

**ESD Reporting and Assessment
Subprogram:**
a social assessment handbook for use by
Australian fisheries managers in ESD
assessment and monitoring

Principal Investigator: Jacki Schirmer

FINAL REPORT



Ecologically
Sustainable Development

Catching Sustainability

FRDC – Subprogram



Australian Government

Bureau of Rural Sciences

**Fisheries Research and
Development Corporation**

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2003/056 ESD Reporting and Assessment Subprogram: a social assessment handbook for use by Australian fisheries managers in ESD assessment and monitoring

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OBJECTIVES:

- 1 Provide a user friendly “how to” Handbook for practitioners that will include:
 - a. A framework outlining the scope and content of social assessments for fisheries management
 - b. Describe the range of methods or approaches that can be employed at different stages of a social assessment
 - c. Provide an assessment of the relative strengths and limitations of different methods and approaches
- 2 Undertake case studies to
 - a. Refine and trial the social assessment principles and approaches contained in the Handbook
 - b. Modify the Handbook where necessary for final publication, to ensure ease of use by both fisheries managers and industry

NON TECHNICAL SUMMARY:

Background

In recent years, understanding the social side of fisheries and fishing industries has become increasingly important, particularly as part of processes reporting on ecologically sustainable development. This project was developed to provide a more structured approach to the way social assessments are planned and undertaken.

Need

Social assessment is an area of fisheries management that has received little attention. Assessing social impacts can inform the choice between management options that have similar resource and economic outcomes, but which may have significantly different social impacts, and can assist development of appropriate policies to ease transitions associated with changes implemented in the industry. A guide to undertaking social assessment

tailored to the needs of the fishing sector was needed to assist fisheries managers and industry in better understanding social aspects of the fishing sector.

Methods

The project involved development of draft recommended methods for social assessment in the Australian fishing sector, via a review of relevant literature and a workshop held in September 2003 with the Women's Industry Network – Seafood Community. These draft recommended approaches were then tested via two case studies – one of the South Australian Marine Scalefish Fishery, and another of commercial fishing activities in the East Gippsland region of Victoria. The case studies gathered data using both quantitative surveys, historical documentation, and in the MSF case study, qualitative workshops. The results of the case studies were used to refine recommended methods.

The project involved a high level of consultation with key stakeholder groups throughout, via the WINSOC workshop held at the 2003 *Seafood Directions* conference; the ESD Subprogram Working and Reference Groups; and consultation with fisheries managers and industries in the two case study regions.

Key results

Development of improved methods for undertaking social assessment

A set of recommended approaches for undertaking social assessment were produced and have been published in the *Social Assessment Handbook* (Schirmer and Casey 2005). Key results related to methods included that a combination of quantitative and qualitative data collection methods provides considerably more in-depth results; and that it is essential to tailor any assessment to the specific fishing activities being examined.

Improved understanding of factors affecting social well-being

The research undertaken in the project case studies found that the social well-being of those dependent on the fishing sector is affected by a range of factors. The level of satisfaction gained from fishing work impacts significantly on the quality of life of fishers, as does achieving an adequate income. However, achieving a high income is not as important to most fishers as a range of other aspects of their work, including undertaking satisfying tasks and achieving an appropriate balance between work and home life. External pressures such as falling market prices, rising input costs, and changes to fisheries management have a significant impact on the well-being of those involved in fishing. In some cases, the nature of fishing work may prevent fishers from taking part in social networks, and hence may result in lower levels of social support networks available to fishers. A high number of requests to take part in meetings and consultation processes also place strain on fishers. Many fishers are highly dependent on their fishing income, as well as being highly attached to fishing as their chosen career. This high dependence means that it is difficult for any fishing dependent families to adjust to changes made to fishing industries.

Outcomes Achieved

The primary outcomes of this project were:

- (1) Development of a set of recommended methods and approaches to undertaking social assessment in the Australian fishing sector, via the *Social Assessment Handbook*;
- (2) Improved understanding of factors affecting the social well-being of those dependent on the fishing sector in the South Australian Marine Scalefish Fishery and the East Gippsland region of Victoria; and

(3) Improved understanding of the contributions made by the fishing sector to coastal communities in the two case study regions.

KEYWORDS: ESD, ecologically sustainable development, social assessment, social impact assessment

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We would like to thank those who contributed their time and energy to helping design survey questions, and helping us identify ways of contacting members of the MSF and the East Gippsland fishing sector. In particular, we would like to thank Neil MacDonald, Alan Suter, Peter Clarke, Ian Robinson, Tony Guarnaccia, Jeff North and others who assisted in reviewing initial drafts of the questionnaire, Claire van der Geest from SeaNet and all members of the Marine Scalefish Fishery Management Committee. We would also like to thank Claire for her considerable work in organising and running workshops. We would like to thank the staff at LEFCOL, particularly Merriann, for their ongoing assistance and work distributing the survey; and Alan Taylor of the East Gippsland Abalone Industry Association (EZAIA) and Alex Ziolkowski of the Abalone Fishing Co-operative Limited (AFCL) for their considerable time spent helping comment on and distribute surveys.

We would also like to thank Primary Industry and Resources South Australia (PIRSA) for providing support, assistance and advice for the case study, particularly Noel Taylor-Moore, Will Zacharin, Jon Presser, Vicki Mavrakis, Sean Sloan and Keith Jones.

We gratefully acknowledge the funding provided by the Marine Scalefish Fishery Management Committee which allowed us to conduct workshops across the South Australian coast for the MSF case study. We also gratefully acknowledge the valuable in-kind support of SeaNet in organising these workshops.

This case study forms part of the larger project *Social Assessment Handbook for Australian Fisheries*, which was advised by the Fisheries Research and Development Corporation's ESD Subprogram Working Group and Reference Group. Their input and advice was greatly appreciated throughout the project.

We would like to thank BRS staff members who contributed time and advice to the project, in particular Ian Byron.

Finally, we would like to thank the Fisheries Research and Development Corporation for funding the project, and FRDC staff for their ongoing formal and informal support and advice throughout the life of the project.

Background

In recent years, understanding the social side of fisheries and fishing industries has become increasingly important, particularly as part of processes reporting on ecologically sustainable development. Improved understanding of the communities directly and indirectly dependent on fishing and fishing industries, their quality of life, and the values and attitudes of different groups towards fishing, can help decision-makers communicate the importance of fishing activities, improve quality of life for fishing communities, and develop responses to particular issues.

This project arose from a workshop held in June 2001 in South Australia which used the Lakes and Coorong fishery as a case study for the SCFA ESD framework. The workshop identified the need for a more structured approach to the way social issues are developed and reported against. A Handbook that fisheries managers could use to either apply the concepts of social assessment (one of the three components of ESD reporting) or assess the activities of consultants contracted to undertake social assessment, was seen as essential to ensuring social assessments are integrated successfully into the ESD process for all fisheries.

Need

Social assessment is an area of fisheries management that has received little attention and was identified as a priority by the Standing Committee on Fisheries and Aquaculture (SCFA)¹. Assessing social impacts can inform the choice between management options that have similar resource and economic outcomes, but which may have significantly different social impacts. Additionally, understanding the social implications of fisheries management decisions or policy approaches may enable co-ordinated government approaches that eases transitions associated with any structural adjustment processes in the industry.

There is a need to provide resources to fisheries managers and those in the fishing industry who wish to assess social dimensions of fishing activities. The project produced a Handbook that will enable all Australian fisheries to finalise their SCFA assessment process using an approach to social assessment that is consistent with the issues and values articulated in Section 6 “Impacts of the Fishery on Community Wellbeing” and Section 7 “Impacts of the Fishery on National socio-economic benefits” of the ESD Reporting Framework for Australian Fisheries². The Handbook provides a social assessment framework and guidance on methods/approaches for each stage of a social assessment that assists practitioners to develop skills and confidence to commission, undertake or review assessments. Use of the Handbook will also facilitate increased awareness of potential social impacts, and improve the planning and management of social impacts, amongst fisheries managers. This project

¹ The SCFA has subsequently been replaced by the Marine and Coastal Committee of the Natural Resources Management Standing Committee.

² *National ESD Reporting Framework for Australian Fisheries: The 'How To' Guide for Wild Capture Fisheries*; Fletcher et al. (2002)

included case studies to trial the Handbook and to provide an illustration of the application of social assessment principles and practices.

The Handbook will be useful to both fisheries managers, to facilitate resource use decisions, and to the industry through providing a further basis for discussion and negotiation around resource use and access.

Methods

The ESD Subprogram Working and Reference Group (ESD Subprogram Group) acted as the Steering Committee for the project. The ESD Subprogram Group advised on the project at key stages, particularly selection of case studies and presentation of draft outcomes.

The project methods involved:

- 1) An initial literature review to identify key methods used in:
 - a. Previous social assessments of fisheries and fishing activities in Australia;
 - b. Previous social assessments of fisheries and fishing activities internationally; and
 - c. Social assessment more generally, drawing on key international literature in the field of social assessment and social impact assessment.

The Social Assessment Handbook contains a list of key references on social assessment and social impact assessment literature, and drew on this literature in recommending social assessment approaches.

- 2) Conducting a workshop with the Womens Industry Network – Seafood Community at the 2003 *Seafood Directions* conference in Perth. This workshop was attended by both WINSC members and members from the fishing sector and fisheries managers. Workshop attendees were asked to identify the key social goals in relation to their work in fishing, and to identify potential approaches to measuring the extent to which these goals are being achieved. The workshop program and key result of the workshop are attached in Appendices 1 and 2.
- 3) The outcomes of the workshop were used along with the review of previous social assessments in fishing and other sectors to inform development of the draft Handbook. The draft also benefited from other work undertaken by BRS examining socio-economic impacts of proposed marine protected areas. While this work was separate, lessons learned from the assessment of proposed closures were incorporated into the approaches recommended in the draft Handbook. The ESD Subprogram Group agreed to a delay in original project timeframes to allow incorporation of these lessons into the draft Handbook.
- 4) Two case studies were chosen to test the applicability of the methods and approaches recommended in the Handbook. These case studies were selected in consultation with members of the fishing sector and the ESD Subprogram group, which approved the final choice:
 - a. The first case study was a social assessment of the South Australian Marine Scalefish Fishery (MSF). This fishery was chosen because it is a complex, relatively diverse single fishery which operates across a wide geographic region and involves many different operators. The Marine Scalefish Fishery Management Committee (MSFMC) provided

additional funding to enable a more in-depth assessment to be undertaken of this complex fishery. This case study used a mail survey to obtain data from licence holders and others involved in the fishery, combined with a series of 12 workshops held along the South Australian coast with MSF fishers;

- b. The second case study examined the commercial fishing sector in East Gippsland, including all commercial fishers landing catch in the region and all those directly employed in the two primary fish co-operatives in the region. Fewer people were surveyed than in the MSF study, but a more diverse range of fishers operating in multiple fisheries as well as co-operative employees were surveyed to provide a more complete picture of the commercial fishing sector in the region. The survey forms were distributed via the fishing co-operatives rather than by mail, to explore whether this was an effective survey distribution method.
- 5) Different surveys were designed for each case study region and distributed via (1) mail in the MSF case study and (2) at fish co-operatives and through member associations in the East Gippsland case study.
 - 6) Once early survey results were received, a series of 12 workshops were held across the South Australian coast for the MSF case study, enabling qualitative interpretation of results of the survey. To reduce the overall number of meetings fishers were being asked to participate in, they were held in conjunction with workshops held by SeaNet,;
 - 7) Delays in the return of surveys in East Gippsland led to the time period for survey return being extended substantially.
 - 8) Once surveys and workshops were completed and initial data analysis undertaken, the draft Handbook was revised. The revised Handbook was distributed to the ESD Subprogram Group for comment, and revised based on feedback received.
 - 9) The Handbook was finalised and printed
 - 10) A full analysis of the two case studies was completed with all survey data entered and analysed, and social profiles of key regions in which fishers lived were produced using Australian Bureau of Statistics and other secondary data held by BRS.
 - 11) Draft case study reports were produced and reviewed by key stakeholders in each case study region. The reports were then revised to produce final case study reports.

Results and discussion

The key results of the project fell into two categories:

1. Improved understanding of factors affecting the social well-being of those working in fishing in two case study regions; and
2. Development of improved methods for undertaking social assessment.

The discussion below covers the key aspects of the three reports produced during this project (Schirmer and Casey 2005; Schirmer and Pickworth 2005a,b), as well as discussing in more detail key findings on the resources required to undertake social assessment, including a comparison of the results achieved using different methods in the two case studies for the project.

Factors affecting social well-being of those working in fishing

. The key findings of both case studies on factors affecting social well-being were very similar, and are highlighted below:

- The quality of life of those working in fishing is highly linked to the quality of their work life. It is therefore important to ask about both, and to recognise that well-being at work has impacts not just on the fisher, but on their family and friends;
- Achieving a high income, whilst important to most fishers, was less important than many other dimensions of their work life. Primary motivations for fishing were more related to the tasks undertaken and the environment worked in than to the financial returns achieved. Well-being should therefore not be measured based only on the income received from fishing, but on whether other goals related to work satisfaction are being achieved – such as achieving an appropriate balance of work hours and home life, having long-term job security, and operating under a fair and consistent management system;
- Many fishers in both case studies were experiencing reduced well-being as a result of the external pressures affecting their work, and the uncertainty of the future of fishing. These were key factors affecting quality of life;
- The sustainability of fishing depends on transfer of fishing skills to new entrants to fishing. It is important to understand how fishers are learning their skills, to help target extension and training programs. In both case studies there was clearly an ongoing shift from family-based transfer of skills to skills being learned through working in other people's fishing businesses, or through trial and error;
- Many of those who work in fishing businesses do so unpaid and may not formally be recognised as employees. For example, the partner of a fisher may spend up to 20 hours a week undertaking correspondence and managing financial aspects of the fishing business, without being formally documented as a partner in the fishing business. These participants in fishing businesses may be highly impacted by changes to management of fisheries, but these impacts may be hard to document due to the 'invisible' nature of their work in fishing;
- The nature of fishing work often prevents fishers from taking part in many formal and informal social activities. In some cases, this reduces the levels of social support networks available to fishers, particularly if fishing networks are fragmented;
- Fishers in both case studies reported disillusionment with meetings and consultation processes involving discussions of changes to management of fisheries;
- The majority of the fishers surveyed in both case studies were highly dependent on fishing income, with little to no household income sourced from work outside the fishing sector. Many also felt they had little scope for obtaining work outside fishing; and
- Fishers are often highly attached to their local community.

These results highlight the need for ongoing understanding of how changes to fisheries management and markets for seafood products affect the social and economic well-being of those dependent on fishing.

Development of improved methods for undertaking social assessment

The *Social Assessment Handbook* (Schirmer and Casey 2005) reported on recommended best practice methods for undertaking social assessment.

A number of key methods recommended in the handbook were directly tested through the two case studies undertaken for the project. As well as acting to test whether particular methods could be used to successfully assess social aspects of the fishing sector, an improved understanding of the other aspects of applying particular methods was developed. This included development of a better understanding of the depth of results achieved using different methods; and the resources and timeframes required to undertake different types of social assessment.

Depth of results achieved

The results of the case studies demonstrated that a considerably deeper understanding of social aspects of the fishing sector can be achieved by:

- Combining both qualitative and quantitative data collection; and
- Investing time and resources to tailor a social assessment to the specific fisheries/fishing activities/regions being studied

A key finding of the project was that undertaking a combination of quantitative and qualitative assessment provides a considerably richer, in-depth understanding of social well-being than assessing social impacts using only quantitative or qualitative methods. This can be clearly seen by comparing the reports of the two case studies.

In the East Gippsland study, data was collected via a quantitative mail survey. In the MSF case study, data was collected via a quantitative mail survey *and* a series of workshops used to gather qualitative data.

The quantitative surveys undertaken provided many useful results. However, the nature of a quantitative survey limits the depth of data that can be gathered. Quantitative survey questions are usually ‘close-ended’, with respondents having to tick particular categories, or alternatively may provide a very limited space for responses to open-ended questions.

While very useful for understanding the distribution of particular characteristics (eg the proportion of the people working in a particular fishery who have high levels of overall satisfaction with their work, it can be difficult to explain why the patterns observed in the results of a quantitative survey have occurred. For example, the results of a quantitative survey may identify that older fishers are less likely to report experiencing health problems related to their fishing work. Explaining *why* this is the case often requires undertaking qualitative work to explore the different factors – eg historical influences, perceptions and behaviour - that affect this.

The methods used in the MSF case study enabled a higher level of explanation of the factors leading to current levels of social well-being than was possible in the East Gippsland case study. This was largely due to the use of a combination of qualitative and quantitative data in the MSF case study.

The process of undertaking both case studies highlighted the importance of tailoring the specific questions asked to the types of fishing and related activities being

undertaken by the people surveyed. There is considerable diversity in the types, size and structure of fishing activities in Australia. This has many implications for designing a successful social assessment. Perhaps the most important implication is that *every social assessment needs to be tailored to the particular fishery/fishing activities/region it is studying*. If this tailoring does not occur, the assessment is likely to miss key issues.

For example, there were significant differences in the types of fishing undertaken by fishers in the MSF and those landing catch in East Gippsland. Within East Gippsland, separate survey questions needed to be designed specifically for some groups such as abalone fishers, who operate using different equipment and face different health and safety risks to other fishers. It was necessary to consult extensively with participants operating in different fisheries and different parts of the fishing sector so the social assessment could be designed to gather information appropriate to each.

Without this initial in-depth consultation and careful design of questions, a social assessment may fail to gather relevant data. This design process takes considerable time and resources, which need to be planned for in social assessments. In this project, timeframes had to be extended to accommodate the length of time required to design and implement the assessments, as well as to allow for a longer timeframe than expected to collect data in the East Gippsland study.

Resources and timeframes required for social assessment involving primary data collection

Key findings on the tasks, resources and timeframes needed for the key tasks undertaken in the two case study social assessments are detailed in Table 1 below.

Table 1: Resources and timeframes for successful social assessment

Stage of social assessment	Tasks and resources involved	Timeframes required
Scoping boundaries of the social assessment	<ul style="list-style-type: none"> Meeting with stakeholders Identifying key social goals and issues to be studied Establishing working group to guide the assessment 	Several weeks are needed to allow feed back of ideas between researchers and those guiding and advising on the social assessment
Identifying the individuals and groups to be assessed and how they can best be contacted	<ul style="list-style-type: none"> Identifying groups that need to be involved in the assessment – eg fishers (including licence holders, crew members, business managers, paid and unpaid) Exploring for methods of contacting these groups Obtaining lists of contact details or negotiating with organisations to distribute questionnaires or organise contact on behalf of the researcher 	Again, this process takes several weeks to allow for ongoing communication and, where necessary, negotiation with those groups who can assist with contacting groups to be assessed. This often involves several meetings with groups such as fisheries agencies, who hold contact details for licensed fishers, to discuss the project and, particularly, confidentiality issues. Failing to adequately identify best methods of contacting fishers can lead to significant delays or low participation in the project.
Designing questionnaire (where a survey is undertaken)	<ul style="list-style-type: none"> Identifying topics to be covered in consultation with stakeholders Drafting questions Reviewing questions in 	This again can take several weeks due to time needed for review of draft questionnaire and printing timeframes for a survey booklet. Note that if a survey is repeated over time, less

Stage of social assessment	Tasks and resources involved	Timeframes required
	<ul style="list-style-type: none"> • consultation with stakeholders • Final questions developed • Layout and design of questionnaire booklet and printing of surveys 	survey design time is needed due to re-use of questions.
Distributing survey	<ul style="list-style-type: none"> • Mailing or distributing survey initially (may include setting up) • Several survey follow-ups, by mail or via newsletters or other appropriate means 	At a minimum, the time from initially sending out a survey to closing the survey takes six weeks – and often longer, up to 10 weeks. Regular follow-ups, preferably by mail, are essential. The lack of regular follow-ups in the Gippsland case study (where reminders were given when fishers landed catch at the co-operative) led to a reduced survey response rate in that case study.
Survey data entry	<ul style="list-style-type: none"> • Establishing appropriate data entry forms • Entry of survey data with quality control (time taken to enter data varies depending on length and number of surveys) 	Data entry can be undertaken as surveys are returned. Amount of time required depends on length and number of surveys – for example it took two weeks of full-time staff time to enter and quality check the data from the 281 returned surveys in the MSF case study, due to the length and complexity of the survey.
Survey data analysis	<ul style="list-style-type: none"> • Coding of data for analysis in a statistical package (often data is coded appropriately as it is entered) • Descriptive and statistical data analysis, the nature of which varies depending on the types of data gathered, and the statistical tests that can be supported by the data gathered 	The timeframe required depends on the number of variables being analysed, and the extent to which relationships between variables are analysed. For example, producing descriptive statistics – eg on average age of respondents and the proportions of people relying ‘agree’ or ‘disagree’ to different statements – can be achieved relatively rapidly. Exploring for relationships, eg whether younger respondents were significantly more likely to agree with a particular statement than other respondents, requires considerable analysis of data, taking a much longer time – but produces more in-depth results.
Planning and undertaking workshops	<ul style="list-style-type: none"> • Identifying topics to be discussed at workshops • Identifying appropriate workshop participants • Identifying and booking workshop locations (and where possible, identifying other meetings already occurring which the workshop can form a part of, to reduce the amount of time fishers are asked to spend attending meetings) • Inviting participants • Travelling and undertaking workshops 	From initial planning to analysis takes several weeks, as participants need to be invited well in advance of the workshop occurring. Qualitative analysis of workshop data can take many days for even a small number of workshops, as they often generate a considerable amount of data.

Stage of social assessment	Tasks and resources involved	Timeframes required
	<ul style="list-style-type: none"> Analysing workshop outcomes 	
Secondary data analysis	<ul style="list-style-type: none"> Identification of existing data sets with relevant information Exploration of the coverage and nature of these data sets Purchase of/access to data Analysis of data and interpretation to provide relevant results 	Timeframes vary considerably depending on the data being accessed. Some data is relatively quick to order and is already in a usable form. Other data may need considerable manipulation to be in a useful form.
Synthesis of results and writing reports	<ul style="list-style-type: none"> Draft report writing (report framework may be designed in consultation with stakeholders) Review of drafts by key stakeholders Revision of draft reports Production of reports in accessible form – eg by producing a summary report – to allow fishing industry participants to easily access results 	Several weeks are needed once a report is drafted to allow to feedback and rewriting of the report.

From the table it can be seen that the cost and timeframe required for a social assessment will vary considerably depending on the size of the assessment and methods used. Assessment of a large diverse fishery or multiple regions requires more resources and longer time frame than assessment of a smaller, less diverse fishery or a single small region. It is not possible to identify a generic timeframe or cost for social assessments due to the diversity of types of assessment that may be undertaken.

In this study, the timeframes required to complete the social assessment of the Marine Scalefish Fishery were longer than expected because a very high response rate to the survey was achieved – resulting in greater time spent entering and analysing data from the high number of surveys returned. The timeframes required to complete the social assessment of the East Gippsland study were also longer than expected as distributing surveys via the fish co-operatives took considerable time due to fishing businesses often landing catch at the co-operatives infrequently. The mail survey approach used for the MSF case study was considerably more effective at collecting data in a time effective manner compared to the distribution of surveys at fish co-operatives in East Gippsland.

Benefits

This project will benefit the fishing sector by assisting fisheries managers and industry to clearly identify the goals and boundaries of social assessments and select the most appropriate methods for undertaking social assessments. It will also assist those who are commissioning and evaluating social assessments by providing a clear guide to the key questions that should be asked and approaches to designing social assessment.

One of the key benefits of the project is the exploration in both the handbook and the case studies of the complexity and diversity of types of social assessment that may be

undertaken. Helping members of the fishing sector understand that many different forms of social assessment may be used assists in ensuring appropriate social assessments are commissioned and undertaken.

Planned outcomes

The project has produced a set of specific recommendations on approaches to undertaking social assessments of Australian fishing activities. The handbook will be used to help shape future social assessments in the fishing sector, enabling improved understanding of the social impacts of fishing and fishing related activities in Australia. This should enable more informed decision making processes to occur in future.

Conclusion

This project has developed a user friendly handbook providing a guide both to commissioning and also undertaking social assessments in the Australian fishing sector. Through the case studies that were undertaken to test the methods for social assessment, it has also contributed to improved understanding of the factors affecting social well-being of those working in the fishing sector, and understanding of the contributions of the fishing sector to regional communities.

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Appendix 1: Intellectual Property

There are no intellectual property issues associated with the materials generated during this project, with the usual copyright applying to the Handbook and two case study reports. All the material is freely available from the FRDC and BRS websites.

Appendix 2: Staff

This project was completed by staff working for the Social Sciences Program of the Bureau of Rural Sciences. The staff contributing to the project were Jacki Schirmer, Anne Maree Casey and Julia Pickworth.

Appendix 3: WINSC workshop documentation

An overview of the WINSC workshop conducted in September 2003 and a summary of the key outcomes of the workshop are provided below.

Summary of discussions and outcomes of the WINSC Workshop, Wednesday September 17th 2003

Background

The Fisheries Research and Development Corporation has provided funding for the Bureau of Rural Sciences to develop a Social Assessment Handbook for Australian fisheries and fishing industries. This Handbook will provide a guide to undertaking and evaluating social assessments in Australian fisheries and fishing industries, including an overview of different types and levels of social assessment, and methods appropriate to a range of time and resource constraints.

The WINSC Workshop discussed the types of social goals important to people involved in fishing and fishing industries, and identified information required to assess progress towards those goals. This information will be used to support development of the Handbook, ensuring it contains information of relevance to those involving in fishing and fishing industries.

A large amount of information was provided in a short space of time by the workshop participants. BRS would like to thank all workshop participants for contributing to the workshop. We hope we can provide the workshop participants and WINSC with useful outcomes from this project to assist in achieving the goals identified in the workshop.

Overview of the workshop

At the workshop, a brief presentation was given, discussing:

- The goal of achieving social sustainability in fisheries
- What social analysis is, with a focus on social assessment/impact assessment
- The uses of social assessment
- Methods used in social assessment

This was followed by two brief workshops in which nine groups of 4-8 people were asked to discuss and give ideas on the following:

- Workshop One: Social goals for fishing and fishing industries, and information required to help measure progress towards those goals
- Workshop Two: Identification of indicators that could be used to measure the information identified in Workshop One.

The results from the two workshops have been summarised and are presented in table form on the next page. For some social goals, few or no suggestions were made as to

the type of indicators that could usefully be used to measure performance against that goal. These were developed through subsequent review of literature and case study research.

Social goals and information for social assessment of fishing and fishing industries

Social goal	Information needed to measure progress to that goal	Indicators that may be useful to measure different types of information
A high quality of life and lifestyle for those involved in and dependent on fishing and fishing industries (includes quality of life for individuals and for communities)	Availability of employment; Security of employment; Working hours and conditions; Leisure time; Employment aspirations (ie does current employment meet needs/ desires?); Training and career pathway opportunities; Sector of employment eg primary or value adding	Employment data eg from ABS (limited use) Data on hours worked, seasonality of employment Sports/clubs memberships Rates of business succession Youth employment Cost of entry to industry eg licences
	Access to services (eg education, health, training, family facilities, recreation facilities, banks)	Geographic measure - Distance to nearest services (for different services such as hospitals, etc) Level of service - Number of services per head of population (eg doctors per '000 population; nurses, teachers etc) Population levels required to maintain particular levels of services Trends over time
	Income level	ABS, ABARE statistics \$GVP Surveys of industry Dependency ratios (how many young/elderly people dependent on income earners)
	Physical well being (of those directly employed in fishing and their families)	Health services data Compensation claims WorkCover information Incidence of stress-related diseases

Social goal	Information needed to measure progress to that goal	Indicators that may be useful to measure different types of information
	Stress levels, mental well being and self worth (of those directly employed in fishing and their families)	Surveys of stress levels eg related to industry pressures Work injuries and work-related health issues (from compulsory reporting) Compensation claims WorkCover information Health insurance affordability/uptake Health Services data on rates of mental illness such as depression, anxiety Incidence of stress-related diseases Domestic violence rates Alcohol/drug abuse statistics
	Education and training	Qualification levels Attendance Aspirations Access to training Gaps in education/training provision and/or access
Improving the general public's perceptions of and communication about fishing and fishing industries	Information about current perceptions/attitudes (assessment of its quality in terms of accessibility, communication etc) Attitudes of different groups Role of media Community education/ communication/ consultation initiatives Interactions between fishing and non-fishing communities	

Social goal	Information needed to measure progress to that goal	Indicators that may be useful to measure different types of information
Impact of fishing on different communities and regions	<p>Distribution of income from fishing – where is income spent?</p> <p>Where do those employed in fishing/industry live?</p> <p>What proportion of corporate vs owner-operator?</p> <p>Rate of population shift ie changing residence location, work location – contributes to community cohesiveness.</p> <p>Age of those shifting in/out of communities (indicator of retention of young people) and average age of population (trends over time)</p> <p>Identifying important elements of ‘community’ – what makes a successful community? Is fishing contributing?</p>	
Successful industry development	<p>Participation in local PFAs</p> <p>Amount of value adding of product in local communities</p> <p>Long-term security of industry eg access to resource through access rights, licences</p> <p>Economic and regional investment</p> <p>Confidence to invest in industry, stay involved in industry</p>	<p>Average age of employees (helps determine if young people are entering industry)</p> <p>Cost of entry to industry eg licences</p> <p>Rate of licence turnover</p> <p>Rates of business succession</p>
Value of non-fishing activities	<p>Involvement of fishers and fishing industry in community activities, bird counts, beach clean ups, school programmes, work experience, environmental data etc</p>	
Inclusive industry	<p>Participation of different groups in industry, including minority groups</p>	
Understanding the socio-demographics of fishing communities		
Understanding the	<p>Who are the stakeholders?</p>	

Social goal	Information needed to measure progress to that goal	Indicators that may be useful to measure different types of information
different communities with an interest in fishing	What are their values, ideas etc?	
High quality, practical, workable governance framework		
Understanding the values and attitudes of those involved in fishing		

Publications in the ESD Subprogram Series

1. Fletcher, W.,J. Chesson, J., Fisher M., Sainsbury, K.J., Hundloe, T., Smith, A.D.M. and B. Whitworth (2002) *National ESD Reporting Framework for Australian Fisheries: The 'How To' Guide for Wild Capture Fisheries*. FRDC Project 2000/145, Canberra, Australia. 120pp.
2. Whitworth, B., Chesson, J., Fletcher, W.J., Sainsbury, K.J., Fisher, M., Hundloe, T., and A.D.M. Smith, (2002) *National ESD Reporting Framework for Australian Fisheries: Technical Support Document – Ecological Components of the 2000/2001 Case Studies*. FRDC Project 2000/145, Canberra, Australia. 98pp.
3. Fletcher, W.,J. Chesson, J., Fisher M., Sainsbury, K.J., Hundloe, T., Smith, A.D.M. and B. Whitworth (2003) *National Application of Sustainability indicators for Australian fisheries*. Final Report: FRDC Project 2000/145. 48pp.
4. Fletcher, W.J., Chesson, J., Sainsbury, K.J., Hundloe, T., Fisher M., (2003) *National ESD Reporting Framework for Australian Fisheries: The ESD Assessment Manual for Wild Capture Fisheries*. FRDC Project 2002/086, Canberra, Australia 163pp.
5. Fletcher, W.J., Chesson, J., Sainsbury, K.J., Fisher, M. & T. Hundloe (2004) A flexible and practical framework for reporting on sustainable development for wild capture fisheries. *Fisheries Research* 71:175-183.
6. Fletcher, W.J., Chesson, J., Fisher M., Sainsbury, K.J., and Hundloe, T.J. (2004) *National ESD Reporting Framework: The 'How To' Guide for Aquaculture*. FRDC Project 2000/145.1, Canberra, Australia 85pp.
7. Schirmer, J. and Casey, A.M. 2005. *Social Assessment Handbook: A guide to methods and approaches for assessing the social sustainability of fisheries in Australia*. FRDC ESD Reporting and Assessment Subprogram Publication No. 7. Fisheries Research and Development Corporation and Bureau of Rural Sciences, Canberra. 50p.
8. Fletcher, W.J., Chesson, J., Sainsbury, K.J., Fisher, M., Hundloe, T., (2004). *ESD Reporting and Assessment Subprogram: Development of Assessment Tools for the National ESD Framework – initial scoping exercise*. Final Report FRDC Project 2002/086, Canberra, Australia 16pp.
9. Fletcher, W.J., (2005). *ESD Reporting and Assessment Subprogram: Strategic Planning, project management and adoption*. Final Report FRDC Project 2001/082, Canberra, Australia.
10. Schirmer, J. and Pickworth, J. 2005. *Social impacts of the South Australian Marine Scalefish Fishery*. FRDC ESD Reporting and Assessment Subprogram Publication No. 10. Fisheries Research and Development Corporation and Bureau of Rural Sciences, Canberra. 129p

11. Schirmer, J. and Pickworth, J. 2005. Social assessment of commercial fishing in the East Gippsland region. FRDC ESD Reporting and Assessment Subprogram Publication No. 11. Fisheries Research and Development Corporation and Bureau of Rural Sciences, Canberra. 57p
12. Fletcher, W.J. (2005) The application of qualitative risk assessment methodology to prioritise issues for fisheries management. ICES Journal of Marine Science (in press).
13. Fletcher, W.J. (2005) A Guide to Implementing Ecosystem Based Fisheries Management (EBFM) within the Pacific Region. Forum Fisheries Agency, Honiara Solomon Islands. (in press)
14. Schirmer, J. (2005) ESD Reporting and Assessment Subprogram: a social assessment handbook for use by Australian fisheries managers in ESD assessment and monitoring. Final Report FRDC Project 2003/056 Canberra Australia, April 2005.
15. Fletcher, W.J. (2006) Frameworks for managing marine resources using ecosystem approaches: how do they fit together and can they be useful? *Bulletin of Marine Science* (under review)