

ACCESS TO FISHERIES RESOURCES ISSUES PAPER

Prepared for: Queensland Commercial Fishermen's Organisation

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EXECUTIVE SUMMARY

The commercial fishing industry is Australia's fifth largest primary export industry. The 1991/92 catch had a value of \$1289 million (Kailola *et al.* 1993) of which approximately 70% is exported. The industry employs approximately 30,000 people in catch and post-catch sectors (ABARE 1991).

Commercial fishers are licensed to provide seafood to the community and hence continued access to fisheries resources is vital to the seafood industry.

Commercial fisheries throughout Australia are subject to on-going restrictions which limit access to fisheries resources. Future pressures resulting from population growth in coastal areas, changes to fisheries management strategies, environmental zonings, Aboriginal land/sea claims, water-based recreational activities and a variety of other factors have the potential to restrict and influence fishing locations/practices and could therefore reduce the ability of commercial fishers to meet the increasing demand for seafood.

In recognition of the importance of ensuring continued access to fishing grounds/fish species and consequent seafood supply, the Queensland Commercial Fishermen's Organisation (QCFO) commissioned WBM Oceanics Australia to provide a report outlining current issues relating to access to fisheries resources by commercial fishers.

This report identifies key access issues in Australia and suggests priority areas for future investigation. The report also identifies action groups with the capacity to resolve the issues raised.

A wide range of issues with the potential to prevent or restrict access to fisheries resources have been considered in preparing this report. These have been grouped into high priority and priority issues.

High Priority Issues

Fisheries Access Rights

In many fisheries, fishing authorisations (licenses) do not guarantee continued access to the resource. Well defined fisheries access rights are required to provide the Fishing Industry with long-term security and facilitate catching and marketing sector efficiency and resource sustainability. *Action is required on this issue from Legislative Bodies, Fisheries Management Agencies and Commercial Fishing Organisations (see Section 3.1).*

Pollution and Habitat Destruction

The sustainability of commercial, recreational and indigenous fisheries depends on a "healthy" marine environment. As populations in many of Australia's coastal areas increase, further pressure will be placed on fisheries habitats by urban, agricultural and industrial development. Degradation of marine and estuarine environments has serious impacts on fisheries resources and threatens the viability of some inshore fisheries. *Urgent action to prevent habitat degradation is required from Approving Authorities, Fisheries Research Agencies, Environmental Management Agencies, Local Authorities, and Commercial and Recreational Fishing Organisations (see Section 3.2).*

Recreational Fishing

Recreational fishing is a popular outdoor activity in Australia. Increases in recreational fishing effort, illegal sale of seafood, lobbies to declare areas for recreational fishing only and to reallocate stocks from the commercial to the recreational sector all have the potential to seriously affect access to fisheries resources by commercial fishers. *Action is required on this issue from Fisheries Management Agencies, Fisheries Research Agencies and Commercial and Recreational Fishing Organisations (see Section 3.3).*

Indigenous Peoples Native Title/Land Claims

The potential impact of native title/land claims on access to fisheries resources is uncertain at present. However, some interpretations of the High Court (Mabo) decision could have a substantial impact on fisheries, including preventing access or making a share of commercial catches liable for claim. *Action is required on this issue from Commercial Fishing Organisations, Aboriginal and Islander Organisations, Fisheries Management and Research Agencies and Legislative Bodies (see Section 3.4).*

Marine and Estuarine Protected Areas (MEPA's)

Marine and estuarine areas are increasingly being subject to environmental regulations for conservation, scientific, educational and recreational purposes. While the Fishing Industry supports the protection of marine and estuarine areas, conflicts have arisen in the past regarding the objectives of MEPA's. For example, zoning of some areas has unnecessarily prevented commercial fishing. Zoning strategies which detrimentally affect commercial fisheries need to be justified and confirmed as an appropriate management strategy. *Action on this issue is required from MEPA Authorities, Environmental Management Agencies, Fisheries Management and Research Agencies, and Commercial and Recreational Fishing Organisations (see Section 3.5).*

Local Government Restrictions

Many of Australia's inshore net fishermen traverse beaches to launch boats and set or haul nets. A number of groups have lobbied Local Government to deny commercial fishermen access to beaches. Some Local Governments perceive that their region will be more attractive to tourists if commercial netting is restricted. Local Governments should not influence fisheries management regulations that are designed to ensure resource sustainability. *Resolution of this issue requires action from Local Governments, Fisheries Management Agencies and Commercial Fishing Organisations (see Section 3.6).*

Endangered Species Legislation

The Commonwealth and some State Governments have, or are in the process of, introducing Endangered Species Legislation that would cover both terrestrial and aquatic species. This legislation may have the potential to affect access to fisheries resources if responsibility for management of marine species is transferred away from fisheries management agencies. Inappropriate regulations could consider a particular species in isolation without taking into account the overall management of marine resources in the area. *Action on this issue is required from Environmental Management Agencies, Fisheries Management Agencies and Legislative Bodies (see Section 3.7).*

Contaminants

Closure of fishing areas due to concerns over possible contamination of product has the potential to substantially affect fisheries access. While such closures have been rare in Australia, their financial and marketing impact may be severe. Contaminants may include chemical pollutants, nutrients and exotic organisms. The closure of large areas or whole fisheries as a result of localised problems is of particular concern. *Action on this issue is required from Environmental Management Agencies, Legislative Bodies, Fisheries Management and Research Agencies and Commercial and Recreational Fishing Organisations (see Section 3.8).*

Priority Issues

In addition to the high priority issues discussed above, there are several other issues which may not require urgent or immediate attention, but their potential to further reduce access to fisheries resources is of concern and therefore they should be addressed as a priority. These include:

- Fisheries Management Closures - *reasons for closures need to be documented and their success or otherwise should be evaluated by Fisheries Management Agencies, Fisheries Research Agencies Commercial Fishing Organisations (see Section 4.1).*
- Mineral, Oil and Gas Industries - extraction operations associated with these industries have the potential to affect access to fisheries resources as a result of habitat degradation/alteration, effects to fish stocks, loss of food resources etc. *Consultation, compensation and environmental impact processes need to be improved necessitating action by Approving Authorities, Commercial Fishing Organisations, Environmental Management Agencies and Fisheries Management and Research Agencies (see Section 4.2)*
- Aquaculture - aquaculture activities in coastal waters are increasing and operations need to be appropriately located to avoid unnecessary conflicts with commercial fishing operations. *Increased liaison between Aquaculturists, Approving Authorities, Fisheries Research Agencies and Commercial Fishing Organisations is required (see Section 4.3)*
- Defence Closures - closures for military training exercises are not of significant concern at present but *increased liaison between Commercial Fishing Organisations and Defence Organisations would avoid potential future conflict (see Section 4.4).*
- Spoil Disposal - current management arrangements for dredge spoil disposal are generally satisfactory. However potential effects to fisheries access are likely to increase in conjunction with increasing dredge spoil disposal requirements. *Approving Authorities, Environmental Management Agencies and Fisheries Management Agencies need to ensure that appropriate consultation continues to occur with Commercial Fishing Organisations, environmental impact studies are conducted prior to designation of new spoil disposal areas near fishing grounds, and that existing spoil grounds are subject to at least one review of their suitability (see Section 4.5).*
- Shipping and Ports - fishing operations in port areas are likely to become more constrained as a result of increased shipping traffic and port usage. *Consultative mechanisms between Port Authorities and Commercial Fishing Organisations need to be improved to identify workable solutions. Fisheries Management and Research Agencies and Commercial Fishing Organisation must be given the opportunity to provide Port Authorities with relevant information on the effects of port-related developments (eg. navigation channel dredging) on fisheries resources and commercial fishing operations (see Section 4.6).*

- Research Closures - closure of areas for research purposes (other than for fisheries management) may prevent commercial fishing activities. *Environmental Management and Fisheries Management Agencies need to ensure commercial fishermen are consulted as early as practical in the closure proposal phase (to identify mitigating options), ensure that such closures are justified and appropriate for the proposed research, and that the research is undertaken as proposed. Research closures in zoned MEPAs should be part of zoning plans and not introduced subsequent to plan declaration. The issue of compensation for commercial fisherman disadvantaged by closures not related fisheries should also be addressed.*

Key Issues

In compiling this report, two key issues arose which were a factor in most of the specific access issues that have been outlined.

(i) The image of the Fishing Industry

Commercial fishers and fishing practices have a poor image in some sections of the community. Few people recognise the importance of the Fishing Industry to seafood supply or that fisheries are managed to ensure resource sustainability. This poor image has had influence in demands for reductions in commercial operations, calls for the introduction of protected areas and approvals for developments which may adversely effect fisheries habitat. *The Fishing Industry should implement an education/public awareness campaign to make the community aware of the industry's practices and benefits of the industry (see Section 5.1).*

(ii) The lack of data on the economic value of the Fishing Industry

Commercial fishers are often prevented from gaining access to fisheries resources for purported economic reasons. The economic significance of the industry (eg. compared with recreational fishing and tourism) is not well documented. *The Fishing Industry should support studies examining the economic significance of both commercial and recreational fishing (see Section 5.1).*

1.0 INTRODUCTION

The commercial fishing industry is Australia's fifth largest primary export industry. The 1991/92 catch had a value of \$1289 million (Kailola *et al.* 1993), of which approximately 70% is exported. The industry employs approximately 30,000 people in catch and post-catch sectors (ABARE 1991).

The market demand for seafood is increasing. There has been a steady rise in per capita consumption of seafood over the past two decades, partially due to the increased perception of seafood as a healthy food.

Australia is known for its diverse range of high quality seafood, an attribute heavily promoted by the tourism industry to international and domestic tourists. A study in Cairns (JCU 1993) found that seafood-based meals worth \$35 million are sold in tourist restaurants and hotels in the Cairns region annually and that 65% of those meals were purchased by visitors.

Maintenance and enhancement of seafood supplies is critical if the increasing market demand (resulting from population growth and tourism) is to be met.

Commercial fishers are licensed to provide seafood to the community. The commercial fishing industry's access to fisheries resources is vital.

Commercial fisheries throughout Australia are subject to on-going restrictions which limit access to fisheries resources. Future pressures resulting from population growth in coastal areas, changes to fisheries management strategies, environmental zonings, Aboriginal land/sea claims, water-based recreational activities and a variety of other factors have the potential to restrict and influence fishing locations/practices and could therefore reduce the ability of commercial fishers to meet the increasing demand for seafood.

In recognition of the importance of ensuring continued access to fishing grounds/species and consequent seafood supply, the Queensland Commercial Fishermen's Organisation (QCFO) commissioned WBM Oceanics Australia to provide a report outlining current issues relating to access to resources by commercial fishers.

This report identifies key access issues in Australia and suggests priority areas for future action/investigation. The report also identifies action groups which could participate in addressing the issues raised. It is based upon an earlier report commissioned by QCFO which discussed access issues in greater detail (WBM Oceanics Australia 1993) with particular emphasis on Queensland commercial fisheries.

2.0 ACTION GROUPS

The following is a list of generic titles that are used to refer to various groups who could take action in relation to addressing the issues identified in this report. A brief description of the basis of each group and a few examples (where appropriate) are given.

Aboriginal and Islander Organisations: Local, State and Commonwealth Councils, Agencies and Departments responsible for Aboriginal and Torres Strait Islander issues (eg. Local and Regional Community Councils, Commonwealth Authorities, State and Federal Departments).

Approving Authorities: Local government or state government departments responsible for approvals and issuing permits for the disturbance of marine environments.

Aquaculture Organisations: State and Commonwealth aquaculture industry groups.

Commercial Fishing Organisations: State and Commonwealth commercial fishing industry groups, commercial fishermen's co-operatives and organisations.

Defence Organisations: Army, Navy, Air Force.

Environmental Management Agencies: State and Commonwealth Departments and Agencies responsible for environmental management not specific to fisheries (eg. Queensland Department of Environment and Heritage, Environmental Protection Agencies, Department of Conservation and Land Management).

Fisheries Management Agencies: State and Commonwealth Government and semi-government Departments, Agencies or Authorities responsible for management of commercial and recreational fisheries (eg. QFMA, AFMA, Queensland Department of Primary Industries).

Fisheries Research Agencies: State and Commonwealth Government and semi-government Departments, Agencies etc., tertiary institutions and funding bodies involved in fisheries research (eg. CSIRO, FRDC, University of Queensland, NSW Fisheries).

Fishing Industry: Persons and parties deriving an income from commercial fishing.

Health Authorities: Government Departments and Authorities responsible for ensuring the suitability of seafood for human consumption (eg. Local, State and Commonwealth Health Departments, National Food Authority).

Legislative Bodies: State and Commonwealth Governments responsible for framing legislation.

Local Governments: Town/City/Shire Councils.

National/Marine Parks Authorities: State and Commonwealth Authorities and Agencies responsible for the conservation and management of marine and terrestrial habitats, MEPA's etc. (eg. National Parks and Wildlife Services, Great Barrier Reef Marine Park Authority).

Port Authorities: Authorities responsible for operation and management of shipping ports.

Recreational Fishing Organisations: Sport and recreational fishing clubs.

3.0 HIGH PRIORITY ISSUES

The issues discussed in this Section are those which should be addressed as a high priority to remove existing, and avoid future, conflicts over access to fisheries resources in Australia and secure access to seafood supplies. They are presented in no particular order of importance. Other priority issues regarding access to fisheries resources (eg. fisheries management closures, port development, extractive industries, defence closures) are described in Section 4.0.

3.1 FISHERIES ACCESS RIGHTS

Background

Fisheries resources are owned by the community. Commercial fishers are authorised (licensed) to harvest these resources on behalf of the community.

Commercial fishers generally believe that fishing authorisations constitute a form of access right. However, in many fisheries, this right is not recognised and there are no statutory provisions which require fishing licenses to be renewed, or for continuing access to traditional fishing grounds to be maintained.

The creation of clear access rights in fisheries tends to reduce conflicts, improve the quality of the catch, and conserve the fisheries resource. Access rights provide an incentive for fishers to maximise economic return for their share of the catch and to ensure the long-term sustainability of fisheries resources. They enable fishers to borrow money for investment in fisheries as they provide a security for the lender. The secure tenure afforded by clear access rights enables better planning of investment in fisheries.

Additionally, access rights provide a legal avenue for compensation should access be denied, if, for example, fishing grounds (or a fishery) are effected by reclamation or pollution or for reasons not related to resource sustainability.

Under Commonwealth Legislation, statutory fishing rights can be created through a plan of management for the fishery and may take the form of the right to take a quota of a certain species, or the right to use a boat-certain apparatus (or any other nature of access right) set out in the plan of management. The NSW Fisheries Property Rights Working Group has recently prepared an information booklet describing one possible approach to providing fisheries property rights (Anon, 1994).

Issues Requiring Attention

The granting of some form of fishing access rights as part of fishing authorisations is an important component in ensuring the Fishing Industry has long term security of access to fisheries resources and that such resources are conserved. They provide a mechanism for ensuring industry catching/marketing efficiency, resource sustainability and industry compensation if access to those resources are unnecessarily denied.

There is a need for relevant groups (shown in brackets) to:

- *make the community and Fisheries Management Agencies aware of the importance of access rights to responsible fisheries management (Commercial Fishing Organisations)*
- *ensure that fishing authorisations (eg. licenses) are recognised as access rights in legislation (Legislative Bodies)*
- *clearly define the rights and conditions attached to fishing authorisations (Fisheries Management Agencies, Legislative Bodies)*
- *include arrangements regarding access rights in a plan of management developed co-operatively with stakeholders in each fishery (Fisheries Management Agencies)*

3.2 POLLUTION AND HABITAT DESTRUCTION

Background

The economic viability of commercial fishing operations depends upon a "healthy" marine environment. Degradation of marine habitats has occurred in the past to the detriment of commercially and recreationally harvested fish stocks.

Waste disposal practices (eg. sewage disposal, industrial effluent, stormwater inputs) may affect fisheries access both directly and indirectly. Fisheries in many parts of the world have been decimated as a result of poor waste disposal strategies.

Habitat alteration involving urban developments, waterway catchment modifications, coastal engineering works and land drainage for urban/agricultural uses has also resulted in the loss or degradation of extensive areas. The commercial fisheries production potential of entire estuaries and inland river systems have been reduced as a result of loss of food resources, nutrient/contaminant inputs and modifications to stream flows/fish migration

patterns via dams and weirs. Land drainage has resulted in acid water discharge (as a result of disturbing acid sulphate soils), extending the area of impact from not only the drained land but also to the adjacent waterways.

The majority of coastal development is occurring adjacent to estuarine areas which include important habitat areas (spawning/nursery/feeding grounds) for many species of direct fisheries importance. Degradation of estuarine water quality as a result of development (eg. from urban runoff, industrial discharges) can affect fisheries resources by increasing species mortality and reducing the viability of important habitat such as wetlands. Reclamation of coastal areas may lead to loss of entire habitat types, altering the community composition of fish and other groups in adjacent waters.

Future population growth will result in coastal areas becoming more urbanised. Unless properly planned and implemented, catering for population growth could lead to degradation of fisheries habitat as a result of:

- increased sediment loads and other pollutant inputs from urban areas (eg. oils, fertilisers, heavy metals) to streams/coastal waters
- more intensive agricultural practises to supply an increased population resulting in increased sediment loads and other pollutant inputs e.g. pesticides
- loss of riparian vegetation resulting in bank erosion/sedimentation problems
- increased recreational usage of waterways with associated pollution, noise, bank erosion etc.
- increased water demand leading to construction of dams/reservoirs interrupting fish/crustacean movement patterns

There is a clear need for relevant authorities to develop planning arrangements to minimise the impact of population growth by incorporating buffer zones and formulating strategies to ensure appropriate land usage adjacent to the aquatic environment.

In many instances, impacts to fisheries resources could have been avoided if information was available which identified and mapped habitats important to fisheries. The lack of such information often prevents impact assessment and identification of the need to implement restoration programmes.

Issues Requiring Attention

Waste disposal (including stormwater) and coastal development practices need to be improved and a better understanding gained of the effects of such practices on habitats and species important to fisheries.

There is a need for relevant groups (shown in brackets) to:

- *ensure that fisheries considerations are included as a component of environmental impact assessments (Approving Authorities, Environmental Management Agencies)*
- *ensure that information is available to identify and map habitats of high fisheries value (Commercial Fishing Organisations, Fisheries Research Agencies, Fisheries Management Agencies, Environmental Management Agencies)*
- *ensure authorities responsible for approving discharges or habitat modification are aware of any potential adverse effects to commercial and recreational fishing (and fisheries productivity in general) and that appropriate controls/monitoring studies are implemented (Commercial and Recreational Fishing Organisations, Environmental Management Agencies, Fisheries Research Agencies, Approving Authorities)*
- *ensure planning arrangements are developed to minimise the impact of population growth on fisheries habitat (Local Government, Fisheries Management Agencies, Environmental Management Agencies)*
- *ensure environmental and seafood monitoring programs for contaminants are implemented and that such programs identify appropriate actions before a public health risk is created (Health Authorities, Fisheries Management Agencies, Commercial and Recreational Fishing Organisations)*

3.3 RECREATIONAL FISHING

Background

Recreational fishing is a popular outdoor activity in Australia. Studies in Queensland have shown that approximately 40% of people engage in angling (Neumann and Hundloe 1986). Not all of these could be described as regular dedicated fishers. National surveys indicate that about 20% of anglers are in this category, and about 5% of those belong to recreational fishing clubs (i.e. approximately 1% of anglers are dedicated fishers belonging to clubs).

(i) *Future Fishing Effort*

The increase in population growth in most coastal regions will result in a proportional increase in recreational fishing effort. For example, Queensland's population is anticipated to increase by approximately 1 million in the next decade potentially resulting in approximately 400,000 additional anglers. Angler effort will also increase significantly due to improved gear technology and additional leisure time availability. Conflicts with commercial fishing operations will become more common as recreational fishers extend their sphere of operation.

Recreational fishing landings for some fisheries may presently exceed commercial landings (eg. tailor, Pollock 1980) especially for inshore areas, and in some cases may be up to a hundred times greater (Kearney 1991).

The effect of a large future increase in angler numbers is of significant concern in terms of the viability of many fish stocks. Anglers fish primarily for relaxation/recreation (Neumann and Hundloe 1986 concluded only 12% of anglers fish for food). Declining individual angler catch rates will not necessarily result in decreased effort being applied to stocks, as anglers may continue to fish for "the fun of it" even when stock levels are dangerously low.

The Ecologically Sustainable Development Working Group (1991) noted that the growing contribution of recreational fishing (particularly in river, estuarine and some marine fisheries) to total fish mortality was a factor for concern.

Commercial fishers can therefore expect greater interaction with recreational fishermen, not only from their increasing physical presence (boats, vehicles etc.) but also from decreased stock availability. Eventually recreational fishing may significantly affect the viability of fisheries resources including those targeted by both commercial and recreational fishing operations. There is a clear need to manage recreational fishing effort although this has not been the focus of fisheries management to date, and insufficient consideration has been given to the effect of recreational fishing on fish stocks.

(ii) *Illegal Fish Sales*

Recreational fishers operating illegally (eg. selling catches) may have a significant adverse effect on fish stocks. Illegal catches in some areas are common and are thought to exceed commercial landings, thereby reducing the area of suitable (in terms of catch and economic reward) commercial fishing grounds. Future

increases in seafood prices (as a result of a increased demand and possible reductions in seafood supply) could create incentive for illegal fishing. This could potentially result in reduced commercial catches.

(iii) *Stock Reallocation*

Recreational fishing groups have strongly lobbied politicians and supplied them with often unsubstantiated information on the benefits of designating areas exclusively for recreational fishing and implementing additional commercial catch or gear limitations.

This pressure to reallocate fish stocks and fishing areas to recreational fishers will continue because there is little information on the nature of recreational fishing activities (catch rates, effects on fish stocks, etc.) or their economic value. This prevents assessment of the effect of recreational fishing on fish stocks or the contribution made to regional economies. Additionally, some commercial fishing operations have a poor public image and a number of erroneous perceptions are held by many members of the public.

The reasons behind prohibiting commercial operations in favour of recreational fisheries in the past, have generally not been documented. This, and the absence of follow-up studies, hinders future assessment of the value in maintaining the prohibition or the prohibition's degree of success in achieving its objective. For these reasons, many such restrictions tend to remain indefinitely once in place and are rarely evaluated.

Issues Requiring Attention

There is an urgent need to fully address the role of recreational fishing in fisheries access and resource issues.

There is a need for relevant groups (shown in brackets) to:

- *ensure that recreational fishing is managed as part of population growth (Fisheries Management Agencies)*
- *ensure that the reasons for altering commercial fisheries management practices are justified and documented (Fisheries Management Agencies, Fisheries Research Agencies, Commercial Fishing Organisations)*

- *ensure studies are undertaken to assess the success, or otherwise, of management strategies which have been introduced in favour of recreational fishing to the detriment of commercial operations (Commercial and Recreational Fishing Organisations, Fisheries Management Agencies, Fisheries Research Agencies)*
- *support research directed at assessing recreational fisheries (eg. landings relative to commercial operations, habitat effects, effects to fish stocks). Particular emphasis should be placed on investigations that define the economic significance of commercial and recreational fisheries (Fisheries Research Agencies, Commercial and Recreational Fishing Organisations)*
- *initiate an education campaign informing the community of the value of the Fishing Industry. Such a campaign should focus on economic contributions, seafood supply and employment (Commercial Fishing Organisations, Fisheries Management Agencies)*

3.4 INDIGENOUS PEOPLES NATIVE TITLE AND LAND CLAIMS

Background

(i) *Commonwealth Legislation*

The issue of granting Aboriginal communities native title in respect of their occupation, tradition and customs for a given area has received considerable attention following the 3 June 1992 High Court Mabo decision. This decision granted title to the Meriam people of Mer Island (Murray Island, Torres Strait) and included all lands to the High Water Mark. The Commonwealth enacted legislation (The Native Title Act 1993), binding all State Governments, which provides a national regime for future dealings with native title. The States and Territories have constitutional responsibilities for land and resource management within their jurisdictions and have complementary native title legislation and a legislation dealing with Aboriginal land rights issues (eg. Qld Aboriginal Land Act 1991).

The Mabo claim did not include the waters surrounding the island, although these were specifically excluded to establish a legal principal and it should not be inferred that tidal waters cannot be subject to native title claims. Newspaper articles reported that the past Mer Island Community Council Chairman considered the oceans around the islands to be as important to his people as the islands themselves and that a Mabo-style claim would be made for fishing grounds in the Torres Strait.

Aboriginal communities in several other areas have recently indicated that claims over tidal waters would be proposed under the Native Title Act. At least one claim has already been made (eg. Wik people claim on Western Cape York).

The High Court decision regarding Mabo did not make specific rulings on whether native title should apply to the sea or its resources. In the Discussion Paper regarding Mabo issued by the Commonwealth as a prelude to the development of legislation, the Commonwealth indicated its intention to validate all existing fishing licences, permits and other authorisations. However this process has not, as yet, occurred in all fisheries jurisdictions in Australia.

The legal status of native title claims, and rights conferred by granting of native title, are uncertain at present. Native title may include rights to fish and harvest marine resources and these may not be extinguished by regulation of them (Pearson 1994). Similarly, the relationship between Commonwealth legislation and State legislation is still being debated but present interpretations suggest that Commonwealth laws override State or Territory laws. Nevertheless it must be recognised that some interpretations made in relation to Commonwealth legislation could, if implemented, seriously influence the Fishing Industry's access to fisheries resources. For example, native title owners may be able to prevent commercial fishers access to certain areas. Additionally, there have recently been instances where indigenous communities have proposed to claim access to a share of the fisheries resources in an area where they have had a historical customary involvement in the fishery. The effects of such claims in a highly regulated fishery are uncertain.

(ii) State/Territory Legislation

Some States have Native Title legislation (which complements Commonwealth Native Title legislation) and Aboriginal Land Act legislation. The jurisdiction of Land Act legislation varies between States and Territories. For example, the Queensland Aboriginal Land Act 1991 precludes the waters and beds of the sea from being available for claim. The provisions under such an Act may result in native title claims having minimal impact on fisheries although this is still uncertain. There are also stringent notification and consultation requirements which must be adhered to while making claims under the Acts. In the Northern Territory, their Aboriginal Land Act enables Aboriginal people to claim rivers, coastal lands and waters (up to 2 km offshore) which could significantly affect access fisheries resources.

Although the Commonwealth intends to validate existing fishing authorisations there are still areas of uncertainty, particularly in relation to the rights conferred by native title or land claims and how these may effect access to fishing resources by commercial fishers.

There is also a question of uncertainty regarding new fishing licences or in cases where fishing rights technically cease to exist because of a change to the management system or the renewal of a Management Plan.

Issues Requiring Attention

The issue of indigenous peoples native title and land claims requires urgent attention and legal clarification. It has the potential to result in losses of fishing grounds, disruptions to fisheries management strategies, conflict between fishers and Aboriginal communities, potential devaluation of fishing licences for certain areas and closure of some fisheries.

There is a need for relevant groups (shown in brackets) to:

- *initiate/maintain discussions between fishers and Aboriginal community representatives (Commercial Fishing Organisations, Aboriginal and Islander Organisations)*
- *as a priority, brief all politicians on the importance of the Fishing Industry. The need for fishing authorisations to be maintained in considering potential native title/land claims when the management system changes must also be addressed (Commercial Fishing Organisations, Fisheries Management Agencies)*
- *pursue with Governments (State and Commonwealth), processes which ensure that decision makers are aware of potential impacts to fisheries access (Fisheries Management Agencies, Commercial Fishing Organisations)*
- *ensure that impacts on access to fisheries resources are considered in any legislative response to native title/land claims (Legislative Bodies, Commercial Fishing Organisations)*

3.5 MEPA's

Background

Marine and estuarine areas are increasingly being subject to environmental protection regulations for preservation, conservation, scientific, educational and recreational purposes. Marine and Estuarine Protection Areas (MEPA's) include Marine Parks (eg. Great Barrier Reef Marine Park) and a range of reserves for fisheries purposes declared by State governments (eg. SEPP 14 wetlands, Fish Habitat Reserves).

MEPA regulations vary in terms of whether any, or certain types of, commercial fishing operations are permissible within declared areas.

Reserves for fisheries purposes are declared over areas which contain habitats important to fisheries (eg. seagrass beds) and are declared to ensure the sustainability of both commercial and recreational fisheries. Commercial fishing is generally permitted in such Reserves.

Some commercial fishing activities are perceived by the public to have a detrimental effect on some marine resources (eg. to MEPA habitats or non-commercial fauna associated with the area) and some conservation organisations are opposed to some types of commercial fishing. In many instances, these perceptions are unfounded and contrary to the results of scientific assessments (for example, concerns relating to trawlers taking reef fish). This is of particular concern when valuable fisheries resources occur in areas under consideration for MEPA declaration. In several instances, commercial fishing operations traditionally conducted in an area have been unnecessarily closed as a result of a MEPA declaration.

The public is placing greater pressure on resource managers to designate areas for passive means of exploitation whereby people can experience areas which are "undisturbed". Such designations may be placed on areas that are considered important for the conservation of protected fauna such as mammals (eg. whale calving grounds).

Environmental protection agencies/Government Departments generally liaise with commercial fishing representatives and fisheries managers prior to MEPA declaration or zoning amendments. It is now recognised that consultation, initiated sufficiently early in the MEPA planning process, may avoid unnecessary conflicts and effects to fishing operations. However, the extent to which MEPA declaration can override existing fisheries practices and management strategies for fisheries within the declared areas is often unclear. Such confusions are best able to be resolved by negotiation (see below).

The present system operating for the Great Barrier Reef Marine Park Region (GBRMMPR) is a successful model for MEPAs. It is based on extensive consultation, and allows both fisheries management agencies and the MEPA agency (Great Barrier Reef Marine Park Authority) to meet their objectives. The system involves a large MEPA area with multi-use zoning. The management of fisheries within the GBRMMPR is undertaken by the relevant State and Commonwealth fisheries agencies. Consultative committee has been established that provides fisheries managers and other major users of the Park the opportunity for involvement in decision making.

National Parks (terrestrial areas) also have the potential to affect commercial fishing by prohibiting fishers traditional access to coastal areas through the National Park. Additionally, some National Parks include intertidal areas. This situation results in the National Park regulations having direct control over fishing activities.

Memorandums of Understanding (MOUs), documents which define a formal consultative mechanism between the MEPA agency and the Fishing Industry, would be of great value in recognising areas of management responsibility and ensuring that the nature of commercial fishing activities are considered in MEPA management planning process. These should be updated at regular intervals, particularly if management strategies or plans alter to take account of changing management needs and industry characteristics. The recently signed Memorandum of Understanding between the QCFO, GBRMPA and DEH for the Barrier Reef region provides an example of the nature of such documents.

Issues Requiring Attention

The declaration of environmental protection areas is increasing in response to a community attitude that additional marine areas need to be set aside for conservation purposes. Commercial fishing, in some cases, is perceived to be at odds with the conservation ethic because of potential detrimental effects to marine habitat and fish populations.

There is a need for relevant groups (shown in brackets) to:

- *ensure fisheries resources in MEPAs are sustainably utilised (Fisheries Management Agencies)*
- *ensure that sustainable multiple use of fisheries resources is an objective of all MEPA legislation (Environmental Management Agencies, National/Marine Parks Authorities, Fisheries Management Agencies, Legislative Bodies, Commercial Fishing Organisations).*
- *ensure that a well defined consultative mechanism exists with MEPA agencies (Commercial and Recreational Fishing Organisations, Fisheries Management Agencies, Environmental Management Agencies)*
- *pursue Memorandums of Understanding on consultative processes with relevant agencies (MEPA agencies, Commercial Fishing Organisations, Fisheries Management Agencies)*

- *undertake research into quantifying the effects of commercial fishing operations (eg. trawling) on marine habitats and investigations aimed at reducing any detrimental effects (Fisheries Research Agencies)*

3.6 LOCAL GOVERNMENT RESTRICTIONS

Background

Many inshore netting operations in Australia are shore-based. Fishers traverse beaches to launch boats and set or haul nets.

Commercial fishing operations on beaches are becoming more conspicuous as a result of the increasing use of beaches for recreational purposes. Large net catches of fish can cause public concern, although such catches are made under a fisheries management plan designed to ensure resource sustainability and are taken to satisfy a market demand.

Some community groups, conservation organisations and recreational fishers are lobbying Local Governments to deny commercial fishers access to beaches as they consider commercial fishing adversely affects angling catches and is harmful to the environment.

Some Local Governments perceive that a reduction in commercial fishing levels will increase the appeal of their Shire to recreational fishers and generate economic benefits greater than those that arise from commercial fishing operations. Fishers are presently prevented from using many beaches near urban or tourist centres. These restrictions directly affect fisheries management strategies.

The trend to close beach access could have severe effects upon inshore fishing operations in the event several contiguous Local Governments undertook such prohibitions. Each may have the belief that banning commercial fishing would increase tourism in their region by attracting anglers and/or tourists. Their collective actions may result in the closure of large areas of the coast to commercial fishing. In such a situation, the tourism benefits to individual Local Governments may be minimal, yet the adverse effects to the commercial fishery and the economy would be substantial.

Issues Requiring Attention

The use of Local Government regulations to control the activities of a commercial fishery is disruptive to both the management of the fishery and the fishing industry. Local Governments should not be able to influence fisheries management practices, as regulations imposed by Local Governments may not be in the interests of ensuring the sustainability of the fishery.

There is a need for relevant groups (shown in brackets) to:

- *educate Local Government and the community on the benefits of the seafood industry to the economy (eg. employment, tourist demand for fresh local seafood) and the adverse effects of preventing access to fisheries resources. Seafood Fairs/Expos have often highlighted awareness of the Industry in communities with positive results (Commercial Fishing Organisations, Fisheries Management Agencies)*
- *inform Local Government that their regulations should not interfere with licensed fishing operations. The approach employed could involve either consultation or introducing specific legislation, if existing legislation is insufficient (Fisheries Management Agencies, Legislative Bodies)*
- *evaluate the benefits of formulating a Code of Conduct, which could be supported and adhered to by beach fishermen (Commercial Fishing Organisations, Fisheries Management Agencies)*

3.7 ENDANGERED SPECIES LEGISLATION

Background

The Commonwealth and some State Governments have or are in the process, of introducing Endangered Species Legislation. The Legislation as proposed would cover marine species.

The Government agency responsible for determining whether a marine species is endangered or administering the Endangered Species Legislation is uncertain. The criteria for determining endangered species need to be clearly defined. Conservation agencies may use different criteria from agencies responsible for fisheries management. The information used to assess whether the criteria are met or otherwise must be supported by appropriate scientific data.

The Government agency responsible for administering the Legislation should adopt an extensive consultative plan in proposing a species for listing as Endangered and formulating management measures to protect that species.

This could involve preparation of a Draft Management Plan for the species under consideration (developed in conjunction with relevant interest groups) released for public comment. A formal Management Plan could then be implemented and necessary management measures introduced, with all affected parties having an understanding of the basis and need for such measures.

Administration of the Endangered Species Legislation for marine species needs to include Fisheries Management Agencies to avoid duplication of responsibility and unnecessary restrictions on access to fisheries resources. Regulations could, if framed or administered inappropriately, consider a particular species in isolation and not take into account the overall management of marine resources in the area.

The responsibility for management of endangered marine species should include the fisheries agencies. Specific measures to protect endangered species should be defined in appropriate Fisheries Management Plans.

Issues Requiring Attention

There is a need for relevant groups (shown in brackets) to:

- *ensure that criteria for determining the conservation status of marine animals in regard to Endangered Species Legislation are clearly defined. The Fishing Industry should be consulted in association with proposed listings and associated management measures (Environmental Management Agencies, Fisheries Management Agencies, Fisheries Research Agencies).*
- *ensure that the introduction of Endangered Species Legislation does not result in a fragmentation of responsibility for marine resources. Fisheries agencies should be included in administering Endangered Species Legislation for marine species and defining specific measures to protect endangered species (Legislative Bodies, Fisheries Management Agencies, Environmental Management Agencies).*
- *ensure that Endangered Species Legislation incorporates a defence for the accidental taking of endangered species as presently occurs in the Queensland Nature Conservation Act (Environmental Management Agencies, Fisheries Management Agencies, Legislative Bodies).*

3.8 CONTAMINANTS

Background

Closure of fishing areas due to concerns over possible contamination of nearby fauna has the potential to substantially affect fisheries access. To date, areas that have been closed to fishing operations for pollution concerns are relatively few. Most are generally small in extent being located immediately adjacent to discharge points. However, overseas experience suggests the continuing levels of pollutant input may result in the closure of larger areas.

Contaminated product may be unsuitable for human consumption and occur over a broad area (as a result of waste dispersal or movement of fauna). Detection of contaminants in some Australian seafood products such as mercury in shark, arsenic in crustaceans, zinc in oysters and chlordane in fish (eg. as a result of sewage disposal) has led to public concern over potential health effects from consuming contaminated products. In some instances this has affected seafood sales, although the consumption of such seafood may pose a negligible health risk.

Sewage disposal into marine areas is likely to become a more prominent issue as a consequence of coastal population growth. The Fishing Industry has suffered in the past from media campaigns associated with sewage related contaminants (ie health risks from eating seafood products caught near outfalls).

Pollution of marine habitats or contamination of fisheries resources results in a loss of income for the Fishing Industry. As examples; the NSW fishing industry lost approximately \$250,000 due to a closure associated with dioxin in the upper reaches of Sydney Harbour (Leadbitter and Doohan 1992). A mechanism needs to be put in place whereby the party responsible for the pollution/habitat destruction is required to provide compensation to the Fishing Industry. This is particularly important in situations where entire fisheries may be affected and perhaps closed (eg. due to an oil spill; industry related heavy metal/dioxin contamination of seafood products).

Contaminants that may affect fisheries resources also include exotic (introduced) organisms. The most common method of introduction of such organisms is via ship ballast water. This issue is becoming of significant concern as a result of recent introductions and projected increases in shipping traffic volume/extent.

Exotic starfish, fish and toxic algae are reported to have been introduced to Australia by this mechanism. The effects of such introductions on fisheries resources depend upon the species under consideration but there is little doubt the potential impacts are enormous.

For example, some shellfish (mussels, scallops) in New Zealand have been recently (January and July 1993) contaminated by a toxic algae probably introduced by ballast water discharges. This resulted in the Government authorities placing a ban on the harvesting of all shellfish species including those not identified as being contaminated. The effect on the industry in terms of lost earnings and market image has been enormous. Unaffected mussels exported to Japan prior to the most recent ban were not unloaded because of perceived health risks. Mussel aquaculture operations in Tasmania have been closed as a result of toxic algae contamination apparently related to their introduction by ballast water.

A similar situation (to that in New Zealand where all of a particular type of species, including those not contaminated were banned) could occur in Australia where an exotic algae could infect, for example, Bass Strait scallops and the export of all Australian scallops could be banned by the Australian Quarantine Service (AQS), thus affecting the Queensland scallop fishery. As a result, all Australian export scallops would suffer in terms of market image, potentially affecting long-term marketing. A similar scenario did occur where Queensland spanner crabs were reported as having unacceptable levels of cadmium. As a result all crab exports from Australia were banned until the issue was clarified.

A process needs to be developed to prevent adverse effects resulting from discharge of ballast water. This could include treatment of water or legislation to prohibit ballast water discharge. Options to control the spread of introduced organisms should be investigated. It is recognised that these issues are currently the subject of on-going research, however given the potential damage to the Fishing Industry and marine resources their priority should be paramount.

Formulation of a contingency plan to cater for contamination problems (eg. from ballast water or effluent discharges) is also a high priority. The main aim of such a plan should be to ensure that marketing of seafood products which are not influenced by the contaminant is not affected. The plan would need to provide a mechanism to close affected areas (eg. regional closures) and avoid any need to prohibit harvesting/export of the species on a nation-wide basis (eg. as occurred with spanner crabs, see above). The system would have to clearly demonstrate that regional closures were effective and ensure that contaminated product could not be sold in order to guarantee purchasers (especially overseas importers) of high quality products

Issues Requiring Attention

Contamination of seafood should be of major concern to the Fishing Industry. Irrespective of whether other access issues are resolved, the future domestic and international market demand for Queensland seafood could suffer long-term damage unless this issue is addressed.

There is a need for relevant groups (shown in brackets) to:

- *take steps to ensure that substances likely to contaminate seafood (eg. resulting from effluent inputs, industrial discharges) are not introduced into the marine environment. While it is recognised that total elimination of such inputs may not be achievable, all efforts need to be made to minimise these inputs (Environmental Management Agencies, Legislative Bodies)*
- *ensure appropriate seafood testing/monitoring programmes and investigatory strategies for contaminants are in place to ensure human health issues are addressed (Health Authorities, Fisheries Management Agencies, Commercial Fishing Organisations)*
- *ensure that appropriate testing/monitoring programs and investigatory strategies for ballast water are in place to prevent the introduction of exotic marine organisms. This may require the introduction of specific legislation and development of ballast water treatment techniques (Legislative Bodies, Environmental Management Agencies)*
- *ensure that once introduced species are detected, every practical method of controlling their spread (and, if practical, eradication) is undertaken (Fisheries Management Agencies, Environmental Management Agencies)*
- *develop a contingency plan to minimise the extent of closures and potential marketing effects resulting from contaminated products (Fisheries Management Agencies, Health Authorities, Commercial Fishing Organisations, Fisheries Research Agencies).*

4.0 PRIORITY ISSUES

In addition to the major issues already discussed, there are several other issues which may influence commercial fishers' access to fisheries resources. These issues have the potential to further reduce access to fisheries resources and therefore they should be addressed as a priority.

4.1 FISHERIES MANAGEMENT CLOSURES

Background

Fisheries management strategies for commercial fisheries often involve prohibiting all, or some, forms of commercial fishing in defined areas. The reasons behind such closures are varied but may include; protection of nursery/spawning grounds, reduction of competition between different components of a fishery targeting the same species, optimising yields from the resource, economic rationalisation, scientific assessment of fishing effects, and management efficiency. Other closures for fisheries management purposes may relate to recreational fishing (see Section 3.3) and environmental pollution/contamination (see Section 3.8).

The majority of closures for fisheries management purposes involve a consultation phase with the Fishing Industry. Difficulties for the Fishing Industry generally arise when insufficient information is available to validate proposed management strategies. In some instances, this situation leads to political decisions being made, often to the detriment of efficient fisheries management.

Issues Requiring Attention

There is a need for the Fishing Industry to ensure that any management-related closures or gear restrictions are based upon scientific evidence and necessary associated information.

There is a need for relevant groups (shown in brackets) to:

- *ensure fisheries are managed in close consultation with the fishing industry, and based on sound acceptable economic, marketing, ecological and other information (Fisheries Management Agencies, Commercial Fishing Organisations)*
- *undertake research directed at providing data for, and assessing the effects of, fisheries management strategies and the need to maintain such strategies (Fisheries Management Agencies, Fisheries Research Agencies)*

- *ensure the reasons for altering commercial fisheries management practices are documented (Fisheries Management Agencies, Fisheries Research Agencies, Commercial Fishing Organisations)*

4.2 MINERAL, OIL AND GAS INDUSTRIES

Background

Sand and gravel extraction in many estuarine areas has altered fishing practices and in most cases resulted in loss of fisheries habitat. In many estuaries, sand extraction operations have completely changed the nature of the river (eg. depth, flows) and consequently altered fish community abundance/composition. Shallow sand banks used as fish feeding grounds have been removed. Poor treatment of dredge tailwaters (eg. lack of settlement ponds) has led to the discharge of sediment-laden waters adversely affecting adjacent areas, some of which may be particularly susceptible to siltation (eg. seagrass beds).

Mineral extraction operations (eg. sand mining) in coastal foreshore areas could prevent fishers from traversing beaches or indirectly affect the ecology of adjacent waters (eg. via habitat removal, water quality effects or disruptions to coastal sedimentary processes).

Significant mineral, oil and gas reserves are known to exist in Australian waters. Although mining proposals in highly sensitive areas have so far been unsuccessful, the issue of oil and gas exploitation is of concern to the Fishing Industry and conservation groups. If approved, mineral extraction may leave the seabed unsuitable for trawling which would be of major concern in prime fishing areas. Areas surrounding the extraction process could be closed to fishing during the life of the operation. Extraction operations could adversely affect fish stocks either directly (eg. mortality of target organisms) or indirectly (eg. habitat alteration, loss of food resources, alterations to distribution patterns of target species).

Unfortunately, very little information is available on the effects of mineral, oil or gas extraction operations, particularly in estuaries. Although environmental impact studies are generally required for project approval, monitoring or follow-up studies to verify the predicted impacts and identify opportunities to minimise any adverse effects have not, until recent years, been a widely adopted practice.

Issues Requiring Attention

There is a need for relevant groups (shown in brackets) to:

- *establish a well defined consultation process with extractive industries (Commercial Fishing Organisations, Fisheries Management Agencies)*
- *ensure that EIS assessments for extractive industry consider the relative value of fisheries (Approving Authorities, Fisheries Management Agencies, Environmental Management Agencies, Extractive Industry Groups)*
- *examine options to provide for compensation/rehabilitation in relation to the mineral, oil and gas industries (Legislative Bodies, Environmental Management Agencies, Commercial Fishing Organisations)*
- *ensure that the standard of environmental impact studies is commensurate with potential impacts on fisheries resources and that appropriate monitoring studies are established (Approving Authorities, Extractive Industry Groups, Fisheries Management Agencies, Commercial Fishing Organisations)*

4.3 AQUACULTURE

Background

The future for aquaculture in Australia is promising and the number of coastal aquaculture operations is growing. Aquaculture operations generally supply a low volume specialist market and it is unlikely that aquaculture in Australia will ever be able to replace wild harvest fisheries in terms of seafood supply (Morton and Tilbury 1993).

Aquaculture operations involving fish pen farming and shellfish culture generally require some form of control over their area of operation to prevent access by unauthorised persons which would include commercial fishers.

The number of sites suitable for such aquaculture operations (generally sheltered, unpolluted inshore areas) are limited and most are subject to some form of existing commercial fishing.

The granting of permits for coastal aquaculture ventures, particularly large scale operations, could result in a loss of fishing grounds and fisheries habitat. In some instances, this may involve entire bays. The situation at present is not a cause for significant concern although this may change as the profitability of aquaculture improves and the public demand for seafood increases.

Issues Requiring Attention

There is a need for relevant groups (shown in brackets) to:

- *establish a consultative mechanism and seek to resolve access issues by negotiation (Aquaculture Organisations, Fisheries Management Agencies, Commercial Fishing Organisations)*
- *ensure that those responsible for approving aquaculture operations are aware of effects to commercial fishing practices in the area (Approving Authorities, Fisheries Management Agencies, Commercial Fishing Organisations)*
- *seek a formalised liaison role in planning studies which aim to identify areas suitable for aquaculture (Commercial Fishing Organisations)*

4.4 DEFENCE CLOSURES

Background

Some coastal areas are permanently or periodically closed to all forms of fishing to allow military training/exercises to occur. Coastal lands are used as bombing ranges and adjacent waters may be closed for safety purposes.

In general, such closures have relatively minor effects upon commercial fishing and most existing closed areas have been in place for many years. However, in some instances military exercises have inadvertently occurred in areas seasonally important to regional fisheries. Discussions between local representatives and military personnel have identified options to reduce future conflicts.

It is unlikely that the extent of military closures will increase to significant levels of concern in the near future although it is possible that some specific areas could be closed.

Issues Requiring Attention

There is a need for relevant groups (shown in brackets) to:

- *inform Defence Organisations of the importance of particular Defence Areas to commercial fishing (Commercial Fishing Organisations).*
- *involve local Fishing Industry representatives in planning stages of proposed coastal exercises so that information on fishing activities near the Defence Area could be quickly obtained (Defence Organisations)*

4.5 SPOIL DISPOSAL

Background

The use of marine areas for disposal of dredge spoil material from waterfront development, port areas and navigation channels may lead to a loss in fishing grounds and/or fisheries resources. Areas may be rendered unsuitable for trawling by physical alteration and adverse biological effects to fish stocks may occur if the spoil disposal area is inappropriately located (eg. in an inshore nursery area). Fine grained material (eg. silts) may disperse from the spoil ground to adjacent areas of importance to fisheries.

Dredge spoil disposal strategies directed at minimising environmental effects are becoming commonplace. However, even in the most well planned operation, some adverse effects (albeit relatively minor), may occur. In general, spoil grounds have well specified boundaries, although some may not be appropriately located and more suitable sites may be available.

The requirements for capital dredge spoil disposal areas will increase in response to the growth in coastal development containing dredged navigation channels and harbour areas. Maintenance dredging of existing and future navigation channels and port areas will subsequently generate increasing quantities of fine grained and/or contaminated material. This trend will lead to potential conflicts with fishing operations, reducing fishing grounds and potentially reducing fish stock abundances in some areas unless suitable controls are exerted.

Issues Requiring Attention

Although existing procedures to address this issue are satisfactory, the influence of dredge spoil disposal activities on access to fisheries resources will tend to increase in the future as a result of increased coastal development.

There is a need for relevant groups (shown in brackets) to:

- *ensure that existing designated spoil grounds are subject to at least one review of suitability with respect to fisheries interests (Environmental Management Agencies, Fisheries Management Agencies, Commercial and Recreational Fishing Organisations)*
- *require that appropriate environmental studies are completed prior to the designation of spoil grounds (Approving Authorities, Environmental Management Agencies)*

- *ensure that commercial fishing organisations/representatives are consulted prior to all spoil dumping exercises near fishing grounds (Environmental Management Agencies, Commercial Fishing Organisations)*
- *ensure that monitoring studies are required for all spoil disposal grounds unless these have previously been undertaken and spoil disposal is shown to have minimal potential impact (Approving Authorities, Environmental Management Agencies)*
- *require investigation of options for on-land spoil disposal (and perhaps spoil use) prior to at-sea spoil disposal (Environmental Management Agencies)*

4.6 SHIPPING AND PORTS

Background

Many fishing operations are regularly conducted in or near ports and shipping channels with only minimal disruption by shipping traffic. Port Authorities have control over all aspects relating to boat navigation within Port Limits. In some large Australian ports, fishing operations are prohibited over extensive areas (eg. Port Kembla) as the Port Authorities have concerns for potential vessel collisions. Most ports are generally not subject to such restrictions although some closures have occurred, primarily as a result of poor consultation between commercial fishers and the Port Authority.

Increased levels of shipping traffic and consequent use of navigation channels may create future difficulties (eg. reduced trawl time/grounds) for fishing operations which involve travelling across or operating near such channels and may lead to port areas being closed to fishing operations.

The increased level of shipping activity will lead to additional risks of oils and other dangerous cargo spilling into the marine environment. If not already in place, contingency plans need to be formulated and implemented for all major shipping lanes and ports. The issue of introduction of exotic organisms from ship ballast water (see Section 3.8), with significant potential for adverse fisheries effects, is becoming of greater concern following several instances of problems (eg. toxic dinoflagellate blooms, starfish infestations).

The potential for Port operations to affect fisheries access varies depending upon the location and size of the port. However, the trend of increasing port usage, and pressure to develop new ports in remote locations (generally for export of mining related material) is likely to increase the influence of port operations on commercial fisheries.

Issues Requiring Attention

The future increase in shipping traffic and subsequent use of ports may result in further constraints on commercial fishing operations. Whilst the majority of required works for port upgrading will be subject to environmental impact assessments by Environmental Protection Agencies/Departments, there is a need for relevant groups (shown in brackets) to:

- *establish a consultative mechanism between local fishers and Port Authorities. In many instances, workable solutions can be defined as the timing of some Port operations is flexible whilst others are strictly scheduled permitting modification of fishing practices (Port Authorities, Commercial Fishing Organisations)*
- *provide relevant State Government Departments with all relevant information regarding the effects of port-related developments (eg. navigation channel dredging) on adjacent fisheries (Commercial Fishing Organisations, Fisheries Research Agencies, Fisheries Management Agencies)*
- *ensure that contingency plans are prepared to accommodate spillages as a result of shipping accidents (Environmental Management Agencies)*

4.7 RESEARCH CLOSURES

Research closures which result in areas being closed to commercial fishing may be considered for a range of scientific purposes. Such research may be related to future fisheries management strategies (described in Section 4.1) but could also involve, for example, bird or turtle research projects. Closures could occur within or external to MEPAs and involve government agencies or tertiary institutions.

Few closures for research purposes presently occur. Most occur within MEPAs, and their potential to limit access to fisheries resources is relatively low compared to other factors described in this report. The major concerns involving research closures are that:

- sufficient emphasis must be placed on ensuring that a closure to commercial fishing is necessary and/or justified considering the objectives of the research project. Some projects may be able to proceed without disrupting commercial fishing activities, while the potential scientific benefits of other projects may not justify the imposition of a closure.

- in cases where the research is justified and a closure to commercial fishing is essential, every effort should be made to locate the research within existing closed areas (whether such closures are for fisheries management or conservation purposes).
- areas may be closed to fishing but the research does not commence within a reasonable period of the closure coming into force or does not commence at all. In such situations, commercial fishing access is needlessly restricted. Research projects which involve fishing closures therefore need to be accompanied by research performance criteria and deadlines. Failure to initiate research by the deadline date should lead to the closure becoming invalid.
- research closures could be added to a zoned MEPA after the zoning plan (with accompanying zoned closures) has been introduced. These should have been addressed in the consultation/liaison that would have occurred during development of the zoning plan. Research closures within MEPAs need to form part of the zoning plan. This will require integration/liaison between the MEPA agency and the research group/agency. Forward planning by researchers will be required to ensure research closures are considered in zoning plan reviews.
- in cases where closures to commercial fishing are justified but have little or no relevance to fisheries management/biology (e.g bird or turtle research), commercial fisherman should have recourse to seek compensation for loss of earnings. Commercial fisherman should not be expected to bear costs associated with research closures that offer little or no direct benefit to fisheries.
- fishermen may be prevented access to an area because of perceived conflicts with research activities. It is therefore important that agencies with the authority to close areas consult with commercial fishermen to identify opportunities to minimise potential conflicts, even before specific areas for potential closures are identified (eg. fishing activities could be modified, or fishing may occur mainly during a particular season and a closure could be unnecessary).

Issues Requiring Attention

Scientific research projects which provide knowledge that could be used to manage marine areas are of benefit to the Fishing Industry. A greater understanding of the functioning of marine ecosystems results in more informed and effective management of fisheries resources.

There is a need for relevant groups (shown in brackets) to:

- *ensure that the objectives of research projects, which involve closing areas to commercial fishing, are justifiable, achievable and consistent with the need for closures so that fishing access is not needlessly prevented. (Commercial Fishing Organisations, Fisheries Management and Research Agencies, Environmental Management Agencies).*
- *ensure that early consultation is undertaken to ensure all methodologies for achieving the purpose of the research closure are considered, such as modification of locations and/or timing of fishing or locating the research within existing closed areas. (Fisheries Management and Research Agencies, Environmental Management Agencies).*
- *require timetables (or performance criteria) for research to commence and be completed as part of the closure declaration. (Commercial Fishing Organisations, Fisheries Management Agencies, Environmental Management Agencies).*
- *ensure that research closures in zoned MEPAs, form part of the zoning plan rather than be introduced subsequent to plan declaration. (Fisheries Management and Research Agencies, Environmental Management Agencies).*
- *recognise that compensation may be payable to commercial fisherman disadvantaged by research closures not directly related to fisheries management. (Fisheries Management Agencies, Environmental Management Agencies).*

5.0 CONCLUSIONS

In assessing this wide range of issues relating to access to fisheries resources, it is acknowledged that some issues are in the process of being addressed. However, the action groups identified in this report should develop cohesive policies to deal with access issues. In this regard the following general and specific recommendations are provided to assist in the timely formulation of such policies.

5.1 KEY ISSUES TO BE ADDRESSED BY COMMERCIAL FISHING ORGANISATIONS

In compiling this report, two major areas which relate directly to resource access overall have been identified. These points are relevant to almost all of the specific issues that have been discussed previously. These issues require immediate attention and involve:

- the image of the Fishing Industry. Commercial fishers and fishing practices have a poor image in some sections of the community. Fishing practices are often seen as destructive and catches viewed as excessive even in tightly managed fisheries subject to strict gear limitations and fishing procedures. Few people recognise the importance of the Fishing Industry to seafood supplies or that fisheries are managed to ensure resource sustainability.

The Fishing Industry has often been blamed in cases where fish catches have declined as a result of habitat modification associated with coastal development or recreational fishing effort.

- This perception of commercial fisheries and poor appreciation of community benefits from commercial fishing has had particular influence in demands by recreational fishing organisations, Local Governments and other groups for reductions in commercial operations, the call for introduction of MEPAs, and approval of coastal development in areas that were previously used almost exclusively by commercial fishers.

The Fishing Industry should, as a matter of urgency, develop and implement an education/public awareness campaign to make the community aware of the practices and benefits of the industry. Issues addressed should include fisheries management arrangements and importance to the economy, employment, tourism and seafood supply.

- the lack of data on the economic value of the Fishing Industry. Commercial fishers are often prevented from gaining access to fisheries resources for purported economic reasons. Recreational fishing organisations commonly claim that

recreational fishing generates larger economic returns and is more important to tourism than commercial fishing. These claims are difficult to substantiate due to a lack of economic data on either fishing sector. In general, commercial fisheries fare poorly in such debates as they have a poor community image (see above).

The Fishing Industry should place greater emphasis on supporting and proposing studies which involve a full evaluation of the economic significance (including backward and forward linkages) of both recreational and commercial fishing. This economic evaluation is crucial if decisions which unknowingly impact upon the economy (Australian, State and regional) are to be avoided.

5.2 SPECIFIC ISSUES TO BE ADDRESSED BY RELEVANT GROUPS

Of all the issues described in the report, specific urgent action is required with regard to:

- Pollution and Habitat Destruction
- Recreational Fishing
- Aboriginal Native Title Claims
- Marine Environment Protection Areas
- Contaminated Products

Pollution and Habitat Destruction

Environmental concerns and maintenance of fisheries habitat should be a major priority. Loss of habitat and contamination of seafood could result in the loss of fisheries worth millions of dollars.

The Fishing Industry should maintain its role in environmental protection and become further involved in environment-related government/community organisations. Environmental and fisheries managers should ensure that impacts on fisheries are considered in environmental impact assessments.

Recreational Fishing

The lack of data on recreational fisheries (eg. catch rates, economic value) hinders assessment of the perceived economic/conservation benefits resulting from the increasing number of claims to close areas to commercial fishing.

The Fishing Industry, Fisheries Management and Research Agencies should give this matter a high priority as this issue will increase in prominence.

Indigenous Peoples Native Title/Land Claims

Many issues associated with native title claims are unclear but potential impact on access to fisheries resources may be significant.

All relevant politicians and fisheries managers need to be aware of potential effects of native title/land claims to the Fishing Industry, the economy and unemployment levels. A formal consultative mechanism with Aboriginal groups needs to be established.

MEPA's

Marine and estuarine areas are increasingly being subject to environmental regulations (eg. for conservation or recreational purposes) some of which could prohibit commercial fishing.

The Fishing Industry should be consulted early in the MEPA planning phase to avoid unnecessary restrictions. The environmental effects of fishing practices need to be further investigated and where necessary appropriate modifications introduced. MEPA managers should be provided with all relevant information on the value of the area to fisheries and be made aware of the history of fishing operations in the area.

The Fishing Industry needs to ensure that management of fisheries within MEPAs is undertaken by appropriate fisheries management agencies and pursue Memorandums of Understanding with MEPA agencies.

Contaminated Products

The potential exists for seafood products to become contaminated by heavy metals/pesticides etc. resulting from effluent discharges or by exotic organisms introduced by ballast water. Contamination of seafood products can result in serious detrimental effects to the marketability of seafood and could lead to the long term loss of certain markets (particularly exports). Some instances have occurred in the recent past, with significant effects to the Fishing Industry, and the frequency of such problems will increase in the future.

Appropriate testing strategies/legislation should be put in place to prevent the introduction of contaminants to the marine environment. Most importantly, Contingency Plans need to be formulated to address and minimise effects to the seafood industry (especially from a marketing perspective) if seafood products in some regions are contaminated.

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