prosecution action under the Act. Convictions of licence holders for such offences can also lead to licence suspension. A list of offences proposed for recognition as serious fisheries offences under the Draft Plan is as follows:

- Contravening a notification requirement;
- Unlawfully buying or selling coral reef fish without an authority to do so, or in a manner other than permitted by an authority;
- Taking, possessing or selling more than double the permitted number of coral reef fin fish under a possession limited commercial licence;
- Obstructing, hindering or resisting an inspector;
- Unlawful dealings with noxious and non-indigenous fisheries resources;
- Taking coral reef fish in a prohibited way, other than with a fishing line(s) with up to 9 hooks or lures attached to it;

- Taking fish that are regulated as no-take under the Plan;
- Using prohibited fishing apparatus to take coral reef fish;
- Taking or possessing animals protected under the *Nature Conservation Act 1994*;
- Taking coral reef fish in or breaching certain provisions of a Marine Park zone or Regulation established under the *Great Barrier Reef Marine Park Act 1975*, or the *Marine Park Act 1982* (QLD);
- Towing other primary boats or tenders to the fishing ground; and
- Transshipping or storing product on a primary boat or tender caught by another primary boat or tender.

81. It is proposed that if a person is “convicted” of an offence, then his or her assistant or commercial fisher licence, commercial fishing boat licence or aquarium fish authority may be considered for suspension.

82. If it is decided that a licence should be suspended, it is proposed that the Chief Executive must have regard to the following periods of suspension for each of the abovementioned authorities. Offences for which a person was convicted on a date more than five years’ past are not to be regarded as offences for the purposes of the section on serious fisheries offences.

- a) Assistant or commercial fisher licence:
 - 1st conviction – up to 3 months;
 - 2nd conviction – 3 months to 9 months;
 - 3rd conviction – 9 months to 5 years.
- b) Commercial fishing boat licence or aquarium fish authority:
 - 1st conviction – nil;
 - 2nd conviction – up to 3 months;
 - 3rd conviction – 3 months to 9 months;
 - 4th conviction – 9 months to 5 years.

5.9 Fishery evaluation and review

83. The Draft Management Plan contains provisions that allow for an evaluation and review of measures against the objectives of the Plan on a periodic basis. These provisions set out to measure the sustainability of the

Fishery in terms of target species, by-catch and ecosystem impacts, and matters concerning fairness of access to, and community benefit from, use of the Fishery resources.

84. The evaluation and review measures also provide a trigger for responses where the objectives are not being achieved. The evaluation and review section of the Draft Plan also provides for dealing with high use areas adjacent to community centres. The Section requires that a review be undertaken where evidence indicates that localised depletion has occurred. The section also provides for continued assessment of the performance of the effort management scheme.

5.10 Spawning closures

85. The draft management plan does not provide any specific measures for spawning season closures. People with an interest in the Fishery are invited to comment on the conclusion of the Great Barrier Reef Marine Park Authority report *“Spawning Aggregations of Reef Fishes on the Great Barrier Reef: Implication for Management”* (August 2001). The report concluded that: *“An annual temporal spawning closure, to protect all reef fish species, should extend over three months, from October to December. This will protect targeted species such as common coral trout and other species that aggregate to spawn during this time.”*

6 CONSISTENCY WITH THE AUTHORISING LAW

86. The Draft Management Plan is consistent with the authorising law in that it provides for the sustainability of the Fishery’s resources, while ensuring fair access to the resources amongst key stakeholders. The Draft Plan was developed through a clearly defined process and extensive consultation involving the QFS with stakeholder groups.

87. The Draft Plan is also consistent with the overall objectives and provisions of the Act. Through the implementation of the amendments the following objectives of the Act will be met:

- The Fishery’s resources will be used in an ecologically sustainable way; and
- Optimum community, economic and other benefits will be obtained from the Fishery’s resources; and
- Fair access to the Fishery’s resources will occur.

7 CONSISTENCY WITH OTHER LEGISLATION

88. The proposed legislation is consistent with other legislation.

8 RISK IDENTIFICATION AND EVALUATION OF MANAGEMENT ALTERNATIVES

8.1 Risk identification

89. There are concerns that if the proposed amendments are not implemented the objectives of the Act may not be achieved. Specifically those concerns are that:

- the sustainability of the Fishery may be compromised;
- access will not be fair between all users of the Fishery.

8.2 Alternatives

90. Possible alternatives to the proposed amendments for achieving the policy objectives are as follows:

- no legislative intervention;
- self regulation;
- alternative legislation; and
- retaining current management arrangements.

91. These alternatives are discussed below.

No legislative intervention

92. 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, there is little incentive for individuals harvesting the resource to conserve fish stocks. This arises because there is no direct ownership of the resources and little incentive to protect these stocks for the future. As these stocks become fully utilised, competition between users often leads to resource depletion or economic inefficiency. 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. It also places at risk the satisfaction of recreational fishers and custom and tradition of Indigenous groups.

93. The role of Governments, as custodians of the resource, is to ensure that fisheries resources are used in an ecologically sustainable manner. In doing so, Governments have the responsibility of 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 worldwide to require effective legislative intervention. In summary, the option of ‘no legislative intervention is not viable as it does not meet the basic objectives of the Queensland fisheries legislation.

Self management

94. Self-management is similarly not considered a viable alternative for achieving the policy objectives mentioned above. The same difficulties outlined under the “no legislative intervention” alternative would still exist with some added complications.

95. Self-management or limited intervention in each fishery sector would rely on self-restriction to an amount of fishing effort that they have been allocated. Such an alternative is unlikely to achieve the same result unless all fishers were compelled to “do the right thing”. For this reason, in most circumstances, self-management in a fisheries context has been rejected by all Governments in Australia and overseas. However, the actual extent, and form, of regulatory intervention does vary from place to place and in response to geographic differences in stocks and their users.

96. This is not to say that user groups do not promote and use various self-management interventions. This is commonly the case with many current management arrangements having been proposed by various fishing groups. However, giving effect to these arrangements requires an appropriate regulatory framework.

Alternative type of legislation

97. Whilst other legislative proposals may go towards meeting the objectives of the legislation, it is considered that the proposals in the Draft Plan, which have been designed to meet the specific biological and ecological characteristics of individual species, and the likely impacts on the Fishery, have the highest net benefit.

Retaining current management arrangements

98. Current management arrangements are not adequate to achieve the long-term sustainability of coral reef fin fish resources and are threatening the long-term viability of the industry. In this respect, they are not fully meeting the objectives of the fisheries legislation.

99. The management of the commercial fishing industry under current fisheries legislation is now beginning to affect industry viability resulting from increasing fishing pressure via an increased demand for access to coral reef fin fish, coupled with improved technology and efficiency in fishing operations. In addition, profitability at present catch levels for the average operator in the Fishery may become marginal as fishing effort increases at a greater rate than catch.

100. 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 coral reef fin fish resources.

9 COST-BENEFIT ASSESSMENT

101. There are a number of proposed provisions that impose a cost on individuals, the fishing industry, Government and the community. Likewise a number of the proposed provisions supply a benefit to those same groups. Overall, the benefits from these proposals are believed to be greater than the costs both for the fisheries resources covered by the Draft Plan and for the members of the community who access those resources.

102. There will be both costs and benefits to Government from the introduction of these proposals. These costs are discussed collectively in a separate section below rather than provided for each specific proposal.

103. There are also costs to individual commercial and charter operators who rely on the Fishery for part, or all, of their income. Recreational fishing interests, such as boat and gear suppliers will also encounter additional costs associated with the possible reduction in fishing activity by that sector in response to the measures proposed. These costs are discussed below for each of the proposed amendments. The dollar impact to fishers from these amendments is difficult to estimate given the diversity of operations within the Fishery. However, an attempt is made to quantify the costs by outlining the number of boats that may be affected and the resultant loss for each of the proposals.

104. The restructuring of the commercial sector of the Fishery is likely to result in reduced quantities of some product being available to fish marketers, exporters and local seafood businesses. These groups may incur costs associated with a reduction of the quantity of some fish, however, it is impossible to quantify these costs as market shifts will occur and other species will fill the market previously supplied by these species. The

commercial fishing industry will benefit from more reliable supply of fish in the long-term and greater certainty of access to product taken from the Fishery.

105. The benefits of the proposals to fishers and the community as a whole are also discussed for each of the proposed amendments. Again, it is difficult to quantify the benefits in economic terms, as many of the conservation benefits and community benefits flow from the overall benefits of a healthy environment and sustainable use of the resources.

9.1 Overall costs and benefits to Government

106. The costs to Government as a result of these proposals are an important consideration. It is expected that there will be costs involved in conducting education campaigns to explain these new changes to all stakeholders and for enforcement of new additional measures. These costs may include the following:

- preparation and printing of new pamphlets and extension material;
- letters of advice and circulation of extension material to stakeholders;
- additional consultation through attendance at key stakeholder meetings; and
- additional resources spent advising key stakeholder groups and fishers of the proposed changes;
- Queensland Boating and Fisheries Patrol staff advice and training about the new provisions; and
- increased enforcement time associated with ensuring compliance with each new provision.

107. Such costs are likely to be of a short-term nature and it is not believed that the provisions will result in additional long-term resources being required by Government.

9.2 Size limits

108. Changing the size limit, or introducing a size limit, for fin fish species is likely to cause some short-term costs to the commercial fishers as some product will have to be returned to the water that otherwise could have been taken and sold. It is unlikely that there will be significant costs to the recreational or charter fishing sectors as a result of minimum and maximum size limits. Any costs incurred through size limits are likely to be

only temporary in nature and will occur only as a one-off event until such time as the fish have grown to the required size.

109. The benefits of taking the proposed action will be to ensure that, regardless of fishing pressure, there will always be a stock of reproductively active fish protected from being taken, thus helping to establish the long-term sustainability of the Fishery.

9.3 Limiting commercial licences and restricting commercial boat size

110. It is unlikely that these proposals will have any cost to existing licence holders. The issue of new licences has been restricted by way of policy for almost twenty years as have provisions relating to restricting the size of boats.

111. The new provisions remove those measures from policy and provide benefits to operators as they provide more certainty over what they can and cannot do in relation to boat replacement. Other benefits are to the Fishery as a whole as another measure is put in place that will help ensure it is managed on a sustainable basis.

9.4 Restructuring of the commercial line fishing fleet

112. Restricting commercial licences to a bag limit will have a financial impact on a small number of commercial operators who entered the Fishery after the “Investment Warning” of 19 May 1997. There will also be a potential cost imposed on other commercial operators, as they will not be able to catch commercial quantities of fish if they choose to engage in the Fishery, and the value of their licence may be affected.

113. However, these costs are far outweighed by the benefits. Current effort levels are believed by managers, scientists and stakeholder groups to be unsustainable in the longer term. To ensure the sustainability of this Fishery action must be taken to remove the potential for new commercial licences to become engaged in the Fishery and to restrict those licences that have shown little or no participation in the Fishery over the past several years.

9.5 Possession limits

114. Possession limits have been set to ensure minimum impact on the majority of recreational fishers. They have been proposed to be set at a point where 90 percent of angler trips have caught up to the possession limits specified without participants on those trips having to forego catches.

Overall financial costs as a result of possession limits are believed to be minimal to both the recreational and charter sectors.

115. Impacts on commercial fishers in respect of possession limits are addressed above under “restructuring of the commercial line fishing fleet”.

116. Benefits to the long-term sustainability of the resource are significant from this measure. Recreational fishers catch between 30 and 40 percent of the total catch in this Fishery using the same methods as commercial fishers. To maintain the possession limits at high levels will result in unrealistic expectations by anglers and devalues the resource in terms of perpetuating a myth that the resource can sustain such quantities of fish being taken. Limiting recreational anglers to the proposed possession limits will result in a small reduction in total catch of the recreational sector and will reduce the latent effort capacity in that sector. Provisions to set aside certain species free from capture will have limited negative impacts as fishing for these otherwise vulnerable species has to date largely been taken opportunistically.

9.6 Format of landed fish

117. There are few if any costs associated with the proposals for format of landed fish. The benefits will be ease of enforcement for Queensland Boating and Fisheries Patrol officers and maintenance of the integrity of the possession and size limits proposed by the Draft Plan.

9.7 Apparatus available for use

118. There are few, if any, costs associated with the proposals for the types of apparatus that can be used as the proposals allow current fishing practices to continue. The benefits are that the provisions will prevent further effort expansion through the introduction of additional hooks and lines, again contributing to the management arrangements that will ensure the long-term sustainability of this Fishery.

9.8 Aquarium fish authority holders

119. The introduction of new size limits on a number of coral reef fin fish species is not expected to impose significant cost on this sector as most of the key species taken by this group are not captured under the Draft Plan. The benefits are that the provisions are unlikely to significantly impact on aquarium authority holders and will allow them to continue to operate in the way in which they have done previously.

9.9 Serious fisheries offences

120. Commercial operators convicted of a serious fishery offence could face significant costs as a result of having their licences suspended for an extended period of time. Such costs are not imposed to punish the licence holder but are imposed to protect the resource. In all cases, if a person is convicted of a serious fisheries offence, it is up to the discretion of the Chief Executive of the Department of Primary Industries to determine if a licence should be suspended or not.

121. Where a person is found to have committed an offence that poses a serious threat to the long-term sustainability of the Fishery, such offence should be considered as a “Serious Fisheries Offence”. A licence is only suspended if the Chief Executive believes that such action is necessary or desirable for the best management, use, development or protection of fisheries resources or fish habitats. The Draft Plan requires the Chief Executive to have regard to increased licence suspension periods for persons who demonstrate that they are willing to make repeated serious fishery offences.

122. Benefits of such proposals are that the resource may be protected from licence holders who are convicted of a serious fishery offence.

10 EMPLOYMENT IMPACT STATEMENT

123. It is considered unlikely that the amendments as proposed in this RIS/PBT would have substantial adverse impacts on employment levels in the commercial and recreational fishing sectors.

124. Balancing the sustainable management of the fisheries resources with the economic benefits derived from the Fishery and sharing access with other fishery sectors may result in some negative impacts to individuals. It is possible that such impacts could result in a small short-term effect on employment levels.

125. However, it has been recognised that the risk associated with failing to implement these management arrangements may result in significant employment disruption in the medium to longer term through unsustainable stock levels or depressed catch levels resulting from not adopting measures as proposed.

126. Benefits may flow to other industries related to the fishing sectors from these management arrangements. The presence of a more stable stock of fish emerging from the proposed measures will form the basis of more

reliable catches for commercial fishers and “satisfaction” of recreational and Indigenous fishers. This would result in increased employment in secondary industries associated with fishing such as tourism, boating, bait and tackle shops and charter operations.

11 NATIONAL COMPETITION POLICY

127. The Competition Principles Agreement, a key part of the National Competition Policy (NCP), requires as a guiding principle that 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.

128. The following is an analysis of the potential NCP issues associated with this proposal.

11.1 Issues and objectives

129. Given the nature of the natural resource upon which the Fishery depends, it is believed the only way to ensure the policy objectives of the fisheries legislation are achieved in terms of long-term sustainable use, fair access and optimum community benefit, is to restrict competition to the extent embodied in the proposed draft Plan.

11.2 Current measures v proposed measures

130. It is a requirement under the Act that fisheries resources be managed in a way that ensures ESD and achieves the goals of the National Strategy for ESD. In managing common property natural resources such as those of the Fishery it is essential that management principles address the potential problems of open access to fisheries resources. Such open access can lead to overcapitalisation (that is, too many boats and too much capacity for catching fish), waste of resources and a deterioration of the Fishery and the habitat on which it depends.

131. The current measures to ensure the sustainability of the Fishery include a range of “input controls” where restrictions control the level of effort put into the Fishery. These types of controls include gear and boat restrictions, possession and size limits for fish, and limited commercial licensing regimes. It is clear from the present expansion in the Fishery that existing restrictive measures are ineffective in providing for ESD.

132. It is proposed that in addition to these controls, further restrictions are necessary to ensure the long-term sustainability of the Fishery. Additional and revised maximum and minimum legal size limits for coral reef fish are an important method of ensuring that a reasonable proportion of the stock of the Fishery is protected to allow all fish to reproduce at least once before harvest, and to protect larger and more fecund specimens of fish.

133. Further, boat catch limits for a number of species considered rare in nature and iconic are proposed as a precautionary measure to prevent target fishing of these species. These new provisions to protect fish stocks are considered necessary and reasonable to achieve the objectives.

134. Fisheries adjustment measures involving the imposition of possession limits will apply to those licence holders who cannot demonstrate a historical commercial level in the Fishery as defined by the Draft Plan. This proposal will alleviate the latent fishing capacity in the commercial sector where the number of licences available in the Fishery far exceeds the number that are actually currently used in the Fishery. These measures are considered necessary to assist in addressing future resource allocation issues.

135. Experience around the world has shown that the optimal utilisation of fish stocks does not occur in an unmanaged, or unrestricted Fishery. Fishery resources are not infinite, and a careful balance of the exploitation rate and impact on their environment needs to be achieved in order to ensure that fish populations can continue to function and provide recruits into the Fishery.

136. In the short term, the price of ensuring ecological sustainability may be restrictions on catches and significant reductions in the size of the industries that depend on fishing. However, in the long-term, the result of managing fisheries to ensure ESD is inevitably linked to increased community benefit and social gains. There are many international examples of fishery failure as a consequence of no action or action too late for whole communities and regional economies.

12 FUNDAMENTAL LEGISLATIVE PRINCIPLES

137. In terms of compliance with the fundamental legislative principles, section 4(2)(a) of the *Legislative Standards Act* provides a general requirement that legislation have sufficient regard to the rights and liberties of individuals. The proposed new regulated fish declarations will clearly

reduce the current licence rights of commercial fishers to exploit the common resource of coral reef fin fish in Queensland waters.

138. However, it is considered that the reduction in entitlement is justifiable in the circumstances. There is general agreement that coral reef fin fish stocks are fully exploited across all sectors at specified fishing levels. An investment warning to new investors and existing operators foreshadowing new restrictions was released as far back as 1997 and preceded the recent increased growth in catch and effort by the commercial sector in this Fishery.

139. A large number of licences with an entitlement to take of coral reef fin fish have historically contributed minimal, or no, effort to this Fishery. For the new measures to achieve the object of future sustainability, the trend in uptake of the large latent effort in the commercial sector must be contained and reversed.

140. Several key components of the re-adjustment of the commercial sector of the Fishery are intended to ensure the restrictions are fairly applied. In particular, holders of licences with a genuine pattern of commercial reliance of the Fishery will be issued with a new fishery symbol conferring a far less restricted entitlement. Eligibility will be based on minimum catch levels being taken in certain past periods. The required catch level of 500 kg per annum is very generous, so that operators with more than the most negligible history should qualify.

141. Other line fishery licences, which are subject to restrictions in respect of permitted coral reef fin fish numbers, can continue to fish for other line-caught species, in accordance with fisheries legislation.

13 SUMMARY

142. Major benefits are expected to flow from the proposed amendments in terms of achieving the objectives of the Act and the sustainable use of the resources of the Fishery in the Great Barrier Reef World Heritage Area. Specifically, the proposed amendments will ensure that appropriate access to fisheries resources is provided for amongst stakeholders and that the sustainability of both the fisheries resources and ecological systems on which the Fishery depends is achieved.

APPENDIX A:

CORAL REEF FIN FISH

Common name	Scientific name	Size limit minimum	Size limit maximum	Bag limit
SERRANIDAE - Cods, Groupers & Trout				
Redmouth Rockcod	<i>Aethaloperca rogae</i>	35	NSL	*
White-lined Rockcod	<i>Anyperodon leucogrammicus</i>	35	NSL	*
Peacock Rockcod	<i>Cephalopholis argus</i>	35	NSL	*
Blue-spotted Rockcod	<i>Cephalopholis cyanostigma</i>	35	NSL	*
Coral Cod	<i>Cephalopholis miniatas</i>	35	NSL	*
Six-spot Rockcod	<i>Cephalopholis sexmaculata</i>	35	NSL	*
Tomato Rockcod	<i>Cephalopholis sonnerati</i>	35	NSL	*
Brown-barred Rockcod	<i>Cephalopholis boenak</i>	35	NSL	*
Flagtail Rockcod	<i>Cephalopholis urodeta</i>	35	NSL	*
Areolate Rockcod	<i>Epinephelus areolatus</i>	35	NSL	Total combined bag limit of 5 cods
White-spotted Rockcod	<i>Epinephelus caeruleopunctatus</i>	35	NSL	*
Blue Maori	<i>Epinephelus cyanopodus</i>	35	NSL	*
Flowery Cod	<i>Epinephelus fuscoguttatus</i>	50	100	*
Trout Cod	<i>Epinephelus maculatus</i>	35	NSL	*
Camouflage Rockcod	<i>Epinephelus polyphekadion</i>	50	100	*
Chinaman Rockcod	<i>Epinephelus rivulatus</i>	35	NSL	*
Greasy Rockcod	<i>Epinephelus tauvina</i>	35	100	*
Maori Cod	<i>Epinephelus undulatostratus</i>	45	NSL	*
Speckled-finned Rockcod	<i>Epinephelus ongus</i>	35	NSL	*

Common name	Scientific name	Size limit minimum	Size limit maximum	Bag limit
Black-Tipped Rockcod	<i>Epinephelus fasciatus</i>	35	NSL	*
Dwarf spotted Rockcod (Wire Netting Rockcod)	<i>Epinephelus merra</i>	35	NSL	*
Longfin Rockcod (Honey Comb Rockcod)	<i>Epinephelus quoyanus</i>	35	NSL	*
Blacksaddle Rockcod	<i>Epinephelus howlandi</i>	35	NSL	*
Snubnosed Rockcod	<i>Epinephelus macrospilos</i>	35	NSL	*
Barramundi Cod	<i>Cromileptes altivelis</i>	na	NSL	0
Potato Cod	<i>Epinephelus tukula</i>	na	NSL	0
Squaretail Coral Trout (Passionfruit Trout)	<i>Plectropomus areolatus</i>	38	NSL	*
Chinese Footballer (Blue Spot Trout)	<i>Plectropomus laevis</i>	50	80	*
Coral Trout (Leopard Trout)	<i>Plectropomus leopardus</i>	38	NSL	*
Barred-cheek Coral Trout	<i>Plectropomus maculatus</i>	38	NSL	Total combined bag limit of 7 coral trout
Highfin Coral Trout	<i>Plectropomus oligacanthus</i>	38	NSL	*
Lyretail Trout	<i>Variola albimarginata</i>	38	NSL	*
Coronation Trout	<i>Variola louti</i>	38	NSL	*
LUTJANIDAE - Tropical Snappers and Sea Perches				
Small-toothed Jobfish	<i>Aphareus furca</i>	25	NSL	5
Ruby Snapper	<i>Etelis carbunculus</i>	25	NSL	5
Flame Snapper	<i>Etelis coruscans</i>	25	NSL	5
King snapper (Rosy Jobfish)	<i>Pristipomoides filamentosus</i>	30	NSL	8
Goldband Snapper	<i>Pristipomoides multidentatus</i> and <i>P. typus</i>	25	NSL	5
Green Jobfish	<i>Aprion virescens</i>	25	NSL	5
Hussar (Pink Hussar)	<i>Lutjanus adetii</i>	25	NSL	10
Indonesian Snapper	<i>Lutjanus bitueneriatus</i>	25	NSL	5
Red Bass	<i>Lutjanus bohar</i>	55	NSL	5

Common name	Scientific name	Size limit minimum	Size limit maximum	Bag limit
Paleface Snapper	<i>Lutjanus bouton</i>	25	NSL	5
Spanish Flag (Stripey)	<i>Lutjanus carponotatus</i>	25	NSL	5
Crimson Seaperch (Small-mouth Nannygai)	<i>Lutjanus erythropterus</i>	40	NSL	Total combined bag limit of 9 nannygai
Saddletail Seaperch (Large-mouth Nannygai)	<i>Lutjanus malabaricus</i>	40	NSL	*
Black-spot Snapper	<i>Lutjanus fulviflamma</i>	25	NSL	5
Yellow-margined Seaperch	<i>Lutjanus fulvus</i>	25	NSL	5
Paddletail	<i>Lutjanus gibbus</i>	25	NSL	5
Bluestripe Seaperch	<i>Lutjanus kasmira</i>	25	NSL	5
Dark-tailed Seaperch	<i>Lutjanus lemniscatus</i>	25	NSL	5
Bigeye Seaperch	<i>Lutjanus lutjanus</i>	25	NSL	5
Onespot Seaperch	<i>Lutjanus monostigma</i>	25	NSL	5
Five-lined Seaperch	<i>Lutjanus quinquelineatus</i>	25	NSL	5
Maori Seaperch	<i>Lutjanus rivulatus</i>	25	NSL	5
Moses Perch	<i>Lutjanus russelli</i>	25	NSL	5
Red Emperor	<i>Lutjanus sebae</i>	55	NSL	5
Brownstripe Seaperch (Brown Hussar)	<i>Lutjanus vitta</i>	25	NSL	5
Midnight Seaperch	<i>Macolor macularis</i>	25	NSL	5
Black and White Seaperch	<i>Macolor niger</i>	25	NSL	5
Chinamanfish	<i>Symphorus nematophorus</i>	25	NSL	5
Sailfin Snapper	<i>Symphorichthys spilurus</i>	25	NSL	5
LETHRINIDAE - Emperors				
Gold-lined Sea Bream	<i>Gnathodentex aureolineatus</i>	25	NSL	5
Collared Sea Bream	<i>Gymnocranius audleyi</i>	25	NSL	5
Japanese Sea Bream	<i>Gymnocranius euanus</i>	25	NSL	5
Robinson's Sea Bream	<i>Gymnocranius grandoculis</i>	25	NSL	5
Spotted Sea Bream	<i>Gymnocranius sp.</i>	25	NSL	5

Common name	Scientific name	Size limit minimum	Size limit maximum	Bag limit
Yellow-tailed Emperor	<i>Lethrinus atkinsoni</i>	25	NSL	5
Yellow-spotted Emperor	<i>Lethrinus erythracanthus</i>	25	NSL	5
Lancer	<i>Lethrinus genivittatus</i>	25	NSL	5
Thumbprint Emperor	<i>Lethrinus harak</i>	25	NSL	5
Pink-eared Emperor	<i>Lethrinus lentjan</i>	25	NSL	5
Sweetlip Emperor (Red-throat Emperor)	<i>Lethrinus miniatus</i>	35	NSL	8
Spangled Emperor	<i>Lethrinus nebulosus</i>	45	NSL	5
Orange-striped Emperor	<i>Lethrinus obsoletus</i>	25	NSL	5
Long-nose Emperor	<i>Lethrinus olivaceus</i>	25	NSL	5
Yellow-striped Emperor	<i>Lethrinus ornatus</i>	25	NSL	5
Red-eared Emperor	<i>Lethrinus rubrioperculatus</i>	25	NSL	5
Yellowlip Emperor	<i>Lethrinus xanthurus</i>	25	NSL	5
Variegated Emperor	<i>Lethrinus variegatus</i>	25	NSL	5
Bigeye Bream	<i>Monotaxis grandoculis</i>	25	NSL	5
LABRIDAE - Wrasses				
Hogfish	<i>Bodianus</i> spp.	NSL	NSL	5
Redbreasted Maori Wrasse	<i>Cheilinus fasciatus</i>	NSL	NSL	5
Tripletail Maori Wrasse	<i>Cheilinus trilobatus</i>	NSL	NSL	5
Humphead Maori Wrasse	<i>Cheilinus undulatus</i>	na	na	0
Anchor Tuskfish	<i>Choerodon anchorago</i>	NSL	NSL	*
Purple Tuskfish	<i>Choerodon cephalotes</i>	30	NSL	*
Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	30	NSL	Total combined bag limit of 6 tusk fish
Venus Tuskfish	<i>Choerodon venustus</i>	30	NSL	*
Blue Tuskfish	<i>Choerodon cyanodus</i>	NSL	NSL	*

Common name	Scientific name	Size limit minimum	Size limit maximum	Bag limit
SCARIDAE - Parrotfishes				
Bumphead Parrotfish	Bolbometapon muricatum	NSL	NSL	5
Bicolor Parrotfish	Cetoscarus bicolor	NSL	NSL	5
Miscellaneous Parrotfish	Scarus spp.	NSL	NSL	5
ACANTHURIDAE - Surgeonfishes				
Surgeonfishes	Acanthurus spp.	NSL	NSL	5
Unicornfish	Naso spp.	NSL	NSL	5
HAEMULIDAE - Sweetlips				
Painted sweetlips (Slaty Bream)	Diagramma spp.	25	NSL	5
Miscellaneous sweetlips	Plectorhincus spp.	25	NSL	5
CAESIONIDAE - Fusiliers and Bananafish				
Fusilier spp.	Caesio spp./Pterocaesio spp.	NSL	NSL	N/A
TOTAL combined possession limit				20

Note: *: Indicates that the species is part of a specific group combined bag limit

NSL: No size limit

All bag limits are per person (in possession limits)

Reference used for scientific names of coral reef fin fish

1. Crimson seaperch (small mouth nannygai), saddletail seaperch (large mouth nannygai), king snapper (rosy jobfish) and goldband snapper – Yearsley GK, Last PR and Ward RD (eds) (1999), 'Australian Seafood Handbook, Domestic Species', CSIRO Marine Research, Melbourne, Victoria; and
2. Other coral reef finfish - Randall, John E. Allen, Gerald R and Steene, Roger C. 1997, *The Complete Divers' & Fishermen's Guide to*

FISHES of the GREAT BARRIER REEF and CORAL SEA,
2nd revised edition, University of Hawaii Press, United States of
America.

ENDNOTES

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