CHAPTER F JUSTIFICATION FOR THE PROPOSED COMMERCIAL FISHING ACTIVITY

F1 The need for the Lobster Fishery

This section examines the need for undertaking the fishing activity proposed in the draft Fishery Management Strategy (FMS) and the consequences of not undertaking the activity. The Lobster Fishery exists because it satisfies a number of significant community needs, each of which are discussed under separate headings below. The NSW Lobster Fishery is the only commercial fishery in Australia that targets eastern rock lobster, a highly valuable and marketable seafood product.

Should the Lobster Fishery not continue, some of the resources used by the fishery would become available to other users, or would contribute to ecological processes and diversity. However the sole target species in the fishery can not be legally taken by other commercial fisheries in NSW, and it is unlikely that increased catches by other resource harvesters would offset the loss of product if the Lobster Fishery ceased to operate.

F1.1 Supply of seafood to the community

Over the past seven years the Lobster Fishery has provided, on average, over 100 tonnes of eastern rock lobsters annually for general consumption by the community and for export to overseas consumers. The supply of lobsters to local markets by commercial fishers satisfies demand from Australian consumers who do not wish to, or are unable to, venture out and catch lobsters themselves. The Lobster Fishery supplies a specific species (eastern rock lobster) that generally has a higher per unit value than many species taken in other NSW commercial fisheries, and supplies a small amount of byproduct.

F1.2 Economic considerations

In 2001-02 the Lobster Fishery was estimated to have a total revenue at point of first sale of approximately $4.74 million. All businesses contributed to the local economy through the purchase of inputs and factors of production. This revenue for the fishery provides an important source of employment for fishers and has multiplier effects in regional communities.

The economic survey conducted during the preparation of this EIS, and other studies undertaken on the expenditure of fishers in NSW (see McVerry, 1996), have shown that around 27% of expenditure from fishing businesses moves outside the region of operation. Therefore approximately 73% of the first sale value of the catch stays within the communities where fishing takes place. This translates to approximately $3.32 million of fishing revenue generated from the Lobster Fishery that was potentially spent in the local regions in 2001-02.

F1.3 Employment considerations

In January 2004 there were 161 fishing businesses in NSW with shareholdings in the Lobster Fishery, comprising approximately 149 individual endorsed fishers. The fishery also directly employs crew members as well as those assisting on land to build traps and provide transport services. Data

from the Roy Morgan Survey (2001) indicates that approximately 330 people are employed directly on a full time or part time/casual basis by the Lobster Fishery. Indirect employment includes those employed in the trade and transport sectors, fish processing and supply sectors which flow-on from lobster fishing.

The lobster fishing community tends to focus around key ports in regional areas such as Coffs Harbour, Port Stephens, Illawarra and Batemans Bay, where unemployment rates are generally higher than in urban areas. The presence of lobster fishers in a port also encourages the development of significant infrastructure for the supply of fuel, ice and vessel maintenance, and for the unloading, handling and marketing of product. Studies of employment flow-on effects indicate that for each job created in the Lobster Fishery, approximately 0.5 jobs are created in the broader community, so the Lobster Fishery contributes directly to the employment of more than 490 people on either a full time or part time/casual basis in NSW.

F2 Justification of Measures in Terms of ESD Principles

The Lobster Fishery is primarily a single species and single method fishery managed by a combination of input and output controls, including restricted entry, a total allowable commercial catch (TACC), size limits and controls on gear use.

The impact of the Lobster Fishery upon the carrying capacity of the marine environment has been assessed in the EIS by an initial analysis of the risks associated with the existing management regime. The risks associated with the Lobster Fishery are partitioned into two components related primarily to (1) the retained species and (2) the ecological impacts of the harvest methods used in this fishery on incidental catch, threatened and protected species, habitat damage and other associated activities. These risks have been fully reviewed and discussed in Part II of Chapter B and Chapter E of this EIS.

The draft FMS, as outlined in Chapter D of this EIS, proposes goals, objectives and management responses for the fishery, having regard to the risks identified in the existing management regime (i.e. Part II of Chapter B). The preferred suite of rules (including management objectives and responses) contained within the draft FMS provides for appropriate allocation of the resource and incorporates the controls necessary to achieve resource sustainability.

The draft FMS provides a broad framework for managing the Lobster Fishery that describes a range of programs to be implemented; some of which are immediate actions, others are longer term programs with a development or investigation stage and a need to undertake further stakeholder consultation built in. In order to ensure that the fishery operates in an ecologically sustainable manner into the future and the risks are meaningfully reduced, it will be important to ensure that the strategies and plans that are subsequently developed under the FMS are implemented so as to fulfil the goals and objectives for the fishery. With this qualification, it can be stated that the draft FMS addresses the principles of ESD as described in sections F2.1 to F2.5.

F2.1 Precautionary principle

The precautionary principle is defined in the May 1992 Intergovernmental Agreement on the Environment as:

"*where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation*" (Deville and Harding, 1997).

The introduction of the precautionary principle has, as described by Deville and Harding (1997), shifted the 'onus of proof' regarding impacts away from regulatory bodies and more towards those whose actions may cause damage. Those undertaking the activity are required to provide a convincing argument that their actions will not have serious or irreversible impacts on the environment, which exceed the long-term benefits of the action (Deville and Harding, 1997).

As recognised in the assessment guidelines under which this EIS was prepared, scientific research into the size and characteristics of shellfish and finfish stocks is inherently complex and costly. Shellfish and finfish populations and the aquatic environment inhabited by them are extremely dynamic. This means that the level of scientific uncertainty associated with shellfish and finfish stocks and aquatic communities is generally high, especially for species that are of low commercial or recreational value. This situation is by no means unique to NSW or indeed Australian fisheries. It is important to note, however, the considerable resources that are currently being contributed by lobster shareholders and the NSW government to the existing stock assessment process for the eastern rock lobster resource in NSW (including extensive monitoring and modelling of the resource).

Many of the management rules that have been applied to the Lobster Fishery, such as using minimum and maximum size limits and setting a TACC, have been adopted on a precautionary basis to provide an 'insurance policy' against over exploitation. The measures proposed in the draft FMS embrace this approach by continuing the existing controls on fishing and by proposing new initiatives to deal with the uncertainty surrounding the impact of lobster trapping on incidental species and habitat. Maintaining the current gear dimensions and developing a code of practice are positive precautionary steps that will minimise the impacts (known and presumed) of lobster trapping on the environment. Additionally, the proposed research programs investigating the impacts of fishing gear on habitats and mortality of discarded (either undersize or oversized) lobsters, pro-actively address the information deficiencies in those areas.

The performance monitoring system established by the draft FMS also provides a necessary safeguard in case there are changes in either the operation of the fishery or stock levels, which could compromise the long term sustainability of the fishery.

F2.2 Intragenerational equity

Intragenerational equity relates to distributing the costs and benefits of pursuing ESD strategies as evenly as practicable within each generation (i.e. within the Lobster Fishery but also between the fishery and other parts of the community).

Intragenerational equity in the context of the Lobster Fishery is not as complex as other commercial fisheries as it is a single target species fishery and there is no other commercial fishery in Australia which targets eastern rock lobster. Eastern rock lobsters are taken by other user groups, however, such as recreational and Indigenous fishers. There are a number of species incidentally caught as either byproduct or bycatch, such as leatherjacket and morwong and species in the Lobster Fishery. These species may be taken, even targeted, in other commercial fisheries and also by other sectors. In addition to the issue of allocation of the resource, there are issues relating to the management of often conflicting user activities (i.e. commercial fishing, recreational fishing, boating, swimming etc.).

The draft FMS proposes to assess the size of the total catch of eastern rock lobster (including recreational and illegal catches) so that the distribution of the resource is known, and performance measures are to be put in place to monitor and manage the distribution of catches of the retained species over time. The measures in the draft FMS distribute, as far as practicable, a fair and equitable sharing of the fisheries resource amongst fishers and the community. The TAC Committee sets a TACC annually, following consideration of the most recent estimated weights of recreational (including Indigenous) and illegal lobster catches. The operation of the fishery provides fresh local seafood to satisfy an ever increasing consumer demand for seafood, particularly a high value species, such as eastern rock lobster. Fishing closures, such as those in marine parks and aquatic reserves, share the resource between the consumptive and the non-consumptive interests within the community by specifying areas where commercial lobster fishing may or may not occur.

The cross jurisdictional liaison, mapping of lobster fishing grounds, and the development of a code of practice proposed in the draft FMS all promote equity of access to the physical environment used by lobster fishers and others in the community. Alternative trap marking provisions promote public safety in areas where the Lobster Fishery overlaps other water activities. Additionally, being a category 1 share managed fishery, lobster shareholders are required to make a periodic contribution to the community for their right to access a community owned resource.

F2.3 Intergenerational equity

Intergenerational equity relates to the present generation ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.

In the context of the Lobster Fishery, intergenerational equity consists of ensuring the fishery operates in a manner that minimises the impact of gear use on habitat, bycatch and threatened species, populations and ecological communities, as well as maintaining eastern rock lobster stocks and byproduct stocks at sustainable levels.

The draft FMS contains seven broad goals, which if realised, will provide future generations with the same or improved opportunities to benefit from the valuable natural resources which the current generation enjoys. Some management measures proposed within the draft FMS to achieve these goals, and hence intergenerational equity, include:

- Development of a code of practice for the Lobster Fishery to address issues such as best practice techniques, disposal of wastes, handling of bycatch, etc.
- Introduction of a defined byproduct species list to restrict byproduct that may be taken by the Lobster Fishery
- Improved mandatory reporting to include interactions with threatened or protected marine species, catches of all retained species and trap loss in the Lobster Fishery
- Continued setting of a total allowable commercial catch (TACC) for eastern rock lobster annually by an independent Total Allowable Catch Setting and Review Committee
- Continued use and review of the compliance strategic plan including advisory and education programs to deter illegal activity and educate the broader community
- Review and amendment of the existing share forfeiture scheme, following the implementation of an endorsement suspension/share forfeiture scheme in other fisheries, to

ensure a consistent and complementary approach to compliance across all share management fisheries

- Development of a comprehensive performance monitoring and review program, the results of which will be publicly available.

There will be substantial benefits to future generations from the recent and continued declaration of a comprehensive, adequate and representative system of marine protected areas (such as marine parks, aquatic reserves and intertidal protected areas) that include a full range of marine biodiversity at ecosystem, habitat and species levels (Marine Park Authority, 2000). Future generations will also benefit from the data collected through the monitoring programs and future research proposed by the draft FMS.

F2.4 Conservation of biodiversity and ecological integrity

This principle incorporates the notion that conservation of biological diversity and ecological integrity should be a fundamental consideration in resource decision making. The draft FMS strongly adopts this principle, with one of the seven major goals being to "manage the Lobster Fishery in a manner that promotes the conservation of biological diversity in the marine environment". There are four objectives beneath that goal which specifically aim to address the following issues:

- Mitigating the impact of lobster fishing on ecosystem integrity (species, populations of species and ecological communities)
- Mitigating the impact of lobster fishing activities on non-retained species
- Mitigating the impact of activities within the fishery on marine and terrestrial habitat and their associated biota
- Preventing the introduction and translocation of marine pests and diseases by lobster fishing activities.

In order to achieve this goal and its objectives, there are 11 management responses in the draft FMS that directly address biodiversity and ecological integrity issues, including mapping lobster fishing grounds and assessing the intensity of fishing on each ground, using fishing closures to protect areas of key habitat, using best practice techniques for handling non-retained animals, introducing a code of practice for the fishery, continuing a periodic observer program to collect information on the quantity and composition of bycatch, modifying use of lobster fishing methods where their use is identified as being detrimental to fish habitat or associated biota, and responding effectively to marine pest and disease incursions.

The draft FMS also contains management initiatives which attempt to monitor the impact of the fishery on biodiversity, such as recording loss of traps, recording interactions with threatened and protected species, monitoring bycatch levels and mechanisms for taking action if the performance of the fishery relative to the goals of the strategy changes to a significant degree.

In conclusion, the draft FMS contains a comprehensive and appropriate package of measures for ensuring that the impacts of the commercial Lobster Fishery on biodiversity are properly managed.

F2.5 Improved valuation, pricing and incentive mechanisms

This principle relates to the use of schemes like user pays and incentive structures to promote efficiency in achieving environmental goals. The Lobster Fishery is a category 1 share management

fishery subject to full cost recovery. This management framework has provided for the issue of long term (10 year) shares that are renewed automatically, with statutory compensation payable if shares are cancelled. It has also provided for a market based trading scheme of shares. The share management scheme for the Lobster Fishery has provided greater incentives for stewardship and long term sustainability of the resource because the value of shares when traded are generally linked to investors' views about the health of the fishery and the anticipated returns on investment.

Although industry members have had some concern over the economic viability of the Lobster Fishery in recent years (reflected by a decrease in share trading prices) there are a number of management responses in the draft FMS which aim to promote long economic viability of lobster fishing. These management responses are supported by the Lobster MAC and include investigation into the use of minimum shareholdings to provide positive economic returns at the fishery level, developing a performance measure of trends in the commercial viability of fishing businesses based on net returns and identifying and promoting post harvest practices to ensure best returns per kilogram.

The Lobster Share Management Plan came into effect in 2000 providing shareholders with a statutory basis for the future of their fishery as well as objectives, performance indicators and trigger points (to be reviewed and updated following finalisation of the FMS) which aim to ensure that the fishery remains ecologically sustainable and economically viable.

The share management regime provides greater flexibility to shareholders in the fishery to be able to trade shares with each other. In the longer term, it can enable fishers to sell shares in the fisheries (or parts of fisheries) that they do not rely on in order to purchase shares in the fisheries (or parts of fisheries) that are important to their fishing businesses.

The category 1 share management scheme requires shareholders in the fishery to pay a periodic community contribution for their right of access to the fishery, additional to the normal licensing and management fees. The level of contribution will be determined through an independent economic review taking place within the next three years. In the interim a flat rate of $109 per shareholder per year will be charged.

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