

**Surveillance Visit Report for
Spencer Gulf Prawn (*Penaeus (Melicertus)*
latisulcatus) Trawl Fishery**

MRAG-MF-1630



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MSC reference standards:

MSC Principles and Criteria for Sustainable Fishing Version 1.1
MSC Certification Requirements Version 1.2
MSC Guidance to Certification Requirements Version 1.1
MSC Accreditation Manual Version 5

| General Information | |
|--------------------------------------|--|
| Fishery Name: | Spencer Gulf Prawn Trawl Fishery |
| Unit(s) of Certification: | <i>Penaeus (Melicertus) latisulcatus</i> |
| Geographical boundaries | Cape Catastrophe S34° 59.12' E136° 0.18' Cape Spencer S35° 17.99' E 136° 52.84' |
| Certification Date: | 25 th July 2011 |
| Certification Expiry Date: | 24 th July 2016 |
| Surveillance Assessment Team: | Principle 1, Principle 2, Principle 3. Richard Banks Dr. Kevin Stokes |
| On-site Audit Date: | 18-19 June 2012 |
| Surveillance Stage: | Second surveillance audit |
| Surveillance Frequency: | Annual |

| | |
|----------------------|--|
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| Prepared by: | Richard Banks, Kevin Stokes |
| Checked/Approved by: | RJT |

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1 Summary

The conclusion of the audit is that the certificate for the Spencer Gulf Prawn Trawl Fishery should be extended for another year. The audit found that the Client Action Plan is largely being implemented as agreed. Three conditions (2, 3 4 and 7) were near completion and it is anticipated that following public dissemination of information conditions 2,3 and 4 will be closed at the next annual audit. Condition 7 is also expected to be closed once the external review of the management plan has taken place. Condition 6 is due for completion over 4 years and is on track. Progress on one condition is slightly behind schedule. There has been a delay in the development and implementation of the Management Plan (MP), primarily in development of a new Harvest Strategy (HS). The condition is slightly behind schedule largely due to required consultation and decision making processes which were not anticipated when the schedule was set; this is not seen as problematic and is evidence of robust process. It needs to be noted, however, that the draft Harvest Strategy differs in substance from that currently in place and there may be a need to rescore P1 at the next annual audit. A new Ecological Risk Assessment for the fishery is in the draft stage, applying somewhat different criteria to those used in the certification assessment. This may cause some problems if the final version reflects the draft, and the surveillance team has made a number of clarifying recommendations.

2 Introduction

This report outlines the process and outcome of the second annual surveillance audit for the MSC certified fishery 'Spencer Gulf Prawn (*Penaeus (Melicertus) latisulcatus*) Trawl Fishery'. The fishery is conducted by members of the Spencer Gulf and West Coast Prawn Fishermen's Association (SGWCPFA).

There are 39 vessels in the fishery. Fishing takes place during the night. The fishing season generally lasts from November to June (with no fishing during January and February). All these vessels are twin rigged with limits set on vessel horse power (450 hp), and the size and headline of the trawls (a maximum 29.26m in total or 14.63 m per net).

No TAC has such is established in the fishery (CG5.1.1/2/3). The client group takes all commercial catches within preset periods. The total green weight catches of prawns in the 2010/2011 and 2011/2012 seasons were 1,979 t and 1,675t respectively (CG5.1.4). The 2010/11 catch was the lowest recorded since 2002/2003. The catch in 2011/12 was slightly below the average for the last 8 years. In the nine fishing years since the low catch of 2002/2003 (1,479 t), the annual average catch has been 1,959 t (Dixon et al¹). Surveys (nominal or standardised) suggest continuing high stock size throughout the year and annually (see Fig 3.4 of Dixon et al, 2012), and egg production (see Fig 3.5 of Dixon et al, 2012). All indications are such that scoring on PI 1.1.1 would be unaffected.

¹ Dixon C, Noel C and Hooper G, Spencer Gulf Prawn *Penaeus Melicertus latisulcatus* fishery assessment report, 2011/2012, SARDI Report Series 685, March 2013.

The fishery operates in specific areas within the Spencer Gulf, associated with a series of gazetted and voluntary closed areas, along with real time move on actions at sea, supported through co-management actions. Effort has declined since 1978/1979 from 46,000 hours/year to ~ 17,000 hours/year for the last 8 years. Over this 8-year period (since 2004/2005), spatial analysis demonstrates that High and Medium intensity fishing areas have resulted in a stable footprint at ~ 17% of fishable areas (>10 m depth). The High intensity trawled area has been stable at approximately 2%.

The fishery is supported through a series of legal instruments including the South Australian Fisheries Management Act 2007 Act, which embraces Commonwealth management principles as laid down in Commonwealth Legislation, which acknowledge the precautionary approach, stakeholder participation and the Ecosystem Approach to Fisheries Management. The principles of co-management are endorsed through the Fisheries Act 1982, which facilitates the active participation in management decision making by the SGWCPFA Fisheries Management Committee (FMC). The fishery also has a management plan which runs from 2007 to 2012, and is in the process of being redrafted.

Principal support organisations include the SGWCPFA and Primary Industries and Resources, South Australia (PIRSA). The principal research organization is South Australia Research and Development Institute (SARDI). The main stakeholder, at State level, additional to the fishermen, is the Conservation Council for South Australia (CCSA). The World Wildlife Fund, Australia is also a major NGO stakeholder with an interest in this fishery.

In preparation for this surveillance audit, stakeholders were contacted by email on 6 May 2013 and by notice on the MSC website, and invited to submit comments. The notification of the surveillance audit was also published on the MSC website on the 7 May 2013. The audit was carried out at the offices of DMAW Lawyers, Adelaide, by the surveillance team consisting of Richard Banks and Kevin Stokes, on 18-19 June 2013. WWF Australia made a submission and these views have been taken into account, along with the verbal and email comments made by the Conservation Society for South Australia (CSSA).

3 The Surveillance Process

The assessment processes followed the determination of the surveillance level based on Table C3 and C4 shall be included in the Surveillance Certification Report.

Table C3. Criteria to determine surveillance score

| Criteria | Surveillance score |
|------------------------------|--------------------|
| Default Assessment Tree used | |
| Yes | 0 |
| No | 2 |
| Number of open conditions | |
| Zero conditions | 0 |
| Between 1-5 conditions | 1 |
| More than 5 | 2 |

| Criteria | Surveillance score |
|---------------------------|--------------------|
| Principle Level scores | |
| >=85 | 0 |
| <85 | 2 |
| Conditions on outcome PIs | |
| Yes | 2 |
| No | 0 |

Table C4: Surveillance Level

| Surveillance score from Table C3) | Surveillance Level | Years after certification or recertification | | | | |
|-----------------------------------|---------------------------|--|-----------------------------|-----------------------------|---|---|
| | | Year 1 | Year 2 | Year 3 | Year 4 | |
| 2 or more | Normal surveillance audit | On-site surveillance audit | On-site surveillance audit | On-site surveillance audit | On-site surveillance audit & recertification site visit | |
| 1 | Remote surveillance | Option 1 | Off-site surveillance audit | On-site surveillance audit | Off-site surveillance audit | On-site surveillance audit & recertification site visit |
| | | Option 2 | Off-site surveillance audit | Off-site surveillance audit | On-site surveillance audit | |
| 0 | Reduced Surveillance | Review of new information | On-site surveillance audit | Review of new information | On-site surveillance audit & recertification site visit | |

The second annual surveillance audit was carried out at the offices of DMAW Lawyers, Adelaide. The surveillance team met with Simon Clark, Executive Officer of the SGWCPFA; Mehdi Doroudi, Sean Sloan, Anabelle Jones and Brad Millick, PIRSA; Craig Noel and Rohan Chick, SARDI; Kathryn Warhurst, CCSA and Cameron Dixon, WWF.

Discussions covered all issues as laid out in annex CG of the MSC Certification Requirements, including the principal changes occurring to the fishery within the second year of certification and the outcomes as outlined in the Client Action Plan (CAP) against the conditions set.

4 Information Sources

4.1 Major changes notified by the client

There were no major changes to fishery activities aside from the appointment of a Deputy Coordinator at Sea as part of the Association's co-management function.

PIRSA had coordinated an Environmental Risk Assessment (ERA), applying the Hobday *et al* (2007) methodology², and with a range of stakeholders, and examining all possible species with potential to interact with the fishery (derived from the 2007 by-catch project). These included by-product (retained), bycatch and ETP species. The report is still in its draft stages. Three major distinctions between Hobday and the use of the MSC Risk Based Framework (RBF) are that i) the MSC Main species categorization eliminates the requirement to examine all species within the range of the fishery; ii) Scale Intensity Consequence Analysis (SICA) as applied using RBF is a lower level first stage risk assessment allowing for elimination from the scoring of all species scoring > 80 and has not been used; and iii) using Hobday, allows expert overrides for High Risk Productivity Sensitivity Analysis (PSA) scores (the MSC PSA does not provide for this, but a similar process is adopted in Commonwealth ERAs, and was reviewed as part of the Northern Prawn Fishery Assessment³; and iv) having reached the scoring, medium risk scores have been elevated to high risk and visa vie using the expert override process described. Consequently, the assessors have major reservations about the ERA process used.

PIRSA ERA identified some species requiring further scrutiny, mostly because of a lack of information and the application of expert override. These included two bycatch species, the coastal stingaree (*Urolophus orarius*) and giant cuttlefish (*Sepia apama*), and one syngnathid teleost, the tiger pipefish (*Filicampus tigris*). The two bycatch species had been subject to SICA in the full assessment but had scored over 80. Coastal stingarees were identified as rarely caught in trawls (Dixon et al. (2005)) and because of the low levels of encounterability, these species were not perceived to be at risk. The assessment report also noted bycatch information also suggested that over the last 10 years, the quality and quantity indicates bycatch has remained fairly constant Carrick (1997), Dixon et al. (2005).

The SICA assessment of the giant cuttlefish identified scores of 2, 3 and 1 on spatial, temporal and Intensity, resulting in overall scoring above 80. The full assessment report also concluded that it is not possible to determine if fishing or environmental factors influence the variability. Cephalopod populations are typically unstable and highly governed by environmental processes (Steer and Hall, 2005). However, more recent information has indicated that bycatches of giant cuttlefish has declined in the Northern part of the Gulf, and that the species may be genetically distinct (de Vries *et al.* in prep), and therefore particularly vulnerable. PIRSA is in the process of implementing a number of actions in response to the risk assessments:

- For giant cuttlefish, PIRSA, SARDI and SGWCPFA have instigated the development of handling/release methods for this species in northern areas that increase post capture survival and could reduce the risk to this species. The stakeholders have also set up a cuttlefish working group, and included the CCSA as core stakeholders. SARDI has also implemented a cuttlefish research programme

² Hobday, A.J., Smith, A.D.M., Webb, H., Daley, R., Wayte, S., Bulman, C., Dowdney, J., Williams, A., Sporcic, M., Dambacher, J., Fuller, M., Walker, T., (2007). Ecological Risk Assessment for the Effects of Fishing: Methodology. Report R04/1072 for the Australian Fisheries Management Authority, Canberra.

³ http://www.msc.org/track-a-fishery/fisheries-search/australia-northern-prawn/files/Oea0985c414df0faac626117afaff022749053f9/@@display-file/file_data

- For coastal stingarees, the ERA expert panel has implemented further monitoring of interactions of the fishery with this species which should inform future risk assessments.
- For the tiger pipefish, the expert panel has agreed that this species requires further consideration of current management arrangements. The expert panel agreed that further risk mitigation strategies should be investigated in conjunctions with those developed for other sygnathids. Information on post capture mortality, or introduction of strategies that increase survival of tiger pipefish (and other sygnathids) is considered likely to reduce the level of risk. Tiger pipefish (and Rhino pipefish, another high risk species but with negligible encounterability) are also to be itemized separately in the TEP logbook.

The assessors have noted some reservations over the application of the PSA by PIRSA against the background of the MSC RBF and the application of the Hobday approach. These include the following:

- Species with very low levels of encounterability have not been eliminated from PSA, neither applying the definition of Main species nor using the SICA;
- If information was unavailable to the ERA, high scores of 3 have been applied, resulting in a heavy and negative weighting in the scoring process, thus relying on the use of expert override;
- The application of the 'availability' score has varied for 21 species during the stakeholder scoring process, including the giant cuttlefish and coastal stingaree. The risk assessment for Giant cuttlefish was specifically adjusted to reflect the Northern stock, as opposed to the possible range (Spencer Gulf) of the fishery. In this instance, because of other information, i.e. recognition of declines in stock abundance, it would have perhaps been prudent to stick with a consistent interpretation of availability, and then retrospectively adjust through expert override;
- The scorings of these coastal stingaree and giant cuttlefish, as possibly others, were elevated to high risk, when the MSC PSA worksheet: (<http://www.msc.org/documents/scheme-documents/forms-and-templates/msc-productivity-susceptibility-analysis-worksheet-v1.1-1/view>) would determine medium risk scores for Giant Cuttlefish and Coastal Stingaree of 2.67 and 3.01 respectively.
- The system of expert override, which is an essential step in ensuring that assessment results are appropriately translated into fishery management and monitoring plans, had not been applied to a sufficient degree of scientific integrity. Documentation associated with the expert override process should be more carefully maintained in order to provide a clear and indisputable record of how and why override decisions were taken. Specifically, the names and qualifications of all experts contributing to the override should be documented along with the exact technical basis for the

override. Citations should be given for reference materials which are in the public domain, and should include the section or page number from which the information is drawn.

- Failing this, SARDI could consider applying other levels of risk-based assessment⁴, now being used by CSIRO.

The assessors reviewed whether or not the fishery should be rescored on the basis of the draft ERA report. The view was that rescoring would be premature because:

1. The full assessment had not identified these species as High Risk and had dismissed them through SICA;
2. The ERA information had not been made available to the assessors until the date of the second surveillance visit; and
3. The assessors had serious reservations in the ERA scoring which had elevated the scores for giant cuttlefish and coastal stingarees from 'medium' to high risk.

It was considered prudent, given these reservations, to spend more time to complete the evaluation of the fishery specific risk over the coming year, much in the way already identified by the PIRSA approach and then to reassess the risks prior to the next annual audit by applying the correct approach – SICA followed by PSA. The results of this work should then be made available to the assessors with any new information, at least one month in advance of the third annual audit. It is also requested that the outputs should not be delayed beyond the third surveillance audit.

Attention is drawn to the communication between CSSA and PIRSA in the Appendix. The assessors have also responded to the points in line with the comments made above.

4.2 Other information sources

The assessors drew from referenced material (emails, notices, research submissions, published and draft documents and personal communications) to support the findings in the report.

5 MSC Certification validation requirements

5.1 Public claims made by the client

The client uses the MSC logo on a brochure with recipes, standard letterhead, and shirts for fishery participants; all of these were sighted during the surveillance audit. In addition, the client uses a video⁵ to support MSC certification of the fishery. The only claim by the client is

⁴ Zhou, S., Smith, T., and Fuller, M., 2007, Rapid quantitative risk assessment for fish species in selected Commonwealth fisheries, CSIRO

⁵ <http://spencergulfkingprawns.com.au/home/>

that the fishery is MSC certified and is a sustainable fishery. Statements by interviewees on the video go no further. No unsupportable claims are made.

5.2 Review of any personnel changes in science, management or industry

There have been some organisational and personnel changes at the management authority, PIRSA, but institutional knowledge has been retained and there are no obvious detrimental implications for management of the fishery. There have been no changes to scientific providers but the senior scientist resigned in the early part of 2013. There has also been a change in fishery manager, with the previous fishery manager moving to SARDI, and a new manager appointed by PIRSA now in place. Some of these changes may have been responsible for delays in the development in the management plan. However, these delays are more likely to have been in response to legislated and policy procedural issues, as required under the Fisheries Act.

5.3 Review of any changes to the scientific base of information, including stock assessments

A number of projects that identify information against the background of the needs required to fulfil the certification conditions have now been completed (a CRC project (see Condition 1) and FRDC funded projects (see Conditions 3 and 4)). Changes in logbooks and reporting of bycatch (see Condition 2) now provide additional information to guide mitigation measures and feed in to ecological risk assessments. Further work to consider standardisation of commercial CPUE (as in Recommendation 2 (SG1.2.3) of the assessment report) is planned and could have implications for decision rule formulation as part of planned work on revised harvest strategy (see Condition 1), strengthening the need for such work to be carried out in advance of evaluation of alternative decision rule and reference points.

6 Progress in implementing the client action plan

Condition 1: Reference Points

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|-------------------|---|
| PI | 1.1.2 |
| Guidepost not met | <ul style="list-style-type: none"> For low trophic level species, the target reference point takes into account the ecological role of the stock. <p>Note that while only the fourth SG80 level Guidepost was not met, the condition set was slightly wider (see below).</p> |
| Condition | <p>A clear explanation of the use of reference points and triggered actions, clearly linked to the requirements for limits and targets in the FAM P1.1.2, should be prepared and agreed for inclusion in the new Management Plan. Limits and targets adopted in the new Management Plan should explicitly consider the role of prawns in the SG ecosystem.</p> <p>The client is required by the first surveillance to provide a plan for necessary work in support of this condition with a clear outline of the approach to be taken. The plan should be enacted by the second annual surveillance audit. By 3 years after certification is granted, work will be completed sufficient to provide clarity as to the targets and limits set and to provide confidence</p> |

| | |
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| PI | 1.1.2 |
| | that they explicitly or implicitly meet PI 1.1.2 requirements at the 80 scoring level or better. |
| Requirement by Year 1 | |
| Requirement by Year 2 | The client is required by the first surveillance to provide a plan for necessary work in support of this condition with a clear outline of the approach to be taken. The plan should be enacted by the second annual surveillance audit. |
| Action Plan by Year 1 and 2 | <p><i>On behalf of the Fisheries Council of SA, PIRSA will prepare a new management plan for the Spencer Gulf Prawn fishery by 30 June 2013 (Recommendation 4). PIRSA will prepare a project statement in 2011 for preparing the Management Plan. The project statement will provide a work plan and timelines for completing components of the Management Plan, including the harvest strategy for the Fishery.</i></p> <p><i>As part of the new management plan, PIRSA are currently developing a harvest strategy framework to objectively assess current stock status based on Performance Indicators (PIs). The new suite of PIs for the fishery will be written to address the requirements of MSC PI 1.1.2. The primary PIs will involve measures of relative biomass determined from standardised measures of CPUE from fishery-independent surveys. Standardisation will examine key environmental factors as well as differences among survey vessels (addresses Recommendation 1). PIs will have relevant limit reference points and triggers that evoke a management response specified in the Management Plan.</i></p> <p><i>SARDI will also undertake standardisation of commercial fishing CPUE to determine whether it is a useful Performance Indicator for the Management Plan (Recommendation 2).</i></p> |
| Actions by SGWCPFA and management organisation | <p>PIRSA established a Management Plan Steering Committee which first met in July 2012. That committee has provided oversight of development of a draft Management Plan (MP) which was available during the 2013 Surveillance Review. The draft MP is comprehensive and includes a place holder for a revised Harvest Strategy (HS). A draft HS document was also made available for review. The draft HS includes a comprehensive specification of biological indicators and reference points, decision rules, and fishing strategies. The Action Plan anticipates that the MP, including HS, will be prepared by the end of June 2013. This has not been achieved because of the requirements for extensive consultation both by Committee, Fisheries Council and then a public consultation process. The time taken to complete these had not been envisaged at the time of setting the condition. Nevertheless, the drafts are comprehensive and require formal consultation and ministerial decision making. The decision date was discussed at the Surveillance Visit and precise timing under the SA Fisheries Act was considered. The Surveillance team was advised that the anticipated decision date was 31st December 2013.</p> <p>The condition specifies the need for a clear explanation of the use of reference points and triggered actions, clearly linked to the requirements for limits and targets in the FAM P1.1.2. Once finalised and implemented, the MP (including HS) should meet the condition requirement that by 3 years after certification is granted, work will be completed sufficient to provide clarity as to the targets and limits set. Whether or not the HS will provide confidence that specified targets and limits explicitly or implicitly meet PI 1.1.2 requirements at the 80 scoring level or better is yet to be tested but is not evident in the draft HS. The only consideration of this was in the 2013 stock assessment (Dixon et al 2013) which borrows the justification from the scoring of PI 1.1.2. This is NOT sufficient as the point of the condition was to find reasoning external to PI scoring and to see this made explicit in the HS. Overall, the development of the MP and HS seems to be on track but meeting the condition in detail is not yet guaranteed (the need is not just for clear description but also for clear justification in relation to MSC PI scoring requirements). In any case, the new HS is quite different to the existing one as scored using the MSC PI; if the new HS is adopted there will be a need to rescore P1 in 2014.</p> <p>The draft HS is very different to that at the time of the certification assessment. The draft HS includes details of how specific targets, limits and triggers (all CPUE based) will result in specified effort caps the following season (as numbers of allowable fishing days per vessel, for</p> |

| | |
|-------------------|---|
| PI | 1.1.2 |
| | <p>the Gulf and for the southern Gulf. The HS also has in draft a number of associated fishing strategies.</p> <p>The draft HS does not explicitly consider the role of prawns in the ecosystem but the 2013 stock assessment does refer to prawns as a low trophic species in discussing reference points as part of a revised HS (page 75). This is the only evidence that the revised HS might explicitly consider the ecological role of the stock in defining reference points.</p> <p>In 2012 it was noted that SARDI had already obtained funding for a Commonwealth Research Centre (CRC) project on bio-economic modelling for the Spencer Gulf and GSV prawn fisheries (\$187K over two years). The project objectives focus on harvest strategy evaluations and the modelling is intended to provide a robust basis for determining Performance Indicators and reference points (limit and target) to be used in the revised harvest strategy consistent with MSC SG requirements. It has proven difficult to recruit a modeller for the project but the funding remains available and it is intended for work to start soon. It is intended that the HS will be review at the time the bio-economic model is completed and tested..</p> |
| Evidence Provided | <p>PIRSA DRAFT Commercial South Australian Spencer Gulf Prawn Fishery Management Plan</p> <p>PIRSA DRAFT Harvest Strategy section of DRAFT Commercial South Australian Spencer Gulf Prawn Fishery Management Plan</p> <p>Dixon, C.D., C. J. Noell, and G.E. Hooper SARDI Research Report series No 6853, March 2013 http://www.sardi.sa.gov.au/_data/assets/pdf_file/0004/183550/SPG_Prawn_11_12_Stock_Assessment.pdf</p> |
| Conclusion | <p>The expectation is that the Management Plan containing the Harvest Strategy will be finalised and agreed for implementation by 31 Dec 2013 for implementation in 2014. The draft Harvest Strategy is different to the existing one to the extent that rescoring will be needed following its adoption. While the Action Plan is being followed, focus has been on the new Harvest Strategy rather than explaining the existing strategy (as required by the condition). If the new Harvest Strategy is implemented and rescoring is done, the condition will become redundant. If the new Harvest Strategy is not implemented there remains a need simply to explain and justify the use of existing reference points and to relate these explicitly to PI 1.1.2 Scoring Guideposts, including consideration of ecological role. This work must be complete by the time of the third surveillance audit, and if not done, the client should be aware that the Certificate could be suspended until the Condition has been satisfied.</p> |
| Recommendation | <p>In developing and agreeing a new Harvest Strategy, for which rescoring of P1 will be required, ensure that explanations of reference point and triggered actions are given with clear justification related to PI 1.1.2 Scoring Guideposts.</p> |

Condition 2: ETP information

| | |
|-------------------|--|
| PI | 2.3.3 |
| Guidepost not met | <ul style="list-style-type: none"> Information is <u>sufficient</u> to determine whether the fishery may be a threat to protection and recovery of the ETP species, and if so, to measure trends and support a <u>full strategy</u> to manage impacts. <u>Sufficient data</u> are available to allow fishery related mortality and the impact of fishing to be <u>quantitatively</u> estimated for ETP species. |
| Condition | <p>The strategy to achieve this should be in place by the first annual surveillance audit. The results should be available from the second annual review onwards (and used to assist the development of additional management mitigation measures, if deemed appropriate). The adequacy of information will be evaluated by the fourth surveillance audit.</p> <p>The client could consider the following :</p> <ul style="list-style-type: none"> Logbooks can contain explicit reference to Syngnathid species and other ETP species, indicating the state (dead, damaged or released alive); |

| | |
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| PI | 2.3.3 |
| | <ul style="list-style-type: none"> Independent trawl surveys may be conducted to include data on the seasonal distribution and abundance of Syngnathids, or any other ETP in trawled areas The distribution and abundance of ETPs in areas outside the trawl areas can be determined through independent surveys to develop an understanding of the success or otherwise of mitigation measures that are in place. |
| Requirement by Year 1 | The strategy to achieve this should be in place by the first annual surveillance audit. . |
| Requirement by Year 2 | The results should be incorporated into an annual by-catch report, commencing from the second annual review onwards, which will be made available for public scrutiny, and used to assist the development of additional management mitigation measures, if deemed appropriate. |
| Action Plan by Year 1 and 2 | <p><i>The commercial daily logbook, used by the fishery to record catch, has been recently (2011) modified to also identify interactions with Threatened Endangered and Protected Species (TEPS) (including syngnathids) on a shot by shot basis. Additional details on each interaction are then provided in a separate logbook that is specific to TEPS. The TEPS log books record the status of the animal when returned to the marine environment i.e. dead, alive etc. The Association will educate the license holders and skippers on the importance and legal obligation for reporting TEPS interactions.</i></p> <p><i>SARDI Aquatic Sciences will collate and analyse data collected through the TEPS log books (cross referenced to the catch log books) and produce a regular TEPS by-catch report for PIRSA, which will be made available to the public on its website. This first annual by-catch report will be implemented commencing from the second annual review.</i></p> <p><i>Fisheries Independent Surveys (FIS) will collect data on TEPS interactions. The FIS covers areas inside and outside fishing grounds at three different times per year (generally November, February and April). This will be used to report the spatial and temporal distribution and abundance of syngnathids (and other TEPS species) inside and outside trawl areas by the second annual surveillance.</i></p> <p><i>PIRSA will lead an Ecological Sustainable Development risk assessment for the Spencer Gulf prawn fishery (2011-12). Following this, PIRSA will also lead a by-catch risk assessment for the fishery, where all available data on by-catch is considered for all species of by-catch captured by the fishery. Syngnathids (and other TEPS species if identified through the assessment) will be critically examined during these processes. Mitigation measures will be developed based on the available data and the success of these mitigation measures will be evaluated against 1) data from the long-term by-catch studies, 2) data from fishery-independent surveys and 3) data from TEPS logbook interactions. This will also contribute towards satisfying recommendation 6.</i></p> |
| Actions by SGWCPFA and management organisation | <p>The commercial daily logbook, used by the fishery to record catch, was modified in 2011 to include interactions with Threatened Endangered and Protected Species (TEPS) (including syngnathids) on a shot by shot basis.</p> <p>Additional details on each interaction are then provided in a separate logbook that is specific to TEPS. The TEPS log books record the status of the animal when returned to the marine environment i.e. dead, alive etc. The SGWCPFA will educate the license holders and skippers on the importance and legal obligation for reporting TEPS interactions.</p> <p>SARDI Aquatic Sciences collate and analyse data collected through the TEPS log books (cross referenced to the catch log books) and produce a regular TEPS by-catch report for PIRSA, which is made available to the public on its website. This first annual by-catch report was produced in February 2013 and contains details on TEP interactions for the years 2009/10 to 2011/2012.</p> <p>The Association initiated a series of 'Information sessions' (SGWCPFAa 2011) for crews. These were preceded with a letter to all vessel owners informing them of the sessions in Port Lincoln and Adelaide/Wallaroo (Clark, 2011).</p> |

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| PI | 2.3.3 |
| | <p>Fisheries Independent Surveys (FIS) now collect data on TEPS interactions. The FIS covers areas inside and outside fishing grounds at three different times per year (generally November, February and April). This is used to report the spatial and temporal distribution and abundance of syngnathids (and other TEPS species) inside and outside trawl areas.</p> <p>PIRSA undertook an Ecological Sustainable Development ERA for the Spencer Gulf prawn fishery (2012), now in Final Draft, applying the Hobday <i>et al</i>, 2007 methodology. The assessment workshops included multiple stakeholders including fishers, CCSA, scientists and fishery managers (The Expert Panel). Species, including ETPs were categorized into risk levels and included <i>Filipcampus tigris</i> (Tiger pipefish) and <i>Histiogamphilus cristatus</i> (Rhino pipefish) as high risk species. There was only one individual recorded in the by-catch survey which occurred in the Wardang closure area (Currie <i>et al</i>. 2009). Tiger Pipefish (<i>Filicampus tigris</i>) is distributed throughout the subtropics from Queensland to northern Western Australia, and Spencer Gulf and Gulf St Vincent (Gomon <i>et al</i>. 2008). The South Australian gulf populations are a tropic relic of more widespread distribution of this species. The ERA was subject to an external Peer Review.</p> <p>The Management Committee of the SGWCPFA has been proactive in voluntarily closing areas known or likely to include preferred habitat of syngnathids, and have advised PIRSA that an increase in the size of the closure at Wardang to further protect syngnathids has taken place voluntarily. The expert panel agreed that the Tiger pipefish species required further consideration of current management arrangements. The expert panel agreed that further risk mitigation strategies should be investigated in conjunctions with those developed for other syngnathids. Information on post capture mortality, or introduction of strategies that increase survival of tiger pipefish (and other syngnathids) is considered likely to reduce the level of risk.</p> <p>This report will be made available to the public once finally approved, as per all SARDI publications.</p> |
| Evidence Provided | <p>SARDI, 2011a, South Australia Western King Prawn Daily Logbook form</p> <p>SARDI, 2011b, South Australia managed fisheries, Wildlife Interaction form</p> <p>Tsolos A and Boyle M, Interactions with Threatened, Endangered and Protected species, in South Australian Managed Fisheries, 2009/2010. 2010/2011, 2011/2012.</p> <p>SGWCPFA, 2011a, TEP Information sessions, October, 2011</p> <p>PIRSA, ESD risk assessment of South Australia's Spencer Gulf Prawn Fishery, September 2012</p> <p>SARDI, A reporting framework for ecosystem based assessment of Australian trawl fisheries – a case study of the South Australian Spencer Gulf Prawn Trawl Fishery (SGPF). FRDC Project No 2011/062</p> <p>Clark, S, 2011, Letter from SGWCPFA. Crew briefings on threatened, endangered and protected species</p> <p>SGWCPFA, 2011b, Report all captures of threatened endangered & protected species. Knight, M., and Vainickis, A., F2009/F0005444-2, SARDI Report Series, 593, December 2011, available at http://www.sardi.sa.gov.au/_data/assets/pdf_file/0020/167240/Interactions_with_Threatened_Endangered_or_Protected_Species_in_South_Australian_Managed_Fisheries_-_2008_09,_2009_10,_and_2010_11pdf.pdf</p> |
| Conclusion | <p>All the elements of the condition have been achieved but for making the report available for public scrutiny. Important stakeholders had not seen the results of the FRDC Research work at the time of the second annual assessment. It was noted however, that additional management mitigation measures are being explored for one species where interactions occur.</p> |

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| PI | 2.3.3 |
| | <p>The WWF submission notes:</p> <p>ETP (or TEPS in Australia) logbook information is currently reported as all three South Australian prawn fisheries combined. Future reporting must be presented as individual fisheries to identify where issues with interactions may arise.</p> <p>Currently there is no approach for validating reporting rates during commercial fishing (i.e. lack of independent observer program). While it is noted that this is not necessary to achieve the 80 scoring guidepost, an approach to validation of these data would reflect best practice management.</p> <p>This Condition can only be closed once information is made available to the public. It is expected that this will take place in the coming months, but will require verification at the time of the third annual audit.</p> |
| Recommendation | <p>SARDI to establish performance indicators and reference points for ETP parameters and to incorporate these into the Fishery management Plan.</p> <p>The bycatch annual report tends to oversimplify presentations, and includes insufficient detail by fishery. It is recommended that, e.g., species interactions by method by area should be made available, as per the reporting framework for the ecosystem based framework;</p> <p>The species identified as high risk from the PIRSA ERA should be specifically identified as separate entries in the ETP logbook, and special attention paid to validating reporting rates.</p> |

Condition 3: Habitat information

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| PI | 2.4.3 |
| Guidepost not met | <ul style="list-style-type: none"> The nature, distribution and vulnerability of all main habitat types in the fishery area are known at a level of detail relevant to the scale and intensity of the fishery. |
| Condition | <p>A detailed plan to achieve this should be in place at the first annual surveillance audit. The results on benthic interactions should be available from the second annual review onwards (and used to assist the development of additional management mitigation measures, if deemed appropriate). The adequacy of information will be evaluated by the fourth surveillance audit.</p> <p>The Condition is to strengthen the information available to allow any detection of an increase in risk to habitat as a result of fishing or other exogenous environmental variables, within the Gulf.</p> |
| Requirement by Year 1 | A detailed plan to achieve this should be in place at the first annual surveillance audit. |
| Requirement by Year 2 | Evidence that this condition has been implemented, will be required by the second annual review and available to the public |
| Action Plan by Year 1 and 2 | <p><i>As per condition 2, PIRSA will lead an Ecological Sustainable Development risk assessment, as a step in developing the new management plan, which will identify the components, including habitats and species, at risk from interactions from prawn trawling.</i></p> <p><i>The ESD risk assessment will be used to develop an Environmental Evaluation Plan by the first annual audit. The "Environmental Evaluation" plan will include:</i></p> <ol style="list-style-type: none"> <i>1) Assessments of the available data on environmental impacts of the prawn fishery in Spencer Gulf;</i> <i>2) Recommendations for appropriate on-going measures and timescales for environmental assessment;</i> <i>3) Recommendations for potential performance indicators for environmental assessment.</i> |

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| PI | 2.4.3 |
| | <i>This plan will assess the on-going measures and time scales for environmental assessment. Data from the FIS and fishing log books will also be incorporated in the model. This plan will provide a basis for on-going reporting of by-catch on a short term and long term scale. It will inform the annual by-catch report, commencing from the second annual review, which will subsequently be made publicly available. The report will be used to assist the development of additional management mitigation measures, if needed.</i> |
| Actions by SGWCPFA and management organisation | <p>FRDC funding was obtained for a project led by SARDI (in partnership with SGWCPFA), with PIRSA support and involvement, to provide a reporting framework for an ecosystem based assessment of the Spencer Gulf, including provision to strengthen information available to allow detection of an increase in risk to habitats and strengthening monitoring of information to assess distribution and abundance of benthic species. The project collated existing data and information from various research projects previously conducted for the Spencer Gulf Prawn Fishery, and incorporated the results of ongoing work conducted in research surveys, and from the SGWCPFC observer programme. The work also included analysis of two existing data sources: 1) GPS data gathered for 30% of all trawl shots conducted in the Spencer Gulf Prawn Fishery since 2002/003. GPS data was provided by fishers as the centre point of a trawl shot, and with assumptions regarding the direction and distance of trawls based on catch and effort data and fisher knowledge, the area trawled and percentage overlap of trawl shots was used to examine the historic trawl footprint and to determine reference points for performance indicators to manage the footprint. 2) Core sediment samples including those in storage and new, were analysed for the trawled and non-trawled areas of the Gulf. These were analysed for substrate structure which was used to assess habitat, and provide core data to evaluate any future risk assessment.</p> <p>A habitat component was not included as part of the ERA. Whilst an omission, it is clear that the results from the assessment work provide an adequate basis from which to measure changes in the footprint as a surrogate.</p> |
| Evidence Provided | <i>SARDI, 2013. A reporting framework for ecosystem based assessment of Australian trawl fisheries – a case study of the Australian Spencer Gulf Prawn Fishery (SGPF), FRDC Project No 2011/062</i> |
| Conclusion | <p>All the elements of the condition have been achieved.</p> <p>The WWF submission makes the following comment:</p> <p>That the Revised Management Plan will provide mechanisms/performance measures that ensure the footprint of the fishery is not expanded, no new areas are opened to trawling, and that sensitive habitats such as sponge beds identified by Currie et al 2009 are demonstrably protected.</p> <p>However, this Condition can only be closed once the results of the research work are made available to the public. It is expected that this will take place in the coming months, but will require verification at the time of the third annual audit.</p> |
| Recommendation | The assessors endorse the SARDI recommendation to establish performance indicators and reference points for habitat parameters and to incorporate these into the Fishery management Plan. The client should further note the need to ensure that there is no expansion in trawling and that sensitive habitats such as sponge beds identified by Currie et al 2009 are demonstrably protected. |

Condition 4: Ecosystem information

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| PI | 2.5.3 |
| Guidepost not met | <ul style="list-style-type: none"> The main functions of the Components (i.e. target, Bycatch, Retained and ETP species and Habitats) in the ecosystem are <u>known</u>. |
| Condition | Based on the outputs from Condition 2 and 3, and Recommendation 3, continuous information should be collected in order to detect the ecosystem outcomes of management |

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| PI | 2.5.3 |
| | measures implemented under the management strategy, once in full operation. |
| Requirement by Year 1 | A detailed plan to achieve this should be in place at the first annual surveillance audit. |
| Requirement by Year 2 | The information should be presented in the annual by-catch report, identifying any possible risks to the trophic balance. Evidence that this condition has been implemented, will be required by the second annual review (2013). |
| Action Plan by Year 2 | <p><i>The Environmental Evaluation Plan described under Condition 3 will examine available data to inform potential risks to trophic level impacts of the fishery, and will recommend data requirements to report on these risks annually, to be completed by the second annual audit. Data considered will include: long-term data from independent by-catch surveys conducted every 7 years; fishery-independent survey data collected 3 times every year.</i></p> <p><i>A joint research proposal has recently been developed between SARDI, Adelaide University and Flinders University. This project aims to develop an ecosystem model for Spencer Gulf. Collaboration on this project (if the grant application is successful) could enable further examination of the ecosystem effects of prawn trawling in Spencer Gulf.</i></p> |
| Actions by SGWCPFA and management organisation | <p>FRDC funding was been obtained for a project led by the University of Adelaide, with PIRSA and SARDI support (University of Adelaide 2011) aims to develop a system model for the spencer Gulf, building on work already completed for the GAB (Goldsworthy et al, in prep.). Data to populate the model will be drawn from prawn stock assessment surveys and the commercial fishery. The project may provide a useful basis for broad understanding of features of the Spencer Gulf ecosystem but it is unclear that the proposed modelling will provide any predictive capability or the ability to test management measures that might be implemented under the Management Plan (as called for in condition 4).</p> <p>The analysis determined the general species abundance, biomass and richness and determined the community structure from current and past trawl intensity. The work concludes that the community structure is well separated by region and is substantially driven by salinity and depth gradients. There is also no evidence for recent (5 years) trawl intensity-related differences in community structure.</p> |
| Evidence Provided | University of Adelaide 2011, Spencer Gulf Research Initiative: development of an ecosystem model for fisheries and aquaculture Goldsworthy, S.D. B. Page, P. J. Rogers, C. Bulman, A. Wiebkin, L. McLeay, L. Einoder, A.M.M. Baylis, M. Braley, R. Caines, K. Daly, C. Huveneers, K. Peters, A.D. Lowther, T.M. Ward (in prep.) Trophodynamics of the eastern Great Australian Bight ecosystem: ecological change associated with the growth of Australia's largest fishery (supplied during meeting) |
| Conclusion | <p>All the elements of the condition have been achieved but will be made available in the ESD, as opposed to the annual bycatch report as specified in the original condition.</p> <p>As per conditions 2 and 3, it is recommended that the results of this work be made available for public view via the SARDI website. It is expected that this will take place in the coming months, but will require verification at the time of the third annual audit.</p> |
| Recommendation | The assessors endorse the SARDI recommendation to establish performance indicators and reference points for bycatch, ETP and habitat parameters and to incorporate these into the Fishery management Plan. |

Condition 5:

Condition 5 was achieved during Year 1, and this condition was closed at the time of the first surveillance audit. Evidence continues to suggest that ENGOs remain involved in the critical consultation phases, and the partnership between the SGWCPFA and CCSA continues to work well.

Condition 6: Research Plan

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| PI | 3.2.4 |
| Guidepost not met | <ul style="list-style-type: none"> A <u>research plan</u> provides the management system with a strategic approach to research and <u>reliable and timely information</u> sufficient to achieve the objectives consistent with MSC's Principles 1 and 2. |
| Condition | A Research Plan is required to clearly outline the strategically important activities as appropriate to achieving fishery-specific and ecosystem-orientated research outputs consistent with the management plan. A strategic research plan should be formulated in agreement with all significant stakeholders. |
| Requirement by Year 4 | The condition is required to be implemented by year 4. No specific actions are required by year 2. |
| Action Plan by Year 1 and 2 | <p><i>SARDI will draft a "plan" as mentioned in the CAP at condition 3 to take into consideration trophodynamics; benthic habitats; by-catch and by-product, and TEPS, collating existing data. This will inform the research plan.</i></p> <p><i>A research plan will be developed with the new Management Plan. The Research Sub-committee will develop a strategy to implement and prioritise research projects, which will support ecosystem-orientated research outputs and fisheries specific programs which will be reviewed biannually from the implementation of the new Management Plan (2013).</i></p> |
| Actions by SGWCPFA and management organisation | <p>As noted at Condition 1, PIRSA has established a Management Plan Steering Committee which first met in mid-2012 and has provided oversight of the Management Plan (MP) development. In the current draft MP at section 11 on Stock Assessment and Research, section 11.4 provides for a "Strategic Research Plan" to be developed by the SGWCPFA. For the 2013 Surveillance Review a proposed final research plan dated June 2103, developed by the SGWCPFA Management Committee Research Subcommittee, was provided. The plan includes a list of current, future planned, and "aspirational" projects.</p> <p>In its current form, the PIRSA MP describes generally how research services, data collection and analysis, and stock assessments are to be conducted. The provided SGWCPFA research plan is a short list of issue areas and ongoing or possible work, some of which is clearly research oriented though some is more related to planning. The current list does not provide timeframes, linkage to MP goals and objectives, potential funding, risks (e.g., to achieving goals) of non-completion, etc.</p> <p>There is clearly an intent in the MP to provide information on PIRSA funded (via levies) core research in support of annual management, as well as providing linkage to wider research supported directly by SGWCPFA. This is good and suggests the condition is likely to be met within the agreed timeframe.</p> <p>The Action Plan says that <i>"The Research Sub-committee will develop a strategy to implement and prioritise research projects, which will support ecosystem-orientated research outputs and fisheries specific programs which will be reviewed biannually from the implementation of the new Management Plan (2013)."</i> It is unclear if any such strategy has yet been developed.</p> |
| Evidence Provided | <p>PIRSA DRAFT Commercial South Australian Spencer Gulf Prawn Fishery Management Plan</p> <p>SGWCPFA Proposed Research Plan (final)</p> |
| Conclusion | The condition requires that SG80 Guideposts be met within four years of certification. The intentions for development of a Research Plan fit within this timeframe and there is evidence |

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| PI | 3.2.4 |
| | that progress is being made under the MP development. However, the current MP section 11.4 and SGWCPFA research plan do not yet clearly outline the strategically important activities as appropriate to achieving fishery-specific and ecosystem-orientated research outputs consistent with the management plan, as laid out in the condition. |
| Recommendation | There is a need clearly to link research programmes, projects and funding options to strategic needs (e.g. to meet goals and objectives laid out in section 6 of the MP and as articulated by the SGWCPFA Management Committee). Ideally, the plan will lay out options and risks for strategic work as well as a full specification for near-term work. |

Condition 7: Performance evaluation

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| PI | 3.2.5 |
| Guidepost not met | The fishery has in place mechanisms to evaluate <u>key</u> parts of the management system and is subject to <u>regular internal and occasional external</u> review. |
| Condition | SARDI and the SGWCPFA Research Plans and their outputs are subject to independent external review once formulated. In addition, the performance of the Management Plan should be subject to regular internal review and occasional external review. A plan for reviews will be evaluated during the first annual surveillance audit, and reviews appraised at each annual surveillance audit as appropriate. The external review will have been completed by the fourth surveillance audit (2015). |
| Requirement by Year4 | The condition is required to be implemented by year 4 |
| Action Plan by Year 1 and 2 | <i>There is no specified requirement for this PI to be met within the second surveillance audit</i> |
| Actions by SGWCPFA and management organisation | PIRSA is in the process of formulating a revised Management Plan which will be subject to external review once formulated (Annabelle Jones, pers com, June 2013). The plan allows for the design of outcomes, activities and means of verification. SARDI applies a system of regular internal review, but has only applied an external review process to one of the adjacent fisheries, the Gulf of St Vincent Prawn fishery. Nevertheless, the results of this review were used and applied the Spencer Gulf stock assessment methodology (Noel, pers com, 2013). It was also evident that the SARDI reporting framework for ecosystem based assessment, had been subject to external review, following FRDC requirements. |
| Evidence Provided | PIRSA DRAFT Commercial South Australian Spencer Gulf Prawn Fishery Management Plan |
| Conclusion | Evidence is in place that both PIRSA and SARDI are applying both regular internal and external reviews to documents supporting the management arrangements. The assessors were satisfied that these processes were being applied well. The assessors feel that this condition can be closed once external review of the Management Plan has been undertaken. This is due in 2013. |
| Recommendation | Internal and external performance monitoring and evaluation are explicitly highlighted as part of the Management Plan. The SG prawn trawl stock assessment be subject to occasional external review |

6.1 Progress relative to milestones

Milestones in each condition are close to being met, or are expected to be so by the third and fourth annual audits, as appropriate. While there appears to be a delay in the process of formalising a Management Plan, this is still reasonably on track, with work now focusing on a revised harvest strategy. If indicated fundamental changes to the harvest strategy are implemented, it will be most probable that the HS will require rescoring at the time of the

third surveillance visit. Pending the outcome of new information, the assessors may also look to rescore the status of bycatch species in the third surveillance visit. It is, however, important that the ERA reviews the specific scoring of High Risk species, ensuring that the system of Expert Override is followed more carefully as per the recommendation as outlined above, or that PIRSA/SARDI looks to apply alternative (e.g. SAFE) assessment criteria. Overall, progress towards achieving milestones and Conditions is in some cases slightly behind time, but the assessors are satisfied with the level of stakeholder commitment and that the conditions are close to being met, and should be so by years three and four.

6.2 Closed-out conditions

Apart from Condition 5 which had been closed out as a result of the first surveillance audit, there were no additional closed-out conditions.

6.3 Surveillance

Based on the guidelines as set out in Annex CG 27.22 (Table C3), the Surveillance score is 2 or more. Table C4 indicates that the Year 3 annual surveillance audit should be normal and on site.

6.4 Certification Decision

The MRAG Americas Certification Committee concurs that the certification of the Spencer Gulf prawn fishery against the MSC Principles and Criteria for Sustainable Fishing be continued for a further year.

6.5 Recommendations

1. PIRSA should give priority to completing the Management Plan and incorporating the required changes to the Harvest Strategy, and ensuring that explanations of reference point and triggered actions are given with clear justification related to PI 1.1.2 Scoring Guideposts
2. The Draft ERA should be carefully evaluated, so that it fully conforms to the Hobday methodology. The stakeholders should take extreme care in the scoring as and when information is not available, and should look to strengthen information, apply greater prudence when using the system of expert override, and perhaps look to apply Level 3 SAFE analyses in order to ensure that any High Risk species are not put at risk by this fishery,
3. Within the context of the Management Plan, PIRSA should establish performance indicators and reference points for the range of ecosystem interactions including bycatch, ETP and habitat parameters.

APPENDIX 1: Stakeholder Comments



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WWF comments for input into the 2nd annual review process for Marine Stewardship Council certification of the Spencer Gulf Prawn Trawl Fishery

July 2013

Submitted by:

Cameron Dixon, Projects Manager, Marine

WWF Australia

Peter Trott, Policy Manager – Fisheries Markets

WWF Australia

Michael Harte, Program Leader, Marine

WWF Australia

CC

Spencer Gulf and West Coast Prawn Fisherman's Association (SGWCPFA)

Introduction

WWF would like to thank MRAG Americas Inc. for the opportunity to participate in and comment on the second annual audit process of the Marine Stewardship Council (MSC) certification for the Spencer Gulf Prawn (*Penaeus latissulcatus*) Trawl Fishery, Australia.

WWF actively engages as a stakeholder in a number of fishery assessments in order to improve individual fishery assessments and to support advancements that fisheries have been making. We continue to support and encourage the Spencer Gulf and West Coast Prawn Fisherman's Association (SGWCPFA) in its effort to strive for best practice management through its engagement in MSC and its on-going commitment to address the conditions set during the certification process.

General comments on the conditions and recommendations

In general terms, the fishery has made very good progress toward achieving the milestones associated with the MSC conditions. While this was pleasing, the documentation of this progress was not provided to the CAB and interested parties in a timely manner. In future, the fishery must ensure that all parties are provided with the appropriate documentation at least one week prior to the audit process to ensure sufficient time to prepare for meetings so that consultation can be as efficient and effective as possible.

While it was noted that a revised Management Plan (including a new harvest strategy) was to have been completed by now, the industry and government agencies satisfactorily described their progress toward achieving this goal and the impediments that have caused its delay. We note that the revised Management Plan must be in place by the next surveillance audit, WWF supports this critical milestone for continued certification.

WWF noted that there were no major changes to the management of the fishery in the previous 12 months, but there were several minor changes that included: further modification in the rules that determine pre-Christmas catches; further development in the co-management process with the delegation of fishery closure notices to the Co-ordinator at sea (industry); the addition of a deputy Co-ordinator at sea, and; several staff changes in the associated government departments (management and science).

Comments specific to conditions and recommendations of the fishery

- Condition 1: Reference Points

WWF notes that the Reference Points for the fishery are currently being addressed as part of the revised harvest strategy and Management Plan. The draft harvest strategy presented for the audit contains reference points that use the catch rates observed during fishery-independent surveys as a proxy for relative biomass. These Reference Points should consider the ecological role of prawns in Spencer Gulf. Also, the rationale for the levels associated with this performance indicator need to be clearly documented. Finally, the language used should be consistent with terminology familiar to MSC.

- Condition 2: Bycatch information (ETPs)

ETP (or TEPS in Australia) logbook information is currently reported as all three South Australian prawn fisheries combined. Future reporting must be presented as individual fisheries to identify where issues with interactions may arise.

Currently there is no approach for validating reporting rates during commercial fishing (i.e.; lack of independent observer program). While it is noted that this is not necessary to achieve the 80 scoring guidepost, an approach to validation of these data would reflect best practice management.

- Condition 3: Habitat information

WWF applauds the recent work conducted on habitat mapping which includes sediment mapping and footprint analysis (from GPS data). However, it is hoped that the revised Management Plan will provide mechanisms/performance measures that ensure the footprint of the fishery is not expanded, no new areas are opened to trawling, and that sensitive habitats such as sponge beds identified by Currie et al 2009 are demonstrably protected.

- Condition 6: Research Plan

The research plan provided was essentially a listed version of current research. WWF would support a more strategic approach to research planning that includes specific goals and timelines. Research to complete the MSC recommendations should be an essential component of the research plan and could be used to ensure that the appropriate paper work is provided to the CAB and other parties in a timely manner prior to the audit process.

- Condition 7: Performance evaluation

Discussion of the review processes associated with key reports for the fishery identified that most documents undergo external peer review. The exception appears to be the stock assessment report written by SARDI Aquatic Sciences. To satisfy the “occasional” external peer review WWF recommends that an external review of the report be conducted prior to the third surveillance.

Emerging issues for the fishery

A Government risk assessment process applied to by-catch species for the fishery identified two “species of interest”: giant cuttlefish and coastal stingaree.

WWF understands that there is serious concern over declines in population abundance of giant cuttlefish in northern Spencer Gulf. While there appears to be minimal overlap with the fishery, and evidence to suggest that the fishery itself is not the likely cause of decline, the extent of the fishery’s current impact, due to continued declining population, is poorly understood. WWF encourages the SGWCPFA and governing bodies to obtain the necessary information to inform on the risk posed by the fishery in time for the third surveillance (or before if possible). Further, the SGWCPFA should continue to work with the Conservation Council of South Australia to minimise current interactions, as it has done by implementing a Code of Conduct for giant cuttlefish interactions.

While the coastal stingaree is not a TEP in Australia, it has been placed on the IUCN redlist. WWF would encourage further information be gathered to inform of the potential risk the fishery may also pose on this species.

Email correspondence from CSSA and assessors’ response

Hi James

Firstly, the MSC definitions in the Risk Based Framework require both Level 1 Scale Intensity Consequence Analysis, and Level 2 Productivity Sensitivity Analysis to be undertaken. The work undertaken during the 2010 Assessment was based on the definitions from MSC FAM version 2 (attached), and the assessment is required to conform to this analytical process until the end of the period, or take account of alternative evidence such as the work recently undertaken by PIRSA. The Assessment did in fact recommend that at ERA be undertaken.

However, the major problem with the subsequent PIRSA work was that the correct processes was not followed because there inadequate guidance provided. Most specifically: 1) it didn’t follow the

Level 1 SICA approach which might have eliminated some species from the assessment, thus eliminating the need for some expert overrides; and 2) that the process of scoring and expert overrides was not been carried out correctly.

The problem also was that the document was made available to the assessment team only as a draft, unfinished, and on examination showed up real problems in the way that the work had been done.

We concluded that the use of 'Expert override' did not provide sufficient justification and documentation to justify increasing or decreasing the risk status. For example, under coastal stingaree and Giant Cuttlefish, the only qualification we have is 'Expert override: *'JB revised re Availability, score increased to 3'*. To apply an expert override, which is an essential step in ensuring that assessment results are appropriately translated into fishery management and monitoring plans, we would want to ensure that this is applied to a sufficient degree of scientific integrity. Documentation associated with the expert override process should be made available to the assessors, or the expert panel, in order to provide a clear and indisputable record of how and why override decisions were taken. Specifically, the exact technical basis for the override. Citations should be given for reference materials which are in the public domain, and should include the section or page number from which the information is drawn. This approach stems from a review that MRAG Americas undertook into the Northern Prawn Fishery, but applies equally. You should note that CSIRO has abandoned the process of expert override and moved to a Level 3 assessment.

Just to explain the reason why Giant Cuttlefish was eliminated from the MSC assessment in 2010 through the SICA process. It scored (by all stakeholders) as low risk in two areas: Spatial scale and Intensity of activity. Spatial scale is defined as the percentage of the total range of the stock that overlaps with all fishing activity affecting the stock. This assumed that the range of stock was not exclusively within the trawl zones, which only account for 8% of the total area. Intensity was defined *as remote likelihood of detection of activity at any spatial or temporal scale*. To score a higher, we would have to show either *moderate detection of activity at broader spatial scale, or obvious but local detection (Medium risk), or detectable evidence of activity occurs reasonably often at broad spatial scale (High risk)*.

Given the elimination of giant cuttlefish with the SICA in 2010, more justification should have been available in order for PIRSA to bring it back up as a PSA. This process should follow the MSC RBF and we would want to see qualitative evidence that the stock was distinctly vulnerable within the full range of the fishery, which arguably would need to show a scale intensity of 1-15%, and either high or medium intensity risks.

Then accepting the likelihood that PSA is to be undertaken, looking at the susceptibility attributes, the assessors would need to have clear evidence of the following in order to score 3: Overlap of the species range >30% overlap; High overlap with fishing gear, Selectivity >2 times mesh size, to say, 4 m in length, Retained species, or majority dead when released. If these are correct, we would then plug in the productivity attributes into the MSC worksheet: <http://www.msc.org/documents/scheme-documents/forms-and-templates/msc-productivity-susceptibility-analysis-worksheet-v1.1-1/view>

However, in doing this, we get the following results:

Giant Cuttlefish – 2.67 **Medium Risk**;
Coastal Stingaree – 3.01 **Medium Risk**

So effectively, even if the report, we would not be able to accept the scores as high risk, nor would we accept the override because of a lack of rationale.

Consequently, we draw the conclusion that the draft ERA process has not been undertaken correctly ore because of a lack of guidance and we will be recommending that the final report contain both a substantial revision to the work and collection of further evidence were these species to be moved to high risk.

Sorry James, but we are bound to follow a process, and if a species is set to high risk, we have to be sure that the process for determining that risk has been carried out correctly, and that new information has been made available to reassess the scoring.

I would hope that come the next assessment, that CCSA provide a written submission, which you are perfectly entitled to do. I will also alert Kathryn in the run up to the next submission.

Kind regards

Richard

From: James Brook [mailto:jbroad@picknowl.com.au]
Sent: Wednesday, 10 July 2013 6:38 PM
To: richard@consult-poseidon.com
Cc: Kathryn Warhurst
Subject: Fw: ESD risk assessment of South Australia's SGPF

Hi Richard,

Kath forwarded to me your email below.

Regarding point 1, its not clear to me how the two sentences are linked. I'm guessing the second sentence is referring to the cuttlefish. However, I did have more general concerns about the way that availability was calculated. In fact it was not calculated. Instead a measure of spatial density in a portion of the species' range was used, that also partly double-counted the encounterability and selectivity scores. I raised this with PIRSA and suggested a different approach that was far more consistent with the method described by Hobday et al. This happened relatively late in the process and PIRSA were reluctant to change their approach, but tolerated the addition of various species that would have come up using a more appropriate methodology for availability (under the guise of expert override).

I am not sure what you mean by point 2. Are you suggesting a different default score (other than 3) should be applied if there is a lack of information?

Regarding point 3, I agree, but as discussed above, the overrides related more to a systemic problem with the way that availability was being calculated.

Regarding point 4, the entire suite of species came from a prawn bycatch study, but I am guessing that you are referring to the species caught over rgrounds that are rarely or never otherwisetrawled. But wouldn't the encounterability/selectivity parameters filter those out? My concern about the starting list was

that it was based on a survey that may not necessarily have picked up all species from the trawl grounds (it certainly didn't for sponges) and museum records should have been checked too.

I don't agree that there would be low levels of Encounterability with cuttlefish. A number of people have independently estimated that thousands if not tens of thousands would be caught each year by trawlers, based on the catch rates in the prawn trawl bycatch study. SARDI have more resolved data that could be used to provide a better estimate but despite several requests for it over the past 18 months or more, it has not been made available. There is not logical reason not to make it available as similar information was provided by Currie et al. (2009) for a number of species, but cuttlefish were not perceived to be a species of particular interest at the time.

If the peer review was by Rick Fletcher then its possible it may only cover the assessment based on his component tree method that was done prior to the PSA

Regards

James Brook

Hi Catherine

I am afraid that we had some difficulties in the application of PSA by PIRSA on four counts.

The definition of Availability was not consistent, and has to be undertaken for the range of the stock. This would mean that very clear evidence is needed to justify separate species. So far, we have not seen any

The scoring of 3 for lack of information, relies heavily on expert override
The expert override process is not supported adequately by references
Species are included in the assessment, that are not necessarily caught.

Based on the weight of evidence, we accept that Giant cuttlefish are vulnerable, prompting management action, but so far there is insufficient evidence available to the assessors to confirm high risk, when also there may be low levels of Encounterability. These data are now being collected and will be available to us at the next annual audit.

We have also being trying to get hold of a copy of the peer review, as we feel that these points should have been raised.

We will also be monitoring the outcomes throughout the year.

For your information, we have decided not to close any of the conditions until all the documents are made available to CCSA and WWF.

From: Kathryn Warhurst [<mailto:kathryn.warhurst@adelaide.on.net>]

Sent: Thursday, 4 July 2013 3:37 AM

To: 'Richard Banks'

Subject: FW: ESD risk assessment of South Australia's SGPF

Hi Richard,
Some further discussion re Hobday semi-quantitative Risk assessment below.
Cheers, Kath

From: Jones, Annabel (PIRSA) [<mailto:Annabel.Jones@sa.gov.au>]
Sent: Monday, 24 June 2013 11:52 AM
To: 'James Brook'
Cc: 'Kathryn Warhurst'; 'Simon Clark'; 'Alistair.Hobday@csiro.au'; Noell, Craig (PIRSA-SARDI); Fistr, Alice (PIRSA)
Subject: RE: ESD risk assessment of South Australia's SGPF

Thanks James for your comments

I will wait for Alistair's comments on the same issue in our consideration.

Cheers
Annabel

Annabel Jones | Program Leader - Commercial Fishing
Primary Industries and Regions SA - PIRSA

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From: James Brook [<mailto:jbrook@picknowl.com.au>]
Sent: Monday, 24 June 2013 10:44 AM
To: Jones, Annabel (PIRSA)
Cc: 'Kathryn Warhurst'; Simon Clark; Alistair.Hobday@csiro.au; Noell, Craig (PIRSA-SARDI)
Subject: Re: ESD risk assessment of South Australia's SGPF

Hi Annabel,

I'm not sure of the current status of this draft, but as you know I've always had concern about the method applied for measuring availability in the SGPF workshop. I want to emphasise that I'm very happy with the outcomes of the process (i.e. final risk classifications) as I believe that the right set of species was ultimately included and given proper consideration.

However, I don't think its a good idea to document the method quoted below as a preferred method or even a valid method and to classify the additional species as just "expert overrides". I believe that there is a solid basis for their inclusion through a correct application of the PSD methodology and don't want to see their status as high risk species undermined by perceptions that they have only achieved that level through a stakeholder process rather than the formal methodology. My other concern is that including the paragraph below in the report, if there are flaws in the approach adopted, sets a dangerous precedent for future risk assessments in other fisheries.

For this PSA of the SGPF, the latter (and preferred) measure of availability was determined for each species by comparing the fishing blocks in which the species was present (recorded from the 2007 by-catch survey) with the % contribution that those same fishing blocks made to the total effort in the fishery over a recent five-year period (2006/07-2010/11). The sum of the % contributions was considered to be a reasonable measure of overlap of a species distribution within the Spencer Gulf with fishing effort of the SGPF.

I apologise for the delay in getting this comment to you but I've only just now been able to discuss this issue with Alistair Hobday. In due course he will be putting together some notes on our discussion for circulation but was happy for me to flag with you now that we've had a discussion and the broad outcome is that aspects of the method applied for the SGPF workshop do require further consideration.

Regards

James