

# **STATE SUSTAINABILITY STRATEGY**

## **SUBMISSION**

**DEPARTMENT OF FISHERIES**

**April 2002**

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## **1. Executive Summary**

The Department of Fisheries (“the Department”) is responsible for the management of the State's fish resources, commercial, pearling and aquaculture industries, recreational fishers and the pristine waters and habitats that surround the State's 12,000km coastline.

Western Australia's aquatic environment, with its significant resource of fish, is one of the State's most valuable assets. This value lies not only in what can be sustainably harvested from the ocean, but in the physical environment of the sea itself that shapes the lifestyle and culture of the people of Western Australia and attracts the many tourists which visit the State each year.

Commercial fisheries directly account for \$750 million of Western Australia's income per annum, of which over \$700 million comes from exports. Additionally, an estimated 600,000 Western Australians contribute a further \$500 million in annual economic activity from recreational fishing and aquatic eco-tourism. In fact, in some regional towns in the Gascoyne and Kimberly regions, fisheries activity provides the main form of employment. The pearling and aquaculture industry is estimated to be valued in excess of \$200 million with most of the activity located in regional centres.

The high ecological, social and economic value placed on Western Australia's aquatic environment creates a significant obligation for the Department to develop and implement appropriate and sustainable resource management strategies for the State's fisheries and fish habitats. This results in the Department constantly reviewing existing strategies and adopting new ones, to meet the challenges that arise from the increasing pressures on the estuarine and marine environment and from a growing population and increasing demand for our fish resources.

It is only through the continued action of the Department in planning for the management, development and sharing of fish resources - partnered by commercial and recreational fishers, volunteers and the wider community, including indigenous groups and relevant government agencies - that present and future generations of Western Australians can be assured of the opportunity to enjoy the economic and social benefits that a healthy aquatic environment can provide.

This submission profiles the long-term contribution that fisheries management is making to ecological sustainability of the State's fish and their habitats and outlines current initiatives to ensure management keeps pace as we move into the new millenium. It also introduces ground-breaking work currently being undertaken by the Department to move towards complete 'holistic' management of the aquatic environment under an innovative Ecologically Sustainable Development (ESD) model. Not only will this model bring new environmental performance reporting standards to increase the transparency of the Department's operations, it will also assist it to explicitly consider biodiversity and resource conservation alongside economic and social well-being.

## 2. Background

The sustainability of fish stocks and conservation of their habitats are a desired Government outcome reflected in the *Fish Resources Management Act 1994* (FRMA). To that end, the Department has one key outcome:

*Conservation and sustainable development of the State's fisheries.*

This is achieved through four key outputs-

- Output 1: Management of the State's Commercial Fisheries
- Output 2: Management of the State's Recreational Fisheries
- Output 3: Development and Promotion of the State's Aquaculture industry
- Output 4: Management and Conservation of Fish and Fish Habitats.

Operating under these four programs, the Department has five key objectives. These are to:

- Uphold the harvesting and fishing and fisheries resources at ecologically sustainable levels;
- Maximise the economic, social and other benefits derived from Western Australia's aquatic biological resources;
- Increase the level of understanding of, and support for, strategies used by the Department to manage the State's fisheries resources;
- Minimise adverse human impact on the aquatic environment; and
- Assign access to aquatic biological resources in accordance with community priorities.

The extent to which these objectives are being met is reported through Performance Indicators contained in the Department's *Annual Report*. These indicators are underpinned by the annual *State of the Fisheries* report prepared by the Department's Research Division (refer to section 8).

In fulfilling and meeting its objectives to ensure the conservation and sustainable development of the State's fish resources and the protection of fish habitat, there are a number of significant issues and trends that the Department needs to address in the short to medium term. These include:-

1. Increased public requirement for accountability in respect to the maintenance of biodiversity and the ecologically sustainable use of the marine environment.
2. Additional pressure placed on inshore fish stocks as a result of continuing population growth, coastal development, improved access and fishing technology, together with a growing recreational sector.
3. The development of high-quality recreational fisheries and low-impact eco-tourism experiences in some regions to meet increasing community interest and tourism potential.
4. Direct involvement of the Commonwealth in the day-to-day management and planning of Western Australia's marine environment through the implementation of the Commonwealth's Oceans Policy initiative.
5. Indigenous fishing issues and the development of the law in respect to Native Title.

The above issues are being addressed by the Department in a number of ways including the major initiatives outlined below.

### **3. Ecologically Sustainable Development**

ESD is the concept that seeks to integrate short and long-term economic, social and environmental effects in all decision making. It therefore represents a fundamental shift in public policy because it affects all government departments and agencies to some degree. The Department is committed to implementing ESD.

The relevance for ESD principles within the context of fisheries management is high, as such management has ideally always been about more than setting minimum biological limits. Societal goals and values often influence the acceptable levels of exploitation, often well above any biologically based limit. Consequently, ESD is now accepted as the foundation for natural resource management in Australia and is a major component of all fisheries legislation at both State and Commonwealth levels. Additionally, these principles are consistent with a number of international treaties and initiatives such as United Nations Convention on the Law of the Sea (UNCLOS) and the United Nations Code of Conduct for Responsible Fisheries.

Within Western Australia, the objects of the FRMA are fully consistent with the ESD objectives and guiding principles. The objects cover issues related to the environment, social and economic components, their integration and the aspects of governance that enable the appropriate outcomes to be achieved.

The pressures to introduce ESD principles into fisheries management have come from both within and external to the fishing sector. Within the fishing sector, incorporation of ESD has been a long-term objective of all of Australia's State and Commonwealth Fishing Authorities. The Department has been progressing down the ESD path for the last seven years, since sustainability was embodied as an objective in the FRMA. This allowed the Department to take a more pro-active role in the sustainable management of marine, estuarine and riverine ecosystems and to establish a dedicated Fish and Fish Habitat Protection Program.

More recently, there has been external pressure placed on the fishing sector to hasten progress to address ESD. This pressure has stemmed from the new commonwealth legislation specifically the amendment to Schedule 4 of the *Wildlife Protection (Regulation of Exports and Imports) Act 1982* [now incorporated in the *Environment Protection and Biodiversity Conservation Act 2000* (EPBCA)]. This resulted in the blanket exemption of marine species being removed and now only species which are harvested in an ecologically sustainable manner are to be given an exemption for export.

The Department has prepared a policy paper which will be published shortly that outlines the first step towards fully implementing ESD principles in the management of the fisheries resources of Western Australia. This policy covers the origins of the concepts of ESD both nationally and internationally and how they can be implemented within the fisheries context in general, and specifically within Western Australia. Due to the recent changes in Commonwealth legislation (mentioned above), the current version of the paper focuses on the environmental components of ESD needed to complete assessments to retain export approval under the EPBCA for Western Australia's major commercial fisheries. Future versions of the paper will expand upon the social and economic components of ESD, especially how they relate to resource allocation issues. Ultimately, the ESD framework will be expanded for use within a regional marine planning context.

The Department is currently in the process of developing ESD reports to ensure that marine fishery species are harvested in a sustainable manner and therefore remain on the export list.

These reports include assessments of the environmental and governance components of ESD for all commercial fisheries. In addition, the Department has begun the assessments of the economic and social aspects of the State's major fisheries. After the ESD assessments are done for the commercial fisheries, the Department will begin the assessment of recreational fisheries and aquaculture industries.

Success in the implementation of ESD principles and practices across all sectors of the State's fisheries will be a 'world-first' for the Department and the fishers and fishing industry of Western Australia. To date, this has not been achieved across any industry in the world.

#### **4. Integrated Fisheries Management**

Historically, fisheries management in Western Australia has been based on meeting the management requirements of each sector or user group, without necessarily taking into account the overall impact of these user groups on fish stocks or their environment. A sectoral based approach to management has been used successfully in Western Australia to date and most stocks are still in good condition by world standards. However, the majority of fish stocks are now fully exploited and under increasing pressure from a growing population, coastal development and the demands of competing user groups. Similar scenarios elsewhere in the world has seen many fisheries go into decline, or fail completely. Fortunately, Western Australia still has time to develop a system that will ensure the long-term sustainability of fish stocks and satisfy the requirements of a wider ESD approach.

In March 2000, the Department initiated a new holistic approach to the management of Western Australia's coastal fisheries and fish habitats - the Integrated Fisheries Management Strategy (IFMS). A discussion paper was published "Protecting and Sharing Western Australia's Coastal Fish Resources – the path to integrated management", a copy of which is available on the Department's website at <http://www.wa.gov.au/westfish>.

The IFMS will enable a wide variety of interest groups - commercial fishers, recreational fishers, Aboriginal and conservationist - and the wider community to be involved in planning the future of Western Australia's coastal fisheries and fish habitats, and includes extensive community consultation across the State. An Independent Review Committee chaired by former High Court Judge, Justice John Toohey, has been established to receive public input and provide an expertise based report on an integrated management framework for fisheries. The committee has made significant progress in the past 12 months. It has reviewed public submissions and met separately with representatives and groups from the commercial and recreational fishing sectors, Aboriginal interests, conservationists, the aquaculture industry, fisheries managers and researchers.

Although there appears to be widespread support for the new management concept, a number of important issues have been raised, highlighting the complexity of the committee's task. These include:

- How do we determine the initial allocation of fish resources between user groups?
- How do we ensure that the system is fair to all?
- How are future re-allocations of resources made?
- Who should determine initial and subsequent allocations?

Each of these issues gives rise to many other questions in areas such as ESD, historic precedent, market forces, wider planning processes and changing community expectations and attitudes.

The Toohey Committee is expected to report to the Minister for Fisheries during 2002.

## **5. Sectoral Initiatives/Issues**

Whilst a new integrated management framework outlined above will guide the fish resource allocation process in the future, it will still be necessary to have effective sectoral management arrangements in place. In fact, the Department's past success in fisheries management has been based on the ability to develop effective arrangements on a sector by sector basis. A sample of sectoral management issues and initiatives is provided below.

### *5.1 Commercial Fisheries Management*

The introduction of limited entry management approaches in 1963 for the Shark Bay Prawn Fishery and the Western Rock Lobster Fishery replaced the open access arrangements previously in place and commenced modern commercial fisheries management in Western Australia. Subsequently, the number of commercial Fishing Boat Licences was frozen in 1983. Since that time there has been a planned approach to bring all commercial fisheries under specific management arrangements. There are now in the order of 33 managed fisheries representing 98% of the commercial production value.

The systematic declaration of managed fisheries has concentrated the remaining commercial fleet onto stocks and areas where fishing access has remained unrestricted. This has been ameliorated to some extent through the removal of a significant number of fishing boat licences by general buy-back and specific fisheries adjustment schemes. There are however a number of fishing boat licences that do not have access to fish stocks subject to a specific management plan. These licences only have access to the so-called 'wetline' sector, which largely comprises the demersal finfish resources of the west coast, mackerel, whitebait as well as a few unmanaged bait stocks. A process is currently being considered to develop more formal management of the 'wetline' sector.

The effectiveness of management is assessed through the annual review of the percentage of fisheries that have catches (or effort levels in quota managed fisheries) within their acceptable range. This Performance Indicator (ie. acceptable catch range or effort levels) is reported annually in the *State of the Fisheries* report and *Annual Report*.

The Department's success in commercial fisheries management is best highlighted by the Western Rock Lobster Fishery. This fishery is widely recognised as one of the best managed fisheries in the world and is Australia's most valuable single species fishery, at a value of \$300 to \$400 million annually. In March 2000, it became one of the first fisheries in the world to receive certification from the Marine Stewardship Council (MSC). The MSC accreditation process is now also paving the way for the fishery to meet its requirements in demonstrating ecological sustainability to Environment Australia – a necessary requisite for all future export fisheries under EPBCA. The foundation of this success was a management package introduced by the Department in 1993/94 to rebuild severely depleted breeding stock. In 1997/98 and 1999/2000, these management measures resulted in bumper catches and economic prosperity for commercial fishers and the State.

### *5.2 Recreational Fisheries Management*

The first comprehensive management framework for recreational fishing was developed during 1989 and 1991. Major outcomes from the review included a statewide set of daily bag and size

limits for all fish species and the establishment of management, research and community education programs for recreational fishing. Now, ten years later there has been significant change in Western Australia's recreational fisheries including increased participation and advances in angler efficiency through improved technology and more pressure on limited resources from competing users. With extra pressure of fish resources, various fisheries issues have arisen in different parts of Western Australia that have required modification, on a reactive basis, to management arrangements.

To manage pro-actively for the future, the Department, in consultation with the community, is developing four regional recreational fisheries management strategies for the State. The basis for a more regional approach is due to the acknowledgement of the natural complexity and diversity of Western Australia's marine life and environments and the need to better link management to the biology and distribution of fish stocks and fishing activity.

The recreational fishing management regions are the Pilbara/Kimberley, Gascoyne, West Coast and South Coast. Plans for the Gascoyne and West Coast have been developed for community consultation and a management framework is expected to be finalised during 2002. Plans for the Pilbara/Kimberley and for the South Coast will follow. Copies of plans are available on the Department's website.

The Department has also recently finalised arrangements for licensing and management of the charter fishing sector. Aquatic charter operators provide a service to fee paying customers to take them fishing. They offer a quality experience to customers (recreational fishers) by enabling fishers to obtain relatively high catch rates of quality fish or access to valued (while generally inaccessible) fishing grounds. The aquatic eco-tourism sector has experienced significant growth in the last ten years and specific management is necessary to complement the Department's broader recreational fisheries management initiatives.

### 5.3 *Aboriginal Fishing Strategy*

As a result of initial funding of a pilot program through the *Aboriginal and Torres Strait Islander Fisheries Strategy* (ATSIFS), the Department is developing an Aboriginal Fishing Strategy. The Strategy is being prepared in liaison with Aboriginal interest groups, the commercial and recreational fishing sector and the general community and will make recommendations about the inclusion of the traditional, cultural and economic aspirations of Aboriginal people within a sustainable fisheries management framework.

Consistent with the Department's statutory obligations to conserve, develop and share the fish resources of the State for the benefit of present and future generations, the objectives of the strategy relate to:

- The greater involvement of Aboriginal people in the fisheries sector, including commercial fishing, aquaculture, the aquatic charter industry, and fisheries management; and
- The inclusion of traditional and cultural fishing practices within a framework of planned sustainable use of fish and fish habitat.

The strategy will make recommendations for implementation of state wide policy and legislation in respect to Aboriginal fishing issues and recommend regional specific strategies in recognition of the unique sustainability requirements arising from the variety of demographic and biogeographic features of Western Australia.



Expected outcomes and benefits of the strategy will include:

- Increased recognition of the values and aspirations of Aboriginal people in the management and use of fish resources;
- A policy framework for Aboriginal involvement in fishing;
- Increased opportunities for Aboriginal people to be involved in fishing and related industries; and
- Increased opportunity for Aboriginal people to be involved in the planned, sustainable management of fisheries.

The Strategy is being developed with the assistance of a Working Group comprising an independent Chairman, the Hon EM Franklyn QC, and representatives from relevant Government Departments, relevant Aboriginal organisations and representatives of the commercial and recreational fishing sector.

#### *5.4 Fish and Fish Habitat Protection*

The maintenance of a healthy aquatic environment is crucial to the commercial and recreational, pearling and aquaculture industries. The sustainability of fish stocks and conservation of their habitats is a desired Government outcome and are reflected in the objectives of the FRMA, which provide for:

- Conservation of fish and the protection of their environment;
- Exploitation of fish in a sustainable manner; and
- Management of Fish Habitat Protection Areas and the Abrolhos Islands.

The Department has established a Fish and Fish Habitat Protection Program, which works with other Departmental Programs, divisions, regional offices, the fishing industry, conservation groups and the wider community to achieve these objectives.

Specific initiatives in the marine environment include the establishment of Fish Habitat Protection Areas (FHPAs) to protect areas of special significance. To date FHPAs have been established at the Abrolhos Islands, Lancelin Lagoon and Cottesloe Reef. In addition, the Program is developing a series of Fisheries Environmental Management Reviews (FEMR) which document, on a region-by region basis, all fisheries and fishing activity in Western Australia's marine waters out to the 200 nautical mile Exclusive Economic Zone (EEZ) boundary. The FEMR documents (and subsequent Management Plans) will take a 'first look' at the possible effects of Western Australian fisheries on the environment, as well as noting any external pressures and threats to each fishery and the habitats that support them. In particular, they will provide a 'blueprint' for future environmental management for the Department and provide an opportunity to look at fishing in terms of a broader ecosystem framework.

A FEMR has been published for the Gascoyne region, a copy of which is available on the Department's website. Further reviews will be published over time.

Whilst the biodiversity of marine fish populations in Western Australia is in good health and in general supported by healthy habitats, there is concern about the status of the freshwater fish populations, particularly in the southwest corner of the State. In the southwest, habitat degradation of fresh water systems has occurred because of salinity, catchment clearing, point source pollution, eutrophication, silting and the loss of riparian vegetation.

There are 14 species of freshwater fish in the southwest and eight of these are endemic to Western Australia. Most species are affected to some extent by habitat loss and five are classified as potentially vulnerable because of habitat loss. In addition, some southwest marron stocks are affected by habitat loss. The Department is working to conserve freshwater fish stocks by:

- Providing financial support to a number of tertiary institutions that are undertaking collaborative research into the distribution and health of freshwater fish throughout the State;
- Retaining breeding stocks of some species and supporting other institutions to do the same;
- Working with other relevant agencies including the Water Corporation, Department of Environment and Catchment Protection, Department of Conservation and Land management (CALM), Department of Agriculture and the Environmental Protection Authority (EPA) to minimise habitat loss and undertake restoration projects including the construction of fish ladders; and
- Working with the freshwater fish reference group to identify issues associated with the conservation of native fish and establish priorities for management.

Collaboration with other agencies is essential since the Department does not have jurisdiction for catchment and land management, which management greatly affects fish stocks.

### 5.5 *Pearling and Aquaculture*

The pearling industry based on the silver or gold lipped pearl oyster, *Pinctada maxima*, is Western Australia's second most valuable commercial fishery and Australia's largest aquaculture sector. The industry was worth over \$190 million in 1999/00. Industry management objectives involve sustaining the pearl oyster wildstock and optimising return to the community. The harvesting of wildstock pearl oysters is controlled by a Total Allowable Catch and by individual quotas. Production levels are also controlled through quotas on the number of hatchery oysters that can be seeded for round pearl production.

In addition to pearls and with the harvest of wild capture fisheries worldwide generally at maximum sustainable levels, the Department has continued to place a high emphasis on developing aquaculture industries. Aquaculture has a substantial role to play in the production of seafood and other quality products. Major species under commercial production include mussels, yabbies, marron, pearl oysters (other than *P.maxima*) and algae for beta-carotene extraction.

The Department is committed to the sustainable development of the pearling and aquaculture industries. Current management issues relate principally to "sharing space" as opposed to "sharing fish" and environmental performance. These issues were addressed in more detail in the Department's recent submission to the Government's Independent Review Committee on the project development approvals system in Western Australia. Specific issues concerning marine planning are also addressed in section 6 below.

## **6. Marine and Coastal Planning**

One of the difficulties facing aquaculture and the fisheries sector generally, in the marine environment is the common property nature of marine resources and poorly defined user rights. There is increasing pressure on the marine environment from a variety of users, including those in the aquaculture, fishing and tourism sectors together with a growing community desire for unfettered access to the marine environment and for conservation of important areas, habitats and species. For certain types of aquaculture, there is a shortage of high quality marine sites. Suitable sites tend to be in high use areas and close to major townsites. This often results in a high level of conflict between aquaculturalists and other users and the general community. There is also a degree of uncertainty with respect to native title in the marine environment although this has been mitigated to some extent by the recent *Croker Island* High Court decision.

Currently, a number of State Agencies undertake planning work in the marine environment. The Department of Conservation and Land Management prepares plans for marine nature reserves, marine parks and marine management areas. The Department of Fisheries prepares fish habitat protection areas plans, aquaculture plans, fisheries management plans, regional recreational fishing management plans and fisheries environmental management plans. The Water and Rivers Commission prepares waterway management programmes for estuaries and inlets. The Department of Planning and Infrastructure plans for port and harbour development and marine safety. The Department of Mineral and Petroleum Development plans for resource development in State waters. Because of the vast area of WA coastal waters these activities have been able to occur in the past with limited conflict but as the development and use of coastal waters increases greater conflict will occur in the absence of any integrative framework.

While agencies and interest groups work together to integrate their activities there is no legislative framework for planning in the marine environment. In addition, existing land use planning processes for coastal lands often do not integrate the use of coastal land and the use of the adjoining marine environment. Since expectations for the use of the coastal and marine environment are diverse, this shortcoming will lead to increasing conflict between users as the development of the State intensifies.

A move away from the current ad-hoc approach to planning in the marine sector is required. As a result, there is an urgent need to amend State planning legislation to enable the Department of Planning and Infrastructure to become involved in the planning of land below the high water mark. A marine planning strategy will complement state and regional land planning strategies.

In addition to State-specific issues, there is the additional complication of Commonwealth legislation. The Commonwealth has a significant interest in the marine environment underpinned recently through its Australia's Oceans Policy (AOP) and the EPBCA and is expanding its interests into areas previously left to the jurisdiction of the State. The AOP has been prepared with a view to meeting some of Australia's obligations in managing the Exclusive Economic Zone (EEZ) under the United Nations Convention on the Law of the Sea (UNCLOS). As part of the implementation process, the established a National Oceans Ministerial Board, National Oceans Advisory Committee, and National Oceans Office. The States are not represented on any of these bodies resulting in widespread concern. As a result, the State Government has not endorsed AOP.

One of the cornerstones of AOP is the development of Regional Marine Plans based on large marine ecosystems. The first of these plans is currently being prepared for the south-eastern region of the EEZ and it is anticipated the Commonwealth will move to prepare a Regional Marine Plan for a portion of the EEZ adjoining Western Australia in the near future. The State will have to respond to the Commonwealth's proposal and if it is to play an effective role in the process it will have to have its own effective marine planning framework in place to ensure State issues are properly considered.

In the absence of sound State policies and procedures, the Commonwealth regulatory regime may take on greater significance. It is in the State's interest to maintain responsibility for developments within the marine environment.

## **7. Inputs to the Management Process**

### *7.1 Compliance and Education*

The major driver for the management of fisheries resources is human behaviour. Thus whilst the objectives of fisheries management are directed towards sustaining fish stocks, what is actually managed is the behaviour of individuals undertaking fishing activities. Compliance by fishers with fisheries laws is essential to the integrity of the systems that manage fisheries and therefore critical to achieving sustainability. Compliance programs underpin the success of fisheries management schemes because non-compliance affects the attainment of biological, economic and social objectives.

The success of any fisheries management system depends on attaining optimal levels of compliance with fisheries laws. This is best achieved by maximising voluntary compliance and by creating an effective deterrent against illegal fishing.

Elements critical to achieving optimal levels of compliance include:

- Maintaining productive working relationships with stakeholders;
- Collaborating with fisheries stakeholders to develop and implement fisheries policies and laws;
- Ensuring that fisheries laws are administered and enforced fairly, reasonably and cost effectively;
- Working with fisheries stakeholders to identify compliance risks and developing compliance strategies, systems and services to lessen those risks;
- Supporting the co-management of fisheries with stakeholders who can be held accountable for meeting their duties and obligations;
- Delivering criminal enforcement services; and
- Maintain the integrity of its people, processes, systems and decision making.

The Department operates a state-wide compliance program that aims to maximise compliance with fisheries laws. Annual expenditure on enforcement is around \$7 million for commercial fisheries (including pearling) and \$3.5 million for recreational fisheries. A large proportion of costs incurred through enforcement of commercial fisheries and pearling are cost-recovered from industry. The majority of recreational enforcement costs are borne by the State. There is increasing pressure on compliance funded by the State through consolidated funds given increased levels of recreational fishing activity and the high costs of enforcement in remote areas, particularly in the north of the State.

To complement its programs, the Department is proposing to develop compliance performance indicators in order to ensure that industry is not over or under-served and that government-funded enforcement activities are optimally allocated.

The Department also places strong emphasis on education as a component of its overall compliance program and to meet its objective of maximising voluntary compliance with fisheries laws. The Department's key message of '*Fish for the Future*' is communicated to the community through strategic campaigns, including television advertising, the Department's highly successful Website and a large amount of printed material targeted at specific groups. The Department's education program is also strongly supported by a large number of Volunteer Fisheries Liaison Officers.

## *7.2 Research*

The Department's Fisheries Research Division provides the expert scientific advice and research information necessary to manage, monitor and develop the State's extensive fish resources.

Research on wild fish stocks is undertaken by scientists working in collaboration with commercial fishers who provide statutory monthly catch and effort records. A large number of skippers also voluntarily complete detailed research logbooks. Similarly, many recreational fishers provide voluntary catch records to the Division, which are supplemented by extensive surveys of recreational catches. These data, together with fishery-independent research surveys, enable the Division to maintain the comprehensive research databases needed for management of the State's harvested fish stocks.

Research on aquaculture development and associated environmental management issues is undertaken in collaboration with industry.

The outputs provided by the Division include:

- Scientific knowledge for the sustainable management of the State's wild fish stocks and associated commercial and recreational fisheries;
- Maintenance of long term databases to support scientific assessments of fish stock and their habitats;
- Strategic research knowledge on aquatic species and their environments for managing aquatic environments and ensuring quality of the State's fish products; and
- Development of new techniques and basic knowledge to add to the community's understanding of aquatic resources and their environment.

Research information and data is essential for the effective implementation of ESD across the State's fisheries and aquaculture sector.

## *7.3 Policy*

The Department has operated a dedicated fisheries policy unit since the mid 1980s. Policy formulation is based substantially on research and compliance input together with industry and community consultation. The Department operates a formal system of consultation, through the use of Management Advisory Committees or through formal meetings with relevant sectors. Currently the structure of the "policy unit" mirrors the Department's four output areas with

Programs established in the areas of Commercial Fisheries, Recreational Fisheries, Pearling and Aquaculture and Fish and Fish Habitat Protection.

## **8. Reporting and Auditing**

The Department reports annually to Parliament through its *Annual Report* and also produces the *State of the Fisheries*. The *State of the Fisheries* reports in detail on the activities and impacts of the commercial and recreational fishing sectors, which utilise the wild fish stocks in Western Australia. In addition, the status of the developing aquaculture industries is recorded to enable the public of Western Australia to follow the development of this emerging sector. The work of the Fish and Fish Habitat Protection Program, which provides environmental co-ordination for the Department's fisheries management activities and habitat reserves is also reported to complete the coverage of the Department's responsibilities.

The document summarises management changes, compliance activities and research data including stock assessments and breeding stock levels, and provides a valuable reference point for Western Australian fisheries. This report has also been subject to periodic scrutiny by the Auditor General.

A copy of the 2000/01 *State of the Fisheries* report is available on the Department's website.

In keeping with the Department's significant initiative to begin implementation of ESD principles in fisheries management, the 2000/01 *State of the Fisheries* has been restructured to reflect the nationally developed ESD reporting framework. Where available, assessments of the ESD performance of fisheries under Western Australian jurisdiction are included.

Aside from its statutory reporting, the Department is also developing a process for reporting to the people of Western Australia on issues associated with ESD in fisheries. This will involve working with the EPA to prepare a framework for reporting on ESD for all Western Australian fisheries. This framework will be linked to a regular audit cycle involving the EPA and periodic reporting to the office of the Auditor General. The Department does not wish to have multiple reporting systems for ESD in fisheries and will be working to combine the processes for reporting to the States and the Commonwealth. It believes this can best be achieved by using a Bilateral Agreement with Environment Australia under the EPBCA.

## **9. Conclusion**

The Department has a long record in sustainable fisheries management based principally on the commercial fisheries sector with a more recent emphasis on recreational fishing and fish and fish habitat protection. Management on a sectoral basis will continue to provide the general framework for fisheries management however the integrated fisheries management initiative will ensure that fisheries management keeps pace with the changing environment. ESD over-arches the Department's entire business and forms the basis for enhanced reporting. A lack of integrated marine planning is a major gap and has resulted in considerable uncertainty for developers and significant user conflict. A more co-ordinated approach to catchment management is also required to protect the biodiversity of the State's freshwater fish resources.

The key linkages and integration of the Department's processes are shown in Attachment 1. Further information is also available in the Department's Strategic Plan and Annual Report available on the Department's website.

## **10. Recommendations**

In the development of a State Sustainability Strategy the Department specifically recommends that –

1. Recognition is given to the Department's long history of sustainable fisheries management and its more recent work to operate within a full ESD framework.
2. The EPA be given responsibility for managing environmental auditing of the State's natural resource management Agencies in collaboration with the Office of the Auditor General, with appropriate delegation from Environment Australia by way of a Bilateral Agreement pursuant to the EPBCA.
3. Consideration is given to a move away from the current ad-hoc approach to planning in the marine sector to a more explicit marine planning approach (noting existing vested estate) under State planning legislation.
4. All State natural resource and catchment management agencies work with the community to develop a long-term strategy to rehabilitate freshwater ecosystems of the south-west to conserve the biodiversity of the State's freshwater fish stocks.

DEPARTMENT OF FISHERIES  
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