

ESD REPORTING AND ASSESSMENT SUBPROGRAM:

National Application of Sustainability Indicators for Australian Fisheries

May 2003



Ecologically
Sustainable Development

Catching Sustainability



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2000/145 National Application of Sustainability Indicators for Australian Fisheries

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OBJECTIVES:

- 1 Facilitate the development and consistent application of practical, nationally agreed criteria and indicators by:
- 2 Completing a series of case studies implementing the agreed draft SCFA criteria and indicators for ESD reporting.
- 3 Conducting a workshop including representatives of all stakeholders to summarise the results obtained in other tasks related to the development of indicators for fisheries.
- 4 Completing a workshop report that contains the best available information on indicators and performance measures that could be used immediately to address the ESD criteria provided by SCFA for each main fishery type.
- 5 Generating a status report using an “initial National Application” for sustainability indicators in fisheries including an evaluation section that would identify any further research, development or testing required to ensure a complete set of revised criteria, indicators and performance measures that could be used for all fisheries in all jurisdictions.
- 6 Complete a final national application report for Australian fisheries.

NON TECHNICAL SUMMARY:

Outcomes Achieved

The primary outcome of this project is that all Australian fisheries now have access to a National ESD Reporting Framework and tools for its application. The framework is designed to document a fishery’s contribution to ESD, both the positive and negative impacts. There are four main elements in the process which include:

- 1) identifying the issues relevant to the fishery;
- 2) prioritising these issues using Risk Assessment techniques;
- 3) completing suitably detailed reports on the performance of the fishery for each issue (dependent upon their priority and complexity); and also
- 4) the compilation of summary background material on the fishery, the major

species affected and the environments that the fishery operates within. This enables the reader to put the material within the assessment report into an appropriate context.

A number of tools have been developed to assist completing each of the four elements. A feature of these tools is the high level of involvement and input from each of the major stakeholder groups.

There has been variable uptake of the process by jurisdictions from complete (WA) to indirect (AFMA). Completion of these reports is not a trivial exercise, particularly for jurisdictions that do not already have a system of annually reporting on the status of their fisheries.

Despite the variable uptake, there is still support for the continued development and implementation of the framework at Standing Committee level. It is likely that more elements of the process will begin to be taken up as experience and understanding of the framework increases and the benefits from those who have used it become more evident.

Background

Achieving Ecologically Sustainable Development (ESD) requires the integration of short and long-term economic, social and environmental effects in all decision making. This has been a difficult task to implement in a practical way.

For fisheries management, implementing ESD means that there is not only the need to consider the effects of the fishery on the target species, but also what effects there may be on the rest of the ecosystem. There is also the need to recognise the economic health of a fishery (such as the profits to commercial fishers or the satisfaction of recreational fishers) relies on maintaining essential ecological processes.

The urgency to develop a comprehensive and practical reporting system for ESD has increased substantially in recent years with changes to legislation at both the Commonwealth and State levels along with increasing community expectations. Consequently, this project to develop practical techniques to report on the performance of fisheries against the principles of ESD was signed off by all fisheries agencies. Moreover, the project received strong support from all the stakeholder groups present at a workshop held at Geelong in early 2000 on ESD and fisheries.

Methods

A reference group of stakeholders (including fisheries managers, researchers, industry, conservation groups and conservation agencies) was used to develop this initial framework and to provide comments and advice during the entire project. A draft conceptual and reporting framework for ESD and fisheries was developed at a meeting held in June 2000 which divided ESD into eight major components relevant to fisheries:

Contributions of the fishery to ecological wellbeing

- Retained species
- Non-retained species
- Other aspects of the environment

Contributions of the fishery to human wellbeing

- Indigenous wellbeing
- Local and regional wellbeing
- National social and economic wellbeing

Ability of the fishery to contribute

- Governance
- Impact of the environment on the fishery

These components are further sub-divided, depending on the characteristics of the particular fishery, into more specific sub-components for which effective reporting and monitoring can be achieved. This approach differed from previous “top down” approaches where a set of indicators and performance measures is imposed on all fisheries without regard to their individual circumstances.¹

To test the effectiveness of the draft framework a series of eight case studies was completed during the latter half of 2000. These case studies covered a variety of fishery types and jurisdictions to ensure that the framework would be applicable in all circumstances. The case studies were the East Coast Trawl Fishery (Qld); Western Rock Lobster (WA), WA Aquarium Fishery, Victorian Abalone Fishery, NSW Estuary General Fishery, NT Barramundi Recreational Fishery, Prawn Aquaculture (Qld) and East Coast Tuna and Billfish (AFMA).

The results from these case studies, including the reports completed by the project team and the experiences of the agencies involved, were examined at a workshop held in October 2000. The outcomes from this workshop provided the directions needed to improve the structure of the ESD Reporting Framework and enhance the overall process. This revised framework was tested and modified through a further series of case studies (mostly conducted in Western Australia) and two further ESD Reference Group meetings held in June and November 2001. The major output from this work was a “*How To*” *Guide* to assist wild capture fisheries complete their own reporting systems (Fletcher et al., 2002). Information generated for the ecological components during the initial series of case studies was documented in a “*Technical Support Document*” (Whitworth et al., 2002) as a resource for managers of other fisheries. Both of these reports are located on the National ESD website (see www.fisheries-esd.com for details).

Conclusions

The project was successful in developing a practical system that allows reports on all elements of ESD to be generated for a fishery. Most of the case studies went well, even those that were in the first series before the addition of the Risk Assessment component. Subsequent trials in WA have proved the system is capable of operating across many types of fisheries and the material generated can be used to complete applications to other agencies (12 fisheries have now been completed).

Use of the framework does not guarantee that a fishery will meet the requirements of particular agencies such as Environment Australia. No **process** can guarantee this. The

¹ The project evolved in association with Project 2000/146 (“Green Chooser”). Both projects used the same major components of ESD to ensure consistency of approach.

degree of acceptance by any third party depends on actual performance against that party's requirements. The reporting framework does, however, allow a fishery to make a self-assessment before submitting an application and ensure that all the information is readily on hand to deal with requirements that may come from multiple sources.

The National ESD Framework should provide all the information needed for any internal/external requirement. It is more than a reporting tool, because it outlines a whole system of management. Therefore, it is intended to be a different way of doing business, not something added to what is already done.

The modular nature of the framework means that different aspects can be tackled separately. Most agencies will concentrate on the environmental aspects of ESD in the immediate future. However, management actions taken to address environmental issues still need to take into account the impact on social and economic issues, therefore there will be a growing need to simultaneously report on all three elements of ESD.

Future Developments

This project has only begun the process for generating the tools needed for the reporting and assessment of ESD for the fisheries and aquaculture sectors. A number of other activities have been identified that will be needed to complete this process including:

1. Further Reporting Activities

- i) Developing methods and information resources for socio-economic components
- ii) Refining the draft framework for use in aquaculture (only one case study was completed)
- iii) Developing the methods needed for appropriately assessing indigenous fisheries and the impacts of coastal fisheries on indigenous communities (the current methods are not suitable for this)
- iv) Continuation of extension of the methods developed into all jurisdictions.

2. Assessment Project(s)

- i) Current Best Practice Manual - Consolidate from a variety of sources the current "Best Practice" options for the objectives, performance measures, indicators and management responses needed for ESD assessments.
- ii) Compare and document the relative benefits of the various methods available to aggregate and integrate performance measures at any level of the ESD reporting tree.
- iii) Tools to enable qualitative and quantitative prediction of the interconnection between the ecological, economic and social outcomes of ESD under various fishery management regimes.

KEYWORDS: ESD, ecologically sustainable development, Risk Assessment, triple bottom line reporting, socio-economic assessments, ecosystem management, Australian Fisheries

BACKGROUND

Since the National Strategy for Ecologically Sustainable Development (NSED) was developed in 1992, ESD has become accepted as the foundation for natural resource management in Australia and has become explicitly or implicitly, a major objective of all fisheries legislation. State and Commonwealth fisheries management agencies are accountable for achieving the objectives and, importantly, to demonstrate that the objectives are being met. To do this, fisheries management agencies need to be able to measure and report on progress of performance. Most fisheries agencies have measures for some components, particularly those related to the target species. However, without clear criteria and indicators to measure all aspects of ESD including ecological, economic, and social components – agencies risk being unable to demonstrate that they are pursuing or achieving ESD objectives.

At its planning session of 19-20 July 1999, the Standing Committee on Fisheries and Aquaculture (SCFA) agreed to establish a Sustainability Indicators Working Group to facilitate the development of nationally agreed criteria and sustainability indicators, building on the work of the SCFA Research Committee. The Working Group was composed of a mix of members from the SCFA, fisheries managers and the SCFA Research Committee, to ensure the rapid development of a unified approach across jurisdictions.

To achieve the desired result within the timeframe available, it was necessary to take the pragmatic approach of utilising existing data and information sources and also by initially only using the indicators already developed. Furthermore, instead of trying to develop one uniform set of indicators it was thought logical that a matrix of options be developed for each of the main fishery types (e.g. trawling, line, potting, netting, mixed – data rich and data poor) to maximise the relevance of the issues assessed and the indicators that will need to be measured. Finally, these activities were only one component of the SCFA initiative on ESD. It was recognised that a process of continuous improvement will be necessary to progress from the shorter term goal of providing a mechanism for reporting on ESD to the longer term goal where achievement of the ESD objectives for Australian fisheries are clear.

The SCFA Working Group met on a number of occasions and agreed on a timetable and workplan to develop draft ESD criteria and indicators. These were to be ‘tested’ using case studies of a variety of fisheries in different jurisdictions, culminating in a workshop to discuss results in October 2000 and a “national application report” by mid 2001. This process was to involve all stakeholders through the formation of an SCFA-ESD “Reference Group” that included representatives from the commercial fishing industry, aquaculture, environmental, recreational and indigenous groups, EA and FRDC. This Reference Group was to provide advice on (1) Developing a national framework of ESD criteria for Australian fisheries; (2) Identifying case studies for the evaluation of the framework, criteria and indicators; and (3) facilitating workshops and communication with stakeholders.

The approach developed by the SCFA Working Group was consistent with the preferred approach of the then Minister for Agriculture, Fisheries and Forestry, for a collaborative approach with the States, Territories and industry, with long term benefits

both in terms of sustainable fisheries management and positive industry development”.

The Working Group approach included 3 key research tasks, which required funding:

1. Application of draft criteria and indicators using case studies.
2. A Workshop based around the case studies.
3. An “Initial National Application” report of the ESD criteria and indicators for Australian fisheries.

This workplan of closely related tasks was designed to enable the efficient development of an effective ESD reporting system. These activities were developed to complement the ESD work that had already occurred (e.g. CSIRO review), was already underway (e.g. ISO 140000 assessments) or was planned (e.g. FRRF & other FRDC applications). The relationship between this proposal and other ESD related activities were outlined at the ESD Workshop held at Geelong in March 2000. Specifically, it was highlighted where obvious synergies could be developed between the SCFA proposal and other projects, e.g. FRDC 2000/146, which seeks to provide assistance to the commercial industry to improve environmental management standards.

Following the workshop, the SCFA approach for the development of a nationally agreed system for ESD reporting received widespread stakeholder support. There was also strong commitment by each of the stakeholder groups to participate in the process by providing representatives to be a part of the Reference Group.

NEED

The urgency to develop a comprehensive and practical reporting system has increased substantially in recent years. The requirement for assessments include the need for third party Government Auditing that will result from the proposals by Environment Australia (EA) to amend Schedule 4 of the Wildlife Protection (REI) Act (1982) along with the imminent introduction of the Environment Protection and Biodiversity Conservation Act in July 2000 and the implementation of the Oceans Policy strategies. There are also requirements within each jurisdiction to meet general government commitments to ESD and particularly when these are explicitly part of their Fisheries Legislation. Finally there are also recent developments associated with industry wanting to either gain market access or provide increased leverage for their products from gaining environmental accreditation. Thus, there are a large number of reasons why assessments need to be completed. There is an even greater need to ensure that the reporting schemes developed are sufficiently comprehensive to restrict the level of duplication.

The Standing Committee on Fisheries and Aquaculture (SCFA) identified the need to actively progress the development of nationally agreed criteria and indicators that would enable fisheries managers to report against all the principles of ecologically sustainable development (ESD). The ESD objective is now explicitly or implicitly part of State and Commonwealth fisheries management legislation. There are a number of

components related to ESD within the fisheries context; these include the target species, the ecosystem, social and economic issues and also management arrangements. Not all of these components are of interest or are addressed in each of the identified requirements listed above. Thus, in the assessments required by Environment Australia the only components addressed are the target species, the ecosystem and management arrangements. This is similar to the assessments required under the Marine Stewardship Council. Assessments for ISO 14000 and Codes of Conduct only cover management arrangements. However, to fully meet the commitment to ESD, all components will need to be assessed. Consequently the proposed SCFA process will cover all aspects of ESD. These comprehensive assessments should nonetheless incorporate the aspects required for all these other requirements.

The SCFA Working Group has been established to steer the development of ESD criteria and indicators with the support of the SCFA Research Committee, who have developed a system for ESD reporting. The Working Group has agreed on an approach and timetable that would result in a report on the application of nationally agreed criteria and indicators for all Australian fisheries by mid 2001.

The urgency to progress this approach was raised at the ESD Stakeholder Workshop that was held in Geelong during March 2000. All stakeholder groups were represented at this workshop and they all recognised that there was a strong need to progress from the current situation to one where reporting on all components of ESD can be completed.

Endorsement was obtained from all sectors for the SCFA approach. There were, however, clear indications that effective consultation and participation from stakeholders were required during the project to ensure that the results will obtain national recognition and support. Consequently, a Reference Group was established that included representatives from Environment Australia, Commercial Fisheries, Aquaculture, Recreational fisheries, Indigenous groups, FRDC, Environmental groups and other relevant experts. The Reference Group worked in partnership with the SCFA Working Group to assist in the coordination and exchange of information. It was also suggested that this Reference Group along with selected members of the SCFA Working Group could act as a resource for other relevant ESD projects (e.g. 2000/146).

Finally, the workshop resulted in the development of the appropriate linkages between the members of the SCFA proposal, which is primarily concerned with the development of effective ESD reporting mechanisms, with the proponents of the other ESD projects such as FRDC 2000/146 which is designed to assist industry develop better, more environmentally credible methods of operation. These discussions resulted in the agreement as to how the two projects could benefit each other.

OBJECTIVES

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4. Completing a workshop report that contains the best available information on indicators and performance measures that could be used immediately to address the ESD criteria provided by SCFA for each main fishery type.
5. Generating a status report using an “initial National Application” for sustainability indicators in fisheries including an evaluation section that would identify any further research, development or testing required to ensure a complete set of revised criteria, indicators and performance measures that could be used for all fisheries in all jurisdictions.
6. Complete a final national application report for Australian fisheries.

METHODS/RESULTS/DISCUSSION

ESD Reference Group

A primary condition upon which FRDC agreed to fund this project was the formation of an ESD Reference Group. This reference group included the SCFA ‘Indicators working group’ plus other relevant stakeholders including the Australian Seafood Industry Council (ASIC), Environment Australia (EA), Aboriginal & Torres Strait Islander Commission (ATSIC), RecFish Australia, an aquaculture representative (ACWA), NGOs (Traffic, WWF) and the FRDC. The group was formed in May 2000 and its first task was to assist the project team develop the initial conceptual framework for ESD and fisheries.

Draft Conceptual ESD Framework for Australian Fisheries

The ESD Reference group met with the SCFA working group in Glenelg (SA) during early June 2000 to adapt the general ESD concepts, as stated in the National Strategy on ESD (NSES), into a series of ESD objectives specifically relevant for fisheries. This was achieved through the development of a draft conceptual framework for reporting and assessing performance against these principles.

The initial conceptual framework that was generated at this meeting identified 8 key components to ESD. These covered environmental wellbeing (which includes issues associated with the retained species, non-retained species and other environmental issues associated with fishing), human wellbeing (socio-economic issues at the local,

regional and national levels) and governance (management and legislative arrangements). These draft objectives and frameworks were ratified at SCFA 43 in September 2000 and at MCFFA² in October 2000 (see Appendix 1 for details).

Core Objectives for ESD and Australian Fisheries

In developing the following set of objectives for Australian fisheries (both core objectives and major components), the Reference Group integrated:

- the general objectives and principles of ESD as outlined in the NSESD;
- the conclusions and guidelines from the FAO technical group (FAO, 1999);
- legislation already in place within the various jurisdictions; and
- other relevant instruments (e.g. the EPBC Act & MSC guidelines).

The SCFA core objectives for sustainable fisheries are to:

- Protect biodiversity and maintain essential ecological processes.
- Enhance individual and community wellbeing by following a path of economic development that safeguards the welfare of current & future generations.
- Provide effective legal, institutional and economic frameworks for ecologically sustainable development.

For these objectives, the seven major goals for wild capture fisheries were:

Contribution to Ecological Wellbeing

1. Retained Species

To manage the take of retained species within ecologically viable stock levels by avoiding overfishing and maintaining and optimising long-term yields.

2. Non-Retained Species

To manage the fishery in a manner that does not threaten biodiversity and habitat via the removal of non-retained species (including protected species and ecological communities) and manage the take of non-retained species at ecologically viable stock levels.

3. Other Environmental Impacts³

To manage the impacts of fisheries such that only acceptable impacts occur to functional ecological relationships, habitat and processes.

² Ministerial Council for Forestry, Fisheries and Aquaculture.

³ This was subsequently renamed General Ecosystem.

Contribution to Human Wellbeing

4. *Indigenous Community Wellbeing*

To satisfy traditional (customary) fishing needs, cultural /economic development and sustainability of indigenous communities.

5. *Community and National Wellbeing*⁴

To contribute to community, regional and national wellbeing, lifestyle and cultural needs.

Ability to Achieve

6. *Governance*

To ensure that ESD principles are underpinned by legal, institutional, economic and policy frameworks capable of responding and taking appropriate pre-emptive and remedial actions.

To allocate the resource to maximise/optimize community benefits.

7. *Impacts of the Environment*

To recognise the impacts of the environment *on* fisheries from both natural and non-fishery human induced sources and incorporate these within management responses.

Initial Draft Reporting Framework

A major factor in the successful development of a national system for reporting on ESD is the framework that is used. The system needs to be sufficiently flexible to allow for the specific issues that affect each fishery, whilst recognising the need to ensure that where possible, issues are treated in a consistent manner.

The framework that was developed utilised the information and processes already available from the work that has been done on ESD reporting by BRS (see Chesson and Clayton 1998, Chesson et al., 1999), the FAO report on sustainability indicators for fisheries (FAO, 1999) and other reporting systems (e.g. PSR, SOE). Thus, the draft National ESD reporting framework included elements from a number of these systems including the use of a series of component trees that were used to identify the issues and a set of standard report headings for each of these identified issues.

Component Trees

The draft National ESD reporting framework had eight major components which fell into three categories; “contributions to ecological wellbeing”, “contributions to human wellbeing” and the “management arrangements”, available to achieve the objectives (Fig. 1). Each of the major components was broken down into more specific sub-components for which ultimately operational objectives could be developed.

⁴ This was split into two component trees.

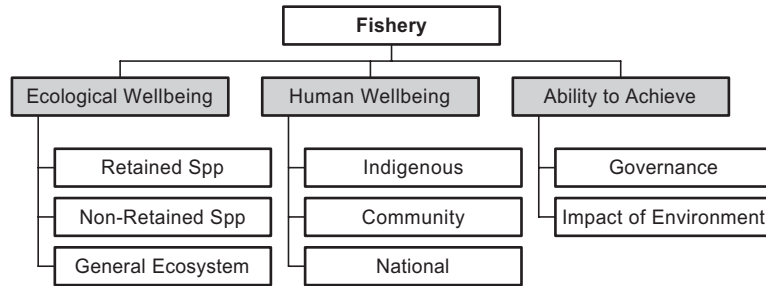


Figure 1. The eight components of ESD for Fisheries.

To maximise the consistency of approach amongst different fisheries, the issues that were raised by the SCFA and the ESD reference group under each of the eight main components were arranged into a series of “generic” component trees (e.g. Fig. 2, see Appendix 2 for the full set). These generic trees were used as the starting point for each of the case studies which could then be subsequently adapted into trees specific to each fishery during an open consultative process involving all stakeholder groups. This is achieved by expanding (splitting) or contracting (removing/lumping) the number of sub-components as required. For example, an abalone fishery is unlikely to require a number of the sub-components as shown in Fig. 2 (e.g. bait collection, ghost fishing). Whereas a trawl fishery may require dividing the impacts on benthic biota into different habitat categories.

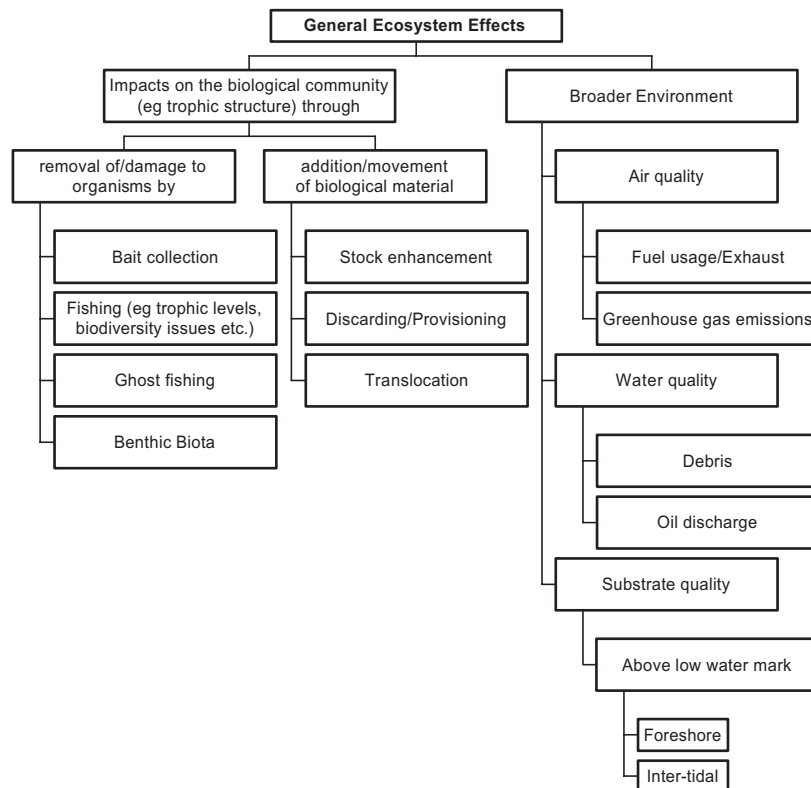


Figure 2. One of the eight generic component trees (see Appendix 2 for the full set).

Reports

For each of the lowest level or terminal sub-components/issues, a detailed report is required. A set of 10 standard headings was developed, each of which needs to be addressed (see Table 1 below). Using the same reporting headings for each of the sub-components:

- Assists in a consistency of focus and attention across all components/sub-components (especially for components where there is little existing experience).
- Separates discussions concerning performance measures from the discussions about the actual indicator, and from the discussion of the adequacy of their measurement etc.
- Requires a specific consideration of the management response in relation to the data available.

Table 1. Description of the ESD Framework Report Headings.

Performance Report Heading	Description
1. Operational Objective (plus justification)	<i>What are you trying to achieve and why?</i>
2. Indicator	<i>What are you going to use to measure performance?</i>
3. Performance Measure/Limit plus (justification)	<i>What levels define acceptable and unacceptable performance and why?</i>
4. Data Requirements/Availability	<i>What monitoring programs are needed?</i>
5. Evaluation	<i>What is the current performance of the fishery for this issue?</i>
6. Robustness	<i>How robust is the indicator &/or the performance measure in assessing performance against the objective?</i>
7. Fisheries Management Response	
– Current	<i>What are the management actions currently being used to achieve acceptable performance?</i>
– Future	<i>What extra management is to be introduced?</i>
– Actions if Performance Limit is exceeded	<i>What will happen if the indicator suggests performance is not acceptable?</i>
8. Comments and Action	<i>Summarise what actions will happen in the coming years.</i>
9. External Drivers	<i>What factors, outside of the fisheries control may affect performance against the objective?</i>

The first step was to specify an operational objective for the component (noting that by setting one objective you are influencing the performance of other components). This operational objective needed to have a direct and practical interpretation in the context of the management of the fishery and, most importantly, performance needs to be measurable and auditable. The objective should also be consistent with, and clearly linked to, any higher-level objectives that might appear in legislation, policy statements or management plans (i.e. this linkage should be spelt out clearly in the justification for choosing this objective).

The indicator is the measurement that is to be used to track changes with respect to an operational objective. The performance measure provides the information to enable

interpretation of the indicator and can be expressed in terms of one or more reference points (biomass should remain as close as possible to x and no lower than y) or simply in terms of a trend (increasing is desirable, decreasing is undesirable).

The operational objective, indicator and performance measure are a package. All three are needed before any one of them is useful. Indicators by themselves (as used in some reporting schemes) are of little value.

In addition to stating the operational objective, indicator and performance measure, there are headings for data quality and availability, robustness of the indicator, management response, and external drivers. The inclusion of 'management response', particularly when it is discussed in relation to the data available, makes the explicit link between the operational objective, the measurement and reporting of performance and the action to be taken to maintain or improve that performance. This is an important distinction, and advantage of the National ESD framework, compared to other systems (Chesson et al., 2000).

This draft framework was tested and modified through a series of case studies and workshops to maximise its usefulness and applicability across the wide spectrum of fisheries that occur in Australia.

Case Studies

The June 2000 meeting discussed which fisheries should comprise the first series of case studies. Given the nominations from each jurisdiction, potential case study fisheries were assessed against a series of criteria (fishery method, location, data availability, level of conflict, other processes). From this, a short list of fisheries was selected. Potential case studies were also identified for recreational, aquaculture and traditional fisheries.

The eight initial case studies (and the dates of the meeting) were:

1. East Coast Trawl Fishery (Qld, 20–21 July 2000)
2. Western Rock Lobster (WA, 2–3 August 2000)
3. WA Aquarium Fishery (WA, 4 August 2000)
4. Victorian Abalone Fishery (Vic, 14–16 August 2000)
5. NSW Estuary General Fishery (NSW, 22–23 August 2000)
6. NT Barramundi Recreational Fishery (NT, 6–7 September 2000)
7. Prawn Aquaculture (Qld, 2–3 October 2000)
8. East Coast Tuna and Billfish (AFMA, 16–17 October 2000)

Participants were provided with significant amount of background material one to two weeks prior to the meetings. This included a comprehensive Case Study Information Package that outlined the background and processes that were to be tested (see Attachment 1). They were also supplied with as much information about the fishery being examined as could be provided by the relevant jurisdiction.

Each of these case study meetings went for 2-days during which time an explanation for why we were conducting this process was explained to the representatives from the relevant fishing industry, departmental managers, researchers, local environmental and other non-government groups and usually a representative from EA.

Following the general introduction and a short presentation on the basics of the fishery being examined, the meetings systematically identified the major issues specific to the fishery for each of the ESD component trees and a number of example reports were developed. Subsequent to the meetings, it was expected that the jurisdictions would complete reports for each of the identified issues.

Consequently, each of the initial case study meetings was designed to:

1. *Adapt the “generic components” agreed to by the SCFA-ESD Reference group into an agreed set of component trees specific to the fishery being examined.*
2. *Identify existing and possible additional operational objectives, indicators, performance limits etc. for each of the components.*
3. *Make a start on each of the other sections of the report.*
4. *Complete the development of the report (i.e. information under all of the headings to be completed) for the case study fishery. This would be done largely by the jurisdictions but with the assistance of the project team.*

Extract from Case Study Package Version 1 July 2000 (see attachment 1 for details)

At the end of each Case Study, a report was completed that summarised the material generated during the case study (see Attachment 2 for all the Case Study Reports). This report also provided a commentary on how well the case study meeting had progressed, particularly with reference to any suggested changes in how the meetings should be structured and also if there were any problems identified with the structure of the ESD Reporting Framework.

Case Study Workshop

A two-day workshop was held in Canberra on October 30-31, 2000 to review progress on the development of the National ESD Framework. The Case Study Workshop was planned to be the main method of drawing together the experiences learned in each of the eight case studies by identifying the strengths and weaknesses in the process and thereby ensure that the project was on-track to meet the major requirements and needs of all stakeholder groups.

Specifically the workshop objectives were to determine:

- What progress has been made since the Reference Group meeting in June 2000?
- How successful have the two-day meetings been in getting the process underway for each of the stakeholder groups?
- What has happened in each jurisdiction after the meeting finished?
- Where to from here?

Workshop Format

The participants at the workshop, which was held at FRDC offices, included the project team, the SCFA Indicators working group, the ESD reference group along with representatives from each of the eight case studies (see above). The agenda (see Appendix 3) provided the opportunity for the project team to explain what had

happened and what they had learned during the series of case study meetings. Participants from each of the case studies then provided feedback on the 2-day meeting process from their perspective and how difficult it was to progress the development of the reports afterwards. Finally, each of the major stakeholder groups (ASIC, EA, RecFish, NGOs and SCFA) provided their views on how successful the process has been in developing a reporting tool that covered their needs and, importantly, how the project should develop in the future. To assist the workshop stay focussed, Dr Derek Staples from BRS was the facilitator of the meeting.

Findings

The project, as originally designed, was attempting to develop a practical method for reporting on ESD that would enable the collation of the objectives, indicators, performance measures and management responses currently being used or proposed for Australian fisheries. There was general agreement that the suggested process of identifying issues using the component trees and developing standard reports for each of the identified components was an appropriate way to proceed. The variations in the structures of some of the “generic” trees, as suggested by the project team from their experiences during these meetings, were also ratified. Most stakeholders appreciated the more holistic outcomes that were generated by the process and the disciplined approach of starting with operational objectives and then moving to the other report headings. However, the need to develop a robust method of determining whether issues were significant enough to warrant further attention was recognised⁵.

The major issue raised about the operation of the case study meetings, was that not all stakeholder groups were able to attend. Subsequent surveys have found that the unavoidably (given the projects timetable) small amount of notice given was the main reason. It was clear that more than a few weeks notice will be necessary for many groups, particularly for the NGOs who have few people to spread around the various issues. To obtain adequate involvement of indigenous groups (who were only present at 2 of the 8 case study meetings), it was suggested that a separate process might be required. Such a process should be developed in conjunction with ATSIC.

The development of further component reports after the initial meeting was found by all groups to be a resource hungry task, more so than was initially expected. This was exacerbated by the general lack of explicit operational objectives available for most fisheries and the need to dedicate appropriate resources to enable their development. The lack of local expertise and information for the socio-economic components was also an issue for most jurisdictions, but suggestions were provided to maximise the value of any expenditure in this area (Table 2).

⁵ This was addressed by the incorporation of a Risk Assessment process within the revised framework.

Table 2. Outcomes of Workshop – Social Data.

Data Type	How to get it?
Community Sensitivity Index	Social Sciences section of BRS already has the information and can supply at marginal costs.
Resource Dependency	Relatively expensive to collect @ \$20-30K per home port or region. Already available for Qld and soon for parts of SE. Australia. (Should focus on important fishing communities which are also high on the CSI scale to reduce costs).
Public Perceptions	National – may (hopefully) be funded by the Commonwealth. Local – would need surveys that would cost \$10-20 K per community region. (only do in important areas)

The most important issues raised during the workshop related to the value of any report developed using the SCFA process in meeting the requirements of a number of third parties including EA for schedule 4 and EPBC, GBRMPA, various state EPAs and also for the on-going management of the fishery itself. Similarly, the evolution of this reporting process into an assessment scheme was also seen as a high priority. Thus, the possibility of developing standards for both the processes undertaken and the outcomes achieved will be considered for future projects⁶.

Conclusions of Workshop

To ensure that the national ESD Framework process can meet the objectives of all stakeholders and achieve the improvements required, involved a number of revisions to the project workplan. Specifically, it was proposed that project resources should be redirected into assisting the completion of at least 2 case study reports to a level that would enable the reports to be submitted to other agencies for review/assessment (e.g. EA, GBRMPA). This would allow a determination as to whether the reports are sufficiently comprehensive to meet the requirements of a number of these third parties. Moreover, the outcomes of these assessments should begin to determine whether the standards presently being used for objectives, performance measures and management responses are considered to be appropriate.

Overall, the workshop was successful in providing useful feedback on the progress of the project so far. Relatively few major problems were identified with an action plan (Appendix 3) developed to address those that were raised. The project team used this information to revise their work plan and timetable for the remainder of the project.

⁶ This was subsequently initiated with the funding of FRDC 2002/086.

Post-Workshop Case Studies (2001)

The major change to the National ESD Reporting Framework resulting from the Workshop was the incorporation of an additional Risk Assessment step in the process. This was introduced because of the concerns of many managers and participants that the numbers of issues being identified in the workshops was often too many for all of them to be addressed in a comprehensive fashion. Therefore, the methods outlined in the Australian/New Zealand Standard Risk Analysis Process (AS 4360) were adapted for use in fisheries situations.

The Case Study Package was also modified to incorporate a description of this Risk Assessment process. Consequently, the expected outcomes from each case study meeting were altered to reflect these changes.

During the case study meetings we want to:

- 1. Adapt the “generic components” agreed to by the SCFA-ESD Reference group into an agreed set of component trees specific to the fishery being examined.*
- 2. Conduct a risk assessment on the environmental issues and prioritise social and economic components.**
- 3. Provide examples on the other sections of the report.*
- 4. Demonstrate how this information can be used to generate an application to EA (MSC) under their guidelines.**

Extract from “ESD Case Study Package Version 2.2 October 2001” (changes from Version 1 are in bold) –see Attachment 1 for details.

The new processes were presented to a meeting of the ESD Reference group held in June 2001. A number of issues and suggestions about the descriptions and categories used in the Risk Assessment process were made. These were incorporated into the next version of the packages and the further testing and tuning of the methods was facilitated by applying them to the assessments of 1 fishery in SA (Lakes and Coorong) and 6 fisheries in WA, these included:

- Shark Bay Prawns
- Shark Bay Scallop
- Exmouth Gulf Prawn
- Shark Bay Snapper
- Pearl Oysters
- Abalone.

From the results of these extra case studies, the case study package was revised and expanded to provide more of a commentary on each of the sections. The material presented included the experiences learned during each of the case studies, including the case study meetings and the subsequent report writing phase. This information was subsequently expanded further into a “How To” guide which was designed to be sufficiently comprehensive that it could be used on its own, or with minimal instruction as the basis to complete an ESD report for any fishery (See Figure 3 for a summary of the process).

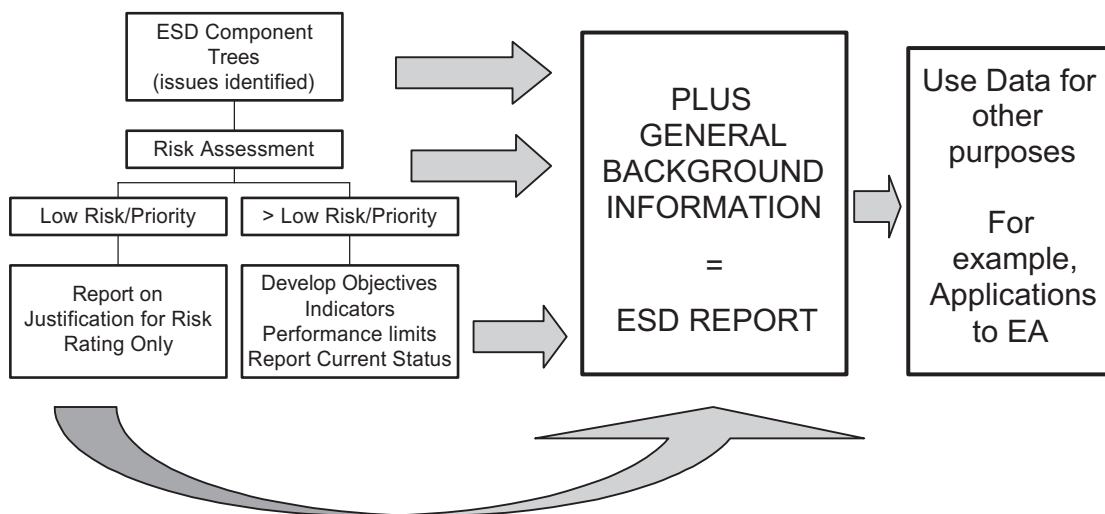


Figure 3. Summary of the National ESD Reporting Framework Processes.

The “How To” Guide

A complete draft of this *Guide* was completed in September 2001. It was discussed at the November 2001 ESD Reference group meeting and final changes were completed in February 2002. It was published in March 2002 and officially launched at the Aquaculture ESD workshop held in Melbourne in July 2002. The “*How To*” Guide is also located in Attachment 3.

The Technical Summary Document

The final output from this project was a summary of the material generated within each of the case studies. In particular, the initial list of operational objectives and indicators for each major fishery type for the ecological components. This report is located in Attachment 4.

PLEASE NOTE

Both the *How to Guide* and the *Technical Summary Document*, along with much of the case study information are all lodged as pdf files on the ESD Subprogram website located at www.fisheries-esd.com

BENEFITS

One of the major outcomes from this project was the production of a ‘How To’ *Guide* to assist individuals, agencies and the industry to provide a comprehensive account of the current performance of a fishery.

Even though this *Guide* should not be seen as a “magic bullet” to some of the current issues facing fisheries agencies and the industry the processes outlined should, if correctly applied, provide a comprehensive account of the current performance of a fishery. This should enable a fair and comprehensive assessment to be made of the fishery concerned, which can be used for a multitude of purposes.

To complete this process, a description of what the fishery is presently trying to achieve, the justification for current management actions (or inactions), and whether or not targets are being met, are all required. These reports should also identify areas where the current objectives or targets are either inadequate or are under initial development. Hence, completing this process provides an excellent planning tool, helping to identify what needs to be done in the future, what current programs assist with these needs, and which of these programs need to be improved.

Whilst the maximum benefits and outcomes will flow from completing assessments across all elements of ESD (i.e. the ecological, economic and social), the process is sufficiently flexible that it can be used to assess some - or only one - elements, depending upon the requirements or priorities at the time. The other elements can be added, when appropriate or logistically possible.

Finally, the information generated by this process can be used for a number of purposes. Thus, a full ESD report can be considered as a *Curriculum Vitae* for a fishery. It is likely that this information will be needed to meet both internal requirements (such as reports to Parliament) and external requirements (e.g. applications to the local/jurisdictional Environmental Protection Authority, or Environment Australia, or the Marine Stewardship Council, etc.).

FURTHER DEVELOPMENT

This project has only begun the process for generating the tools needed for the reporting and assessment of ESD for the fisheries and aquaculture sectors. A number of other activities have been identified that will be needed to complete this process including:

Additional Reporting Requirements (in addition to the outputs of the current project)

Indigenous Involvement and Indigenous Fishery Case Studies

The initial series of case studies found that the method of holding small workshops in capital cities where only a few representatives of each sector are present were not appropriate to address indigenous issues. Obtaining input from indigenous groups with an interest in a fishery, or whom the fishery affects, may require a different approach.

For example, whilst there are a number of Non Governmental Organisations that have an interest in fisheries issues, it is common for them to represent each other at workshops. Similarly, there are likely to be a number of indigenous family groups with an interest in a fishery but it is often not appropriate for one group to be asked to speak on behalf of others, unless they have prior agreement to this proposition.

Holding workshops in capital cities means that they may be difficult for indigenous people to attend, particularly if this clashes with cultural events or other customary obligations. It is also possible that indigenous people may prefer not to participate in a situation where they are the only indigenous person in a room full of people.

The aforesaid means that it may be difficult to get indigenous representatives to attend a workshop in a city, and, if they do, these representatives may not feel comfortable speaking up in such an environment.

Getting genuine and effective indigenous input to this process may require talking to individuals and groups on their 'home ground' and using a different, more conversational approach. Advice on a more appropriate approach to obtaining indigenous input could be sought from the Aboriginal and Torres Strait Islander Commission, Indigenous Studies departments at tertiary institutions, and those people who have experience with effective communications with the relevant indigenous groups.

Aquaculture

Only one aquaculture case study was completed during the initial project. Furthermore, as the case study was prawn farming, being a land based system it could be argued that in terms of the methods for assessment, it is closer to dairy farming than to wild capture fishing. Consequently, this case study was viewed by the project team more as an initial scoping exercise rather than an application of a developed system. There was strong interest in seeing how sensible the three new draft component trees fitted with the actual issues for an aquaculture industry.

Despite the problems that were encountered during the case study meeting (See Attachment 2 for details) this was still a useful exercise. The three newly developed

aquaculture environmental trees appeared to be at least a sensible starting point for developing reports on aquaculture. It will however be necessary to test the system on a wider selection of aquaculture sectors to ensure that it is a sensible approach in all circumstances. A number of processes are already underway (including a workshop held in July 2002) to progress this development.

Socio-Economic Information

The need for a more structured approach to the way social issues in the framework are developed and reported against was identified at a number of workshops. It was suggested that producing a handbook that fisheries managers could use to either apply the concepts of social assessment (one of the three components of ESD reporting) or alternatively assess the activities of consultants contracted to undertake social assessment, was essential to ensuring social assessments are integrated into the ESD process for all fisheries.

Other

The processes developed here could be applicable to other industries and circumstances particularly those relevant to marine and coastal ecosystems along with catchment and freshwater systems. There is also interest in how this system can be adapted for use in non-aquatic sectors such as agriculture.

Assessment Tools (initially progressed as FRDC Project 2002/086)

These proposed activities are summarised below.

- Given the strong need by most jurisdictions (and other external parties) to have some guidance on what is acceptable performance with regards to objectives, indicators etc for fisheries as soon as possible, this scoping project would produce the first edition of the “Best Practice” report/manual by November 2002 based on information currently available. It is envisaged that a follow up project would be submitted to update this manual at 6-12 month intervals.
- This scoping project would also include a series of workshops and discussions to gain an understanding of the inter-connectedness across the elements of ESD (social, economic and ecological) and initiate development of appropriate methods/models to enable their integration and predict flow-on effects. It is envisaged that this first stage would concentrate on examinations within a single fishery. It was recognised, however, that there will be a need to expand this scope to “across fisheries” and ultimately “across industries” over the next 2 –5 years. The outcomes of this preliminary work would be used to produce a longer term, more comprehensive project application for the December 2002 intake.
- The gaps and level of completeness of the elements contained within the first edition of the “Best Practice” report and the initial discussions and preliminary model testing of the methods for integration would provide the information needed to develop the application for the “Testing Options” project by December 2002.

PLANNED OUTCOMES

The overall outcome from the SCFA initiative was for nationally agreed sustainability criteria and indicators to report on and demonstrate that fisheries managers are meeting ESD objectives.

The project identified that developing a set of nationally agreed indicators was not a sensible approach. Instead, the National ESD framework developed centred on having a consistent process for each fishery to identify what issues needed to be addressed, to what level they needed to be managed and for those needing management what were the objectives, performance measures and finally what were the indicators.

A major outcome of this initiative will be for fisheries agencies being able to report on ESD for all their fisheries using practical and cost effective indicators.

The project was able to produce a framework for reporting on ESD in the most efficient way. This system is being utilised in most jurisdictions in either an implicit or explicit manner.

The assessments should also assist identify areas that can be addressed by the Seafood Services project to increase the efficiency and efficacy of industries wishing to attain external certification for their environmental practices.

The ESD framework developed in this project was used as the basis for generating the tools for the industry to create their own environmental management systems. The two systems are complementary.

The project will provide a staged series of outputs that will progressively provide more comprehensive and robust information with which to report on ESD for Australian fisheries.

The first set of outputs has been created through publishing the *How to Guide* and the *Technical Support Summary*.

CONCLUSION

The project was successful in developing a practical system that allows reports on all elements of ESD to be generated for a fishery. Most of the case studies went well, even those that were in the first series before the addition of the Risk Assessment component. Subsequent trials in WA have proved the system is capable of operating across many types of fisheries and the material generated can be used to complete applications to other agencies (12 fisheries have now been completed).

The key elements of the framework includes the allowance for flexibility whilst ensuring a rigorous and disciplined approach is taken. Further, the incorporation of risk assessment techniques within the framework allows the broad spectrum of issues that are associated with each fishery to be dealt with in an appropriate and efficient manner.

The level of implementation of this framework amongst jurisdictions has been varied due to a number of factors. These include timing in relation to when the process was available and when reports were completed. Thus WA has taken on this process completely (Fletcher, 2002) whereas other agencies have so far only used the process indirectly (AFMA). Other processes such as NSW being required to complete prescriptive EIS reports under their EPA legislation have also made the direct uptake by all jurisdictions difficult to achieve. There has, nonetheless, been a continuing commitment for the process at the Standing Committee level which was ratified again at the meeting of the Marine and Coastal Committee of the NRMSC in July 2002. The reality is that elements of this system are already being used in all jurisdictions and this is likely to increase over time.

The National ESD Framework should provide all the information needed for any internal/external requirement. Whilst completing a report using this framework will not guarantee that it will be acceptable to third parties (such as EA for the EPBC requirements) - no process can guarantee this, because it is not a “magic wand”. The degree of acceptance by any third party depends on how effectively the issues are covered. Nonetheless, this framework will greatly assist the identification of where you are doing well and where you are not, before you submit an application.

The National ESD Framework is more than a reporting tool, it outlines a whole system of management because it describes what you are trying to achieve, how you will measure your success, whether this is being achieved or not and what you plan to do in the future to meet these objectives. Consequently, it needs to be the way you do business, not something added to what you already do. The main failures in its application are for jurisdictions where they have tried to use it in addition to other processes.

Another advantage of the system is that you can start the process using bite size chunks (not all elements have to be completed at once). Given current drivers to complete applications to EA, most agencies will concentrate on the environmental aspects of ESD for the next few years. The growing need to report on the social and economic elements will, however, become increasingly important and the system will continue to evolve and improve with experience.

Finally, there has been interest in the application of suitably modified frameworks to other natural resource management sectors (e.g. Aquaculture and Agriculture), but also to non-natural resource management agencies. This demonstrates the value of the basic framework as a methodology for assisting in the operation and management of any activity.

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STAFF

Dr W. J. Fletcher (NSW Fisheries from May 2000 to Dec. 2000)
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Ms T. McVea (NSW Fisheries – May 2000 to Dec 2000)

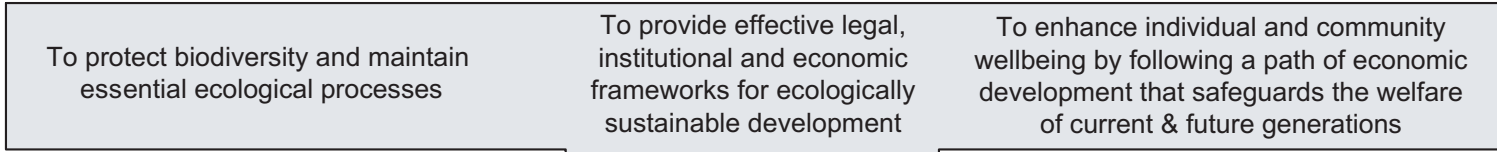
INTELLECTUAL PROPERTY

There are no intellectual property issues associated with the materials generated during this project. All the material is freely available from the Website www.fisheries-esd.com.

Conceptual Framework for the Ecologically Sustainable Development of Australian Fisheries

The core objectives for sustainable fisheries are:

Core Objectives



Ecological wellbeing

Human wellbeing (social/economic)

Retained species*	Non-Retained Species	Other Environmental impacts	Indigenous Wellbeing	Community/ National wellbeing	Governance
To manage the take of retained species within ecologically viable stock levels by avoiding overfishing and maintaining long term yields.	To manage the fishery in a manner that does not threaten biodiversity and habitat via the removal of non-retained species (including protected species and ecological communities) and manage the take of non-retained species at ecologically viable stock levels.	To manage the impacts <i>of</i> and <i>on</i> fishing such that only acceptable impacts occur to functional ecological relationships, habitat and processes.	To satisfy traditional fishing needs, cultural/economic development and sustainability of indigenous communities.	To contribute to community, regional and national wellbeing, lifestyle and cultural needs.	To ensure that ESD principles are underpinned by legal, institutional, economic and policy frameworks. To allocate the resource to maximise/optimize community benefits.

* note: these components/objectives will have little application to the aquaculture sector

Appendix 2. Generic Component Trees (WILD CAPTURE)

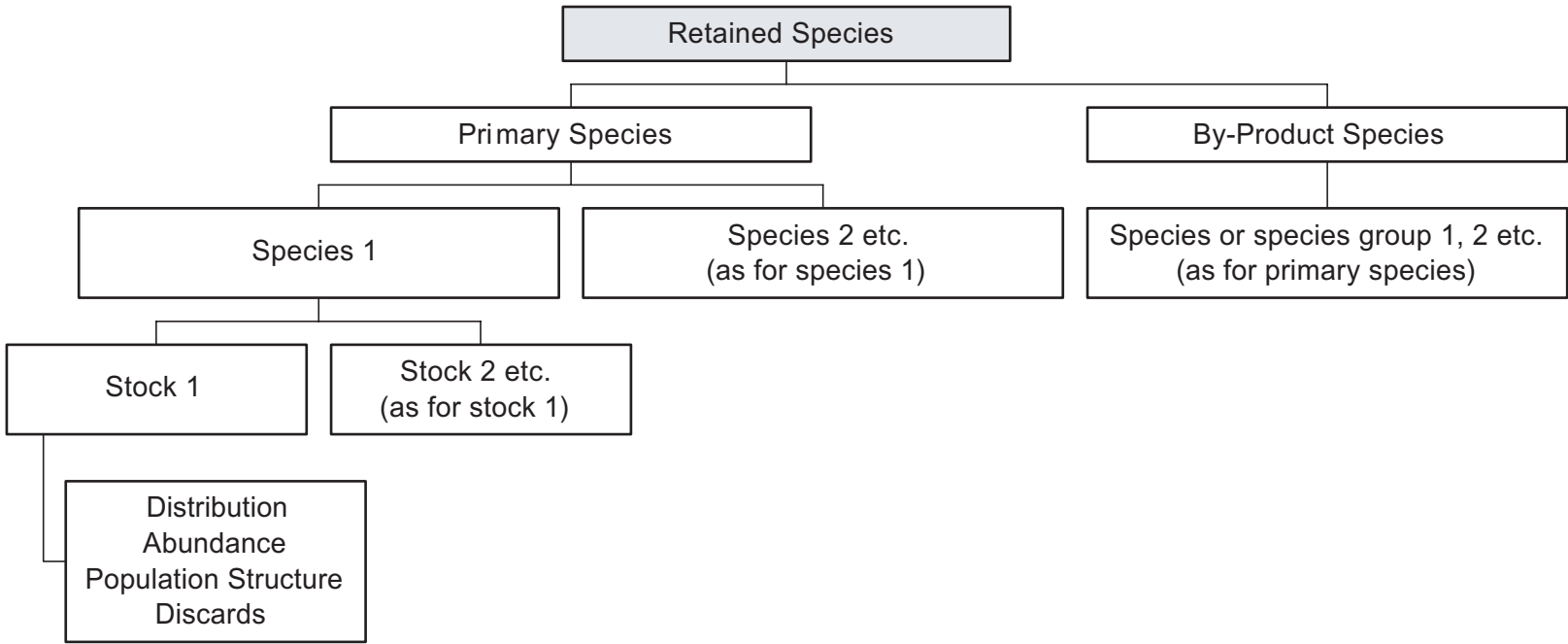
The following “generic” component trees have been modified from the draft trees initially developed at the June ESD Reference Group meeting held at Glenelg. Subsequent modifications are based upon the collective experiences gained during the seven wild-capture based case studies. These modifications were ratified at the October 2000 ESD Case Study Workshop.

These trees may be used and modified so long as their initial source is acknowledged.

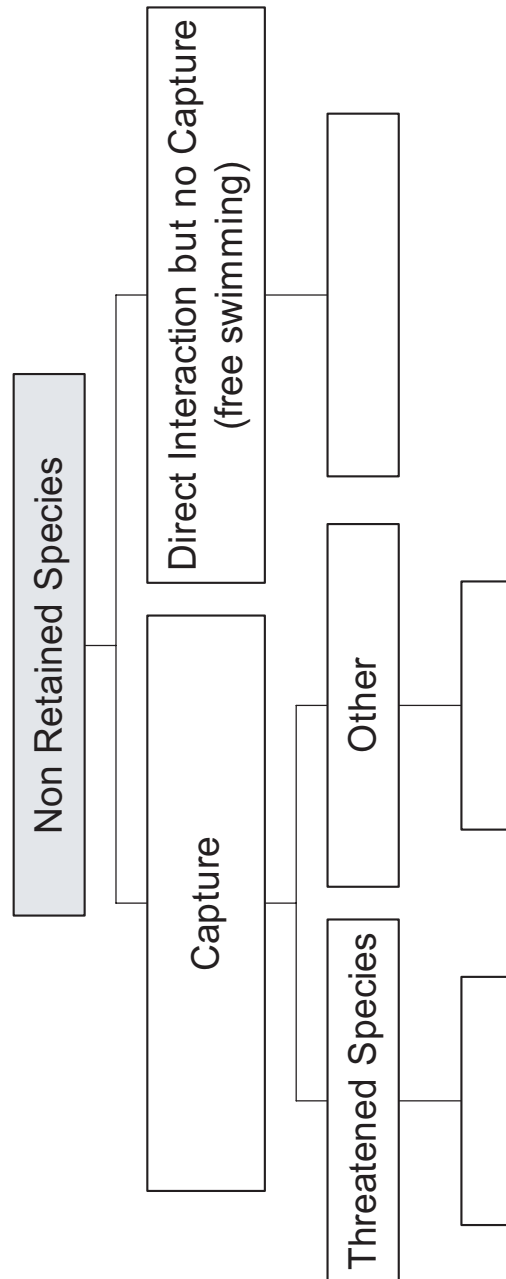
They are designed to be used in conjunction with the ‘HOW TO’ Guide. This is available either on CD or from the ESD website (www.fisheries-esd.com).

The component trees are produced in Microsoft Organisational Chart V2. They can be modified by double clicking when your cursor is located within the objects region. MS Organisational Chart V2 is available on most systems where MS Office has been installed.

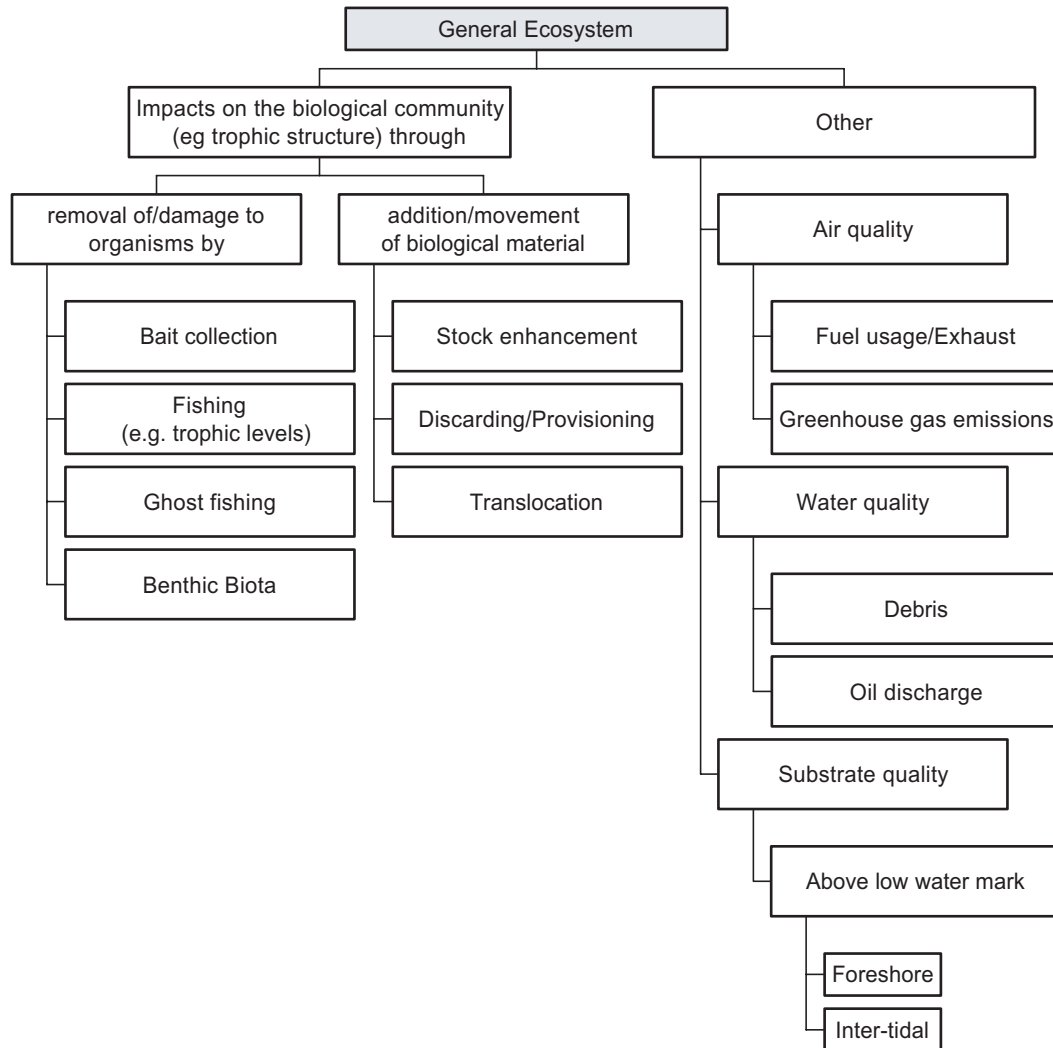
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Issues related to the non-retained species of a fishery:



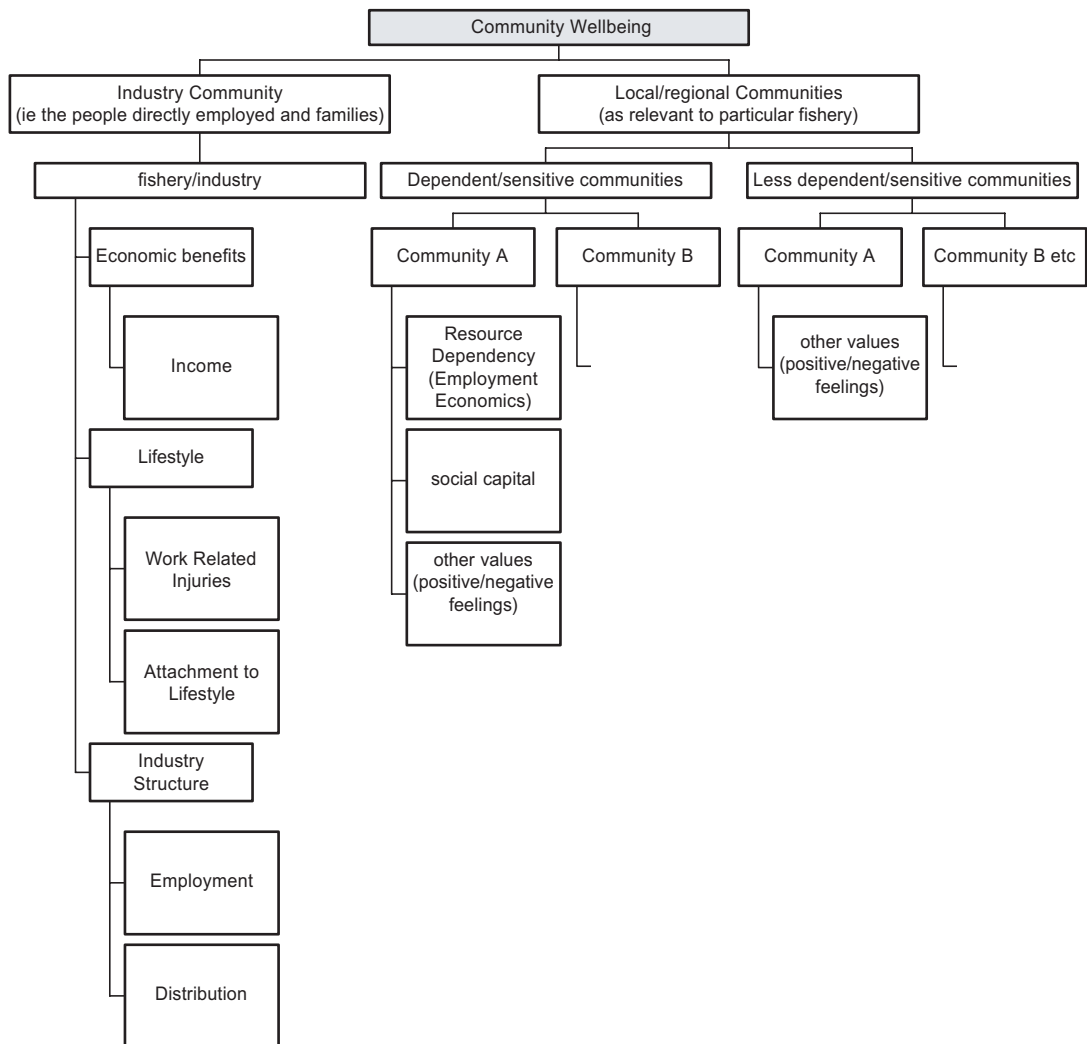
Issues related to the general ecosystem impacts of a fishery:



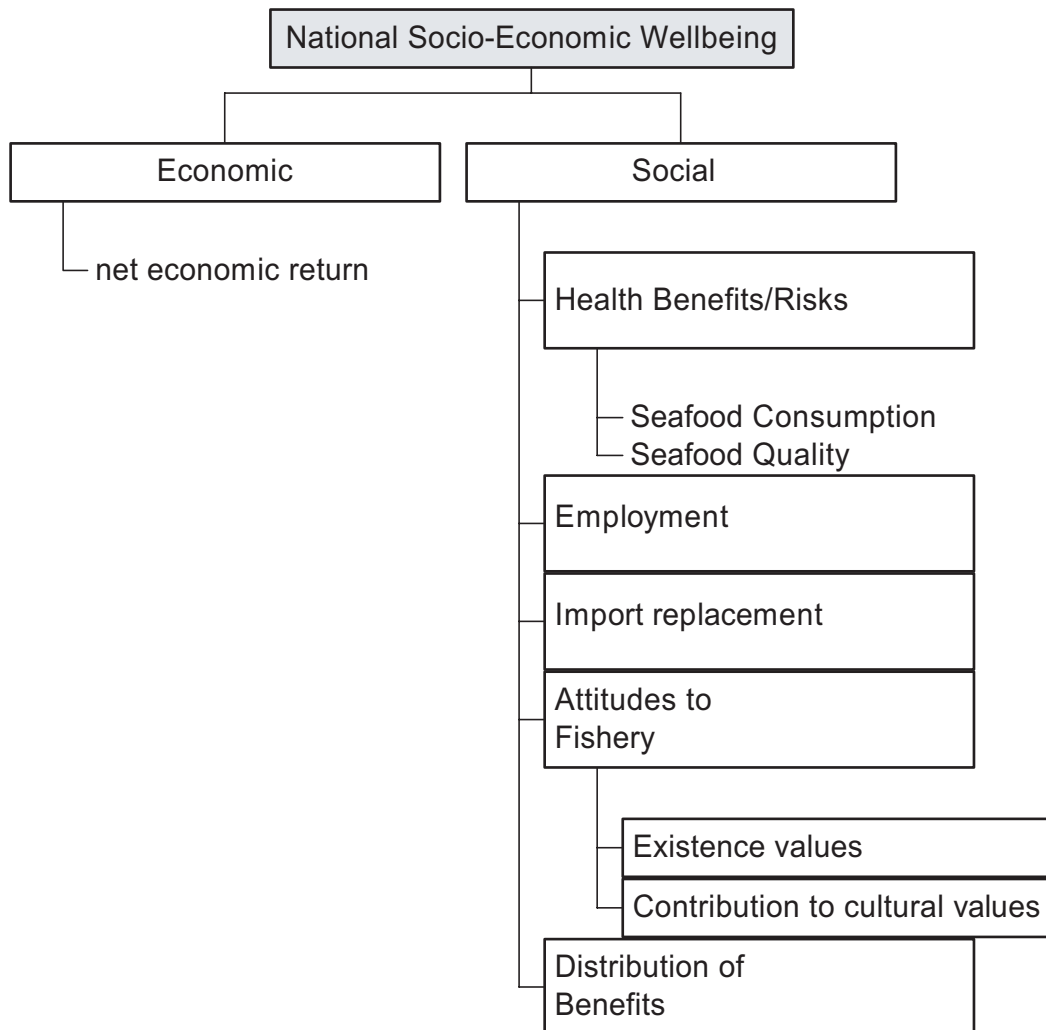
Contribution of the industry/Fishery to Indigenous Wellbeing:

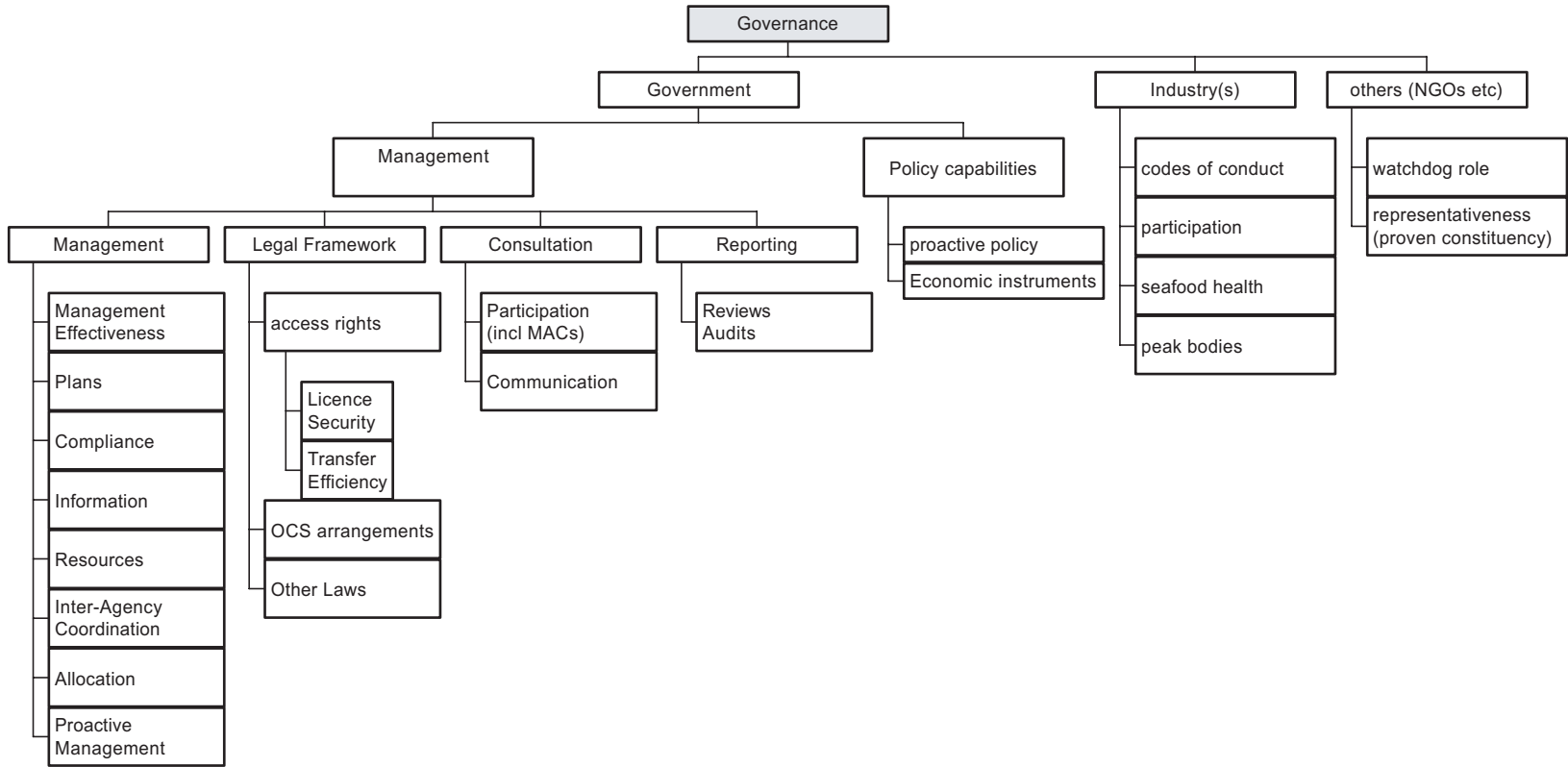


Contribution of the Fishery/Industry to Community Wellbeing:

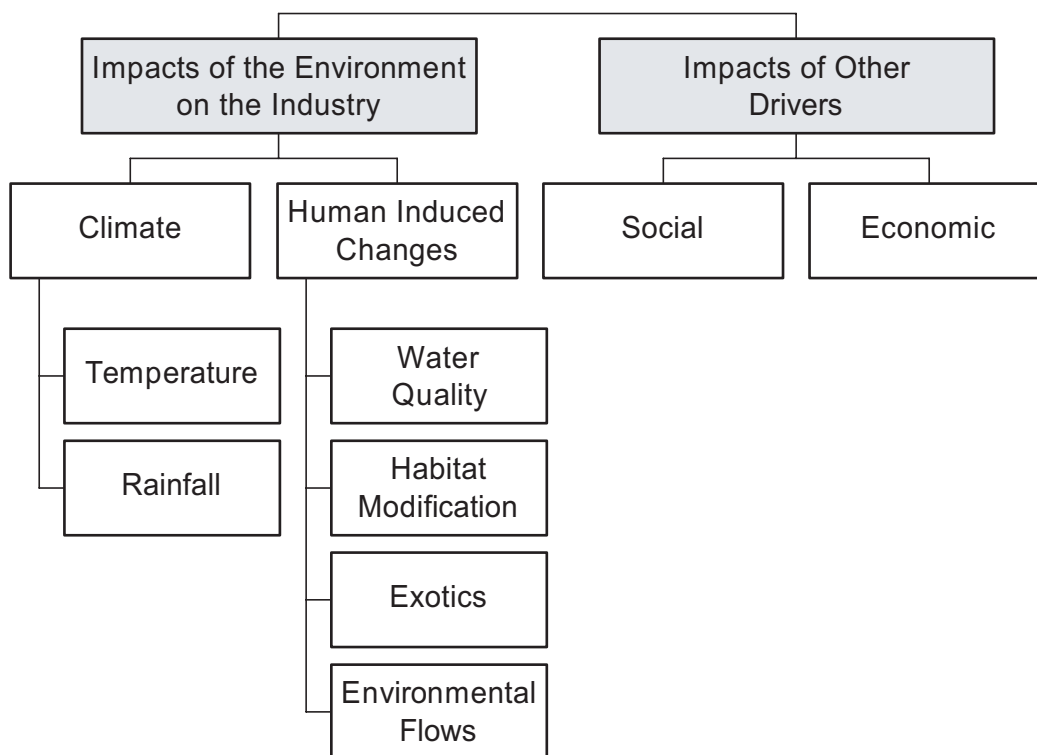


Contribution of the Fishery/Industry to National Socio-Economic Wellbeing:





Impacts of the environment and other issues on the industry:



Appendix 3. Case Study Workshop October 2000 – Agenda and Outcomes

SCFA FRDC CASE STUDY WORKSHOP

(FRDC Offices Deakin West Canberra)

30-31 October 2000

Chair - Glenn Hurry

AGENDA

Day One – Monday 30 October

- 8:30 – 9:00 Coffee and Welcome
9:00 – 9:05 Welcome to FRDC (*Peter Dundas-Smith*)
9:05 – 9:10 Introduction (*Facilitator – Derek Staples*)
9:10 – 9:25 Background (*Rick Fletcher*)

Overview of the Case Studies (Project Team Perspective)

- 9:25 – 9:45 General (*Rick Fletcher*)
9:45 – 10:05 Retained & Non Retained Species (*Jean Chesson*)
10:05 – 10:20 Environmental Trees (*Keith Sainsbury*)
10:20 – 10:30 Aquaculture Environment Trees (*Rick Fletcher*)

Morning Tea (10:30 – 10:50)

- 10:50 – 11:15 Indigenous and Non Indigenous Community Wellbeing Trees
(*Melanie Fisher*)
11:15 – 11:40 National Wellbeing (*Tor Hundloe*)
11:40 – 12:00 Governance (*Rick Fletcher*)
12:00 – 12:15 General Discussion

Lunch (12:15 – 1:15)

Overview of Case Studies (Local Case Study Participants)

- 1:15 – 1:45 Qld East Coast Trawl (2)
1:45 – 2:15 WA Aquarium Fish and Rock Lobster (2)
2:15 – 2:45 Victorian Abalone (2)
2:45 – 3:15 NSW Estuary General (2)

Afternoon Tea (3:15 – 3:40)

- 3:40 – 4:10 NT Recreational Barramundi (2)
4:10 – 4:40 EC Tuna and Billfish (2)
4:40 – 5:10 General Discussion (facilitator)

Close Day One

Day Two – Tuesday 31 October

8:30 Coffee
8:45 – 9:00 Review Day One (Facilitator)

Overview of Case Study Progress (Stakeholders)

9:00 - 9:20 ASIC
9:20 – 9:40 Report on Seafood Services FRDC Project
9:40 – 10:00 RecFish
10:00 –10:20 NGO

Morning Tea (10:20 – 10:40)

10:40 – 11:00 ATSIC
11:00 – 11:20 EA
11:20 – 11:40 SCFA
11:40 – 12:30 Synthesis of Opinions

Lunch (12:30 – 1:20)

Discussion Groups

1:20 – 1:30 Explanation Objectives
1:30 – 2:30 Three Breakout discussion groups on:
 – 3rd party Audits (*Jim Penn*)
 – Methods of Integration for reports (*Jean Chesson*)
 – Setting Standards for Assessments (*Keith Sainsbury*)
2:30 – 3:30 Reports by each group (3 x 20 minutes)

Afternoon Tea (3:30 – 4:00)

Where To Now?

4:00 – 4:30 Picking New Series of Case Studies (Facilitator)
4:30 – 5:00 Develop Action Plan (Facilitator)

Close

SCFA FRDC CASE STUDY WORKSHOP
FRDC, Canberra 30-31 October 2000

Attendees:

Kerry Truelove	EA
Mark Flanigan	EA
David Kay	EA
Ross Gould	Department of Fisheries WA
Anna Willock	Traffic Oceania
Jane Gunn	MAF, NZ
Jennie McMurrin	MAF, NZ
John Nicholls	Department of Fisheries WA
Jim Penn	Department of Fisheries WA
Guy Leyland	WAFIC
Emma Hopkins	WA EPA
Colin Chalmers	Department of Fisheries WA
Craig Bohm	MCCN
Phillip Gibbs	NSW Fisheries
Colin Buxton	TAFI - University of Tasmania
Anthony Cheshire	SARDI
Dennis Witt	Tas DPIWE
Hans Jusseit	East Coast Tuna Boat Owners Association.
Patrick Hone	FRDC
Glenn Hurry	AFFA
Mike Drynan	AFFA
Alex McNee	SCFA
Derek Staples	BRS/AFFA
Katrina Maguire	AFMA
David Smith	MAFRI
Harry Gorfine	MAFRI
Len McCall	SIV Abalone
Alex Wells	FRDC
Rosemary Lea	QFS
Kate Brooks	BRS
Andrew McNee	AFMA
Benj Whitworth	BRS
Peter Dundas Smith	FRDC
Russ Neal	ASIC
Ted Loveday	QSIA
Melanie Fisher	BRS
Keith Sainsbury	CSIRO
Jean Chesson	BRS
Tor Hundloe	UQ
Tony Smith	CSIRO
Rick Fletcher	NSW Fisheries
Ross Monash	Recfish Australia
John Harrison	AFANT
Richard Sellars	NTPIF
Nick Rayns	NTPIF
Will Zacharin	PIRSA (Fisheries)
Fiona Curley	QSIA
Jane Gallagher	QSIA

SUMMARY OF MEETING

Opening remarks

Peter Dundas-Smith

- recognition that this is the first project of truly national significance
- need to continue to work together to resolve outstanding issues

Derek Staples

- aim to review the process
- what have we learned
- determine stakeholders needs in the process
- determine the next steps - project
- stakeholders

Background - Rick Fletcher

Three stages: Standards, Reporting, Evaluation

- current process is only about reporting
- reporting unit is a “fishery” as defined by the management agency

See Figure 1.

Objectives for the workshop:

- How has the project gone so far?
- Explain changes to original framework
- Discuss success of 2 day meeting approach
- Discuss report writing post meeting

Expected outcomes - improvements in the reporting framework

Future steps - synthesis of information

- evaluation of reports - of what / by whom?
- Development of standards - of what / by whom?

Key issues for the workshop to progress

- a discussion on leadership in Govt / industry - who will take the process forward
- interactions between the States and the Commonwealth
- maintaining communication with the community
- maintaining resources
- priorities / timelines - important vs urgent
- other stakeholders not currently represented in the process
- Cost

Lessons from the case studies

- time consuming process
- information is not always available
- resource intensive - process needs to be cost/benefit justified
- need to determine if model will suit all fisheries
- process helped to share perceptions - it value outside fisheries to improve knowledge and understanding of fisheries and fisheries management issues - helps focus thinking on ESD
- ownership of the process is essential to achieve useful results
- this is an ongoing process - reporting is the key

- multi disciplinary expertise is required
- need a mechanism for weighting core ESD components
- feedback loops needed - reported outcomes lead to better indicators and improved management decisions
- social and economic data not always readily available
- involvement of indigenous communities
- industry commitment (costs and demands on time)
- overlap in existing management arrangements in existing fisheries - needs pragmatic decisions.
- Need for interagency cooperation to achieve ESD objectives
- Funding of issues that falls outside core business of fisheries agencies
- Intrinsic value of recreational fishing (existence value?)
- Need for communication tools to communicate ideas to broader populus
- Need commitment from all stakeholders to a common goal - ESD
- International dimensions - how do these fit within the framework?
- Need sufficient financial and human resources
- Concerns about political and bureaucratic interventions
- Operational manual for the process would be valuable
- Commitment and accountability
- Distinguish between short and long term objectives
- Need to build capability and confidence of all stakeholders

Summary of key issues

- need to look at different approaches for engaging the indigenous sector, current approaches will not work
- need to acknowledge regional issues that will impact on particular fisheries (and may drive agenda) but note the difference between these and broader (national level) objectives of the process.
- Acknowledge meeting overload - we are all busy people and this is a real issue that has to be worked through in achieving good stakeholder involvement
- Engaging the recreational sector - need to recognise the levels of involvement- local, regional, national
- Communication
- Integration of case studies: by jurisdiction, cross jurisdictions
- Determine the linkages between the fishery based approach and the ecosystem based approach
- Need to develop a mechanism for linking segments to develop the broad ESD management picture
- What is the economic framework within which ESD reporting will operate?

Meeting and post meeting

- education, communication and commitment from all parties
- sign off
- commitment of resources and acknowledgement of priorities
- need a process for integrating and focussing disparate activities
- next steps - how to structure reporting framework.

Next Steps

- All sides need to lay their requirements on the table

- Need to draw commonality out of case studies to develop a national level reporting framework
- Need to develop a parallel process to develop standards and determine what they will be needed for.
- Need to document existing standards
- Determine the key national standards to report against

**** SCFA working group needs to work through the issue of standards and assessment**

Third party review

- need to work towards a system that the community as a whole has confidence in
- need to develop standards to underpin auditing
- what are we auditing, the process or the outcome
- EA process is not an audit process - is an environmental impact assessment under statutory regulatory requirements
- Need to distinguish between process and performance audits

**** EA to provide Jim Penn with input on what their requirements are (for auditing)**

**** Jurisdictions to provide Jim with updates on their current arrangements**

Future Case Studies

- Aquaculture - pearls / Mussels
- Existing CS to assessment and integration
 - NSW Estuary
 - EC Prawn Trawl
 - Vic Abalone
- Ecosystem (species) - GBR Line fishery / EC Tuna
- Regional - integration (users)
 - N. Spencer Gulf
- Rec/Commercial/Mixed/Indigenous - integrating sectors
 - NT Barra
 - SA River Fishery
 - NSW estuary- recreational

All case studies need to be carried through to completed report
Need to acknowledge publicity/educational value of completed product.

Final resolutions

1. WG to meet and consider workshop outcomes
2. Inform SCFA - report of workshop with series of recommendations for endorsement
3. Redraft workplan

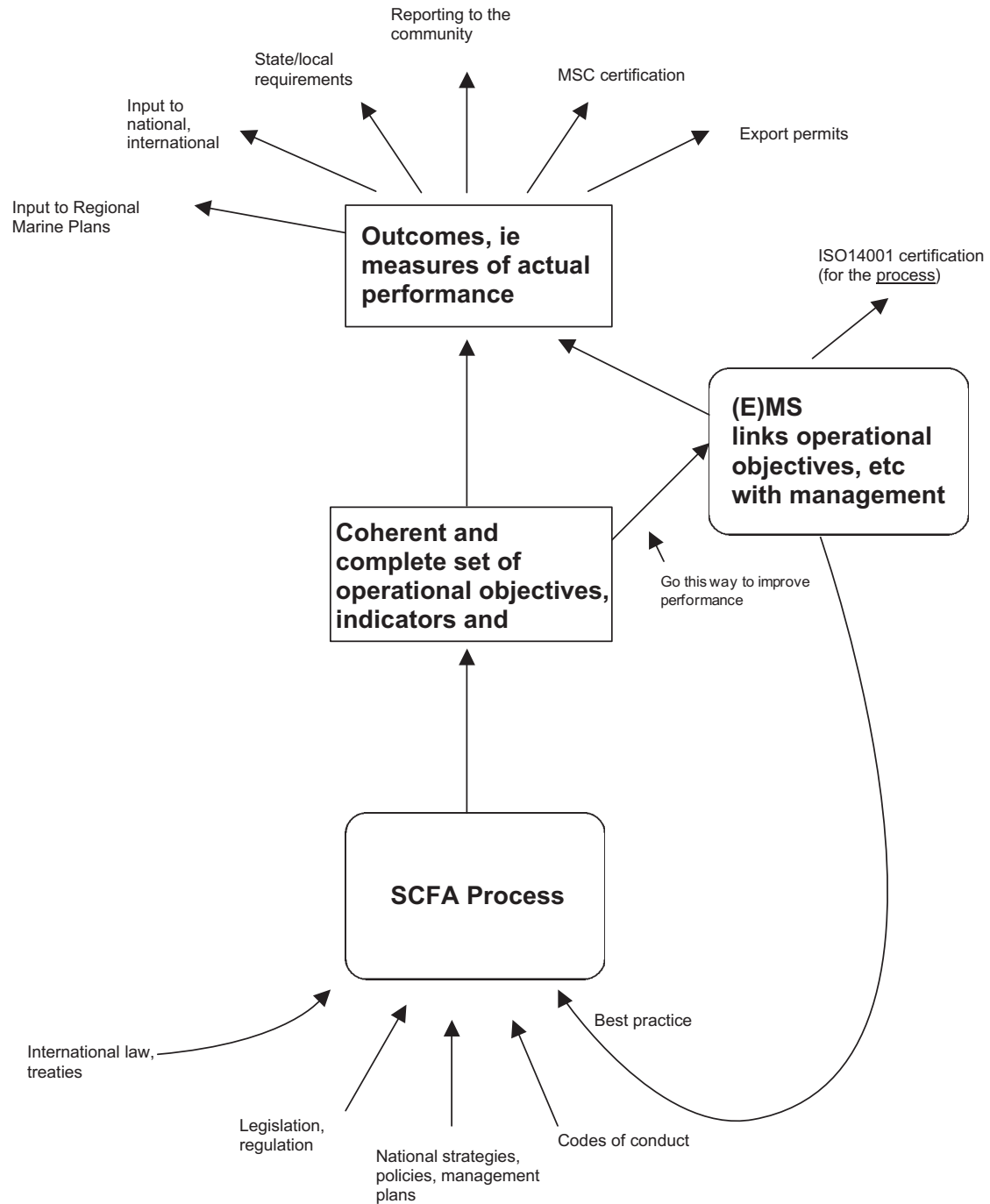


Figure 1. Role of SCFA process in relationship to other activities.

OUTCOMES FROM ESD CASE STUDY WORKSHOP

Improvements Needed

Case Studies

Post meeting process	Myopia (integration)	'Taboo' threats	Resource intensive	Economic and social analysis
<ul style="list-style-type: none"> - Project team to provide ongoing support - Agreed goals and timelines - Continued commitment \$\$\$\$ 	<ul style="list-style-type: none"> - Mutual understanding of the links between operational objectives and ESD goals - Other processes 	<ul style="list-style-type: none"> - Changed attitudes and perceptions 	<ul style="list-style-type: none"> - Process meets all needs - Pprioritise (risks) - Exponential 	<ul style="list-style-type: none"> - Consultants

Project Team

Solutions						
Present			Future			
Objectives (lack)	Multifishery (overlaps)	Integration	Communication (community)	Reporting	Leadership	Involvement
<ul style="list-style-type: none"> - Tease out - Tool kits (generic) 	<ul style="list-style-type: none"> - Ecosystem approach - Define the fishery (e.g. greatest catch) 	<ul style="list-style-type: none"> - \$ value - Case study - ecosystem 		<ul style="list-style-type: none"> - Needs 'owner' - Focus group <li style="text-align: center;">↓ - Larger stakeholder group 	<ul style="list-style-type: none"> - Agency / stakeholder Commitment - MACs 	<ul style="list-style-type: none"> - Separate process - More notice - GBRMPA - SCFA? - Case studies WHO PAYS?

WHAT NEEDS IMPROVING?

Achievement	Improvement	Action
- good stakeholder involvement	Not all inclusive	Yes
- broad range of ESD relevant issues	- not shared concept	?
	- little socio-economic experience	?
- focus discussion of issues	Too many issues	Yes
- Integration concept - ecol/econ/social	Needs more integration	Yes (fishery)
- moving towards more universal reporting	Linkages of processes vague	?
- more data available than originally thought	Difficult to assess	?
Long term perspective	Too many bushfires!!	Yes
Process should be part of core business		

ACTION PLAN

What	How	When	Who
<i>Case Studies</i>	<i>Select final set from list</i>	<i>End of November</i>	<i>Reference Group SCFA</i>
<i>Involvement/ Participation</i>	<i>Use NT Barra Case Study Separate process for indigenous groups</i>	<i>Next Activity</i>	<i>Reference group</i>
	<i>Timing of invitees</i>	<i>Case Study Workshop</i>	<i>Local Case Study Managers & Project Team / local case study managers</i>
<i>Communication</i>	<i>Develop a communication Strategy involving all agencies, articles for magazines, newsletters, web sites, other conferences Geelong II 2002</i>	<i>Now</i>	<i>Project team, FRDC, Specific Coordinator, SCFA secretariat, seanet, Macs FRDC Communications Team</i>
<i>Socio-Economic Stuff</i>	<i>See Table 2; Develop guidelines (like EA ones) for these issues employment / access rights</i>	<i>Ongoing</i>	<i>AFFA (BRS, ABARE), Consultants, Project Team</i>
<i>Links to Policy/ management</i>	<i>SCFA discussion and decisions</i>	<i>November</i>	<i>Reference group</i>
<i>Reporting → Assessment</i>	<i>Taking a case study through to being an assessment, start to identify possible standards</i>	<i>Case study timelines</i>	<i>Project Team</i>
<i>Commitment & Resources (leadership)</i>	<i>Case studies - industry and agencies SCFA / Agencies</i>	<i>Ongoing</i>	<i>SCFA, Project team, Industry, Everybody</i>
<i>Too Hard Basket</i>	<i>Employment / Access rights</i>		