

**Mackerel Icefish Fishery
Heard & McDonald Islands
Australia**

**2007 Annual Surveillance Report
As Required Under the Marine Stewardship Council Program**

Prepared for:
Austral Fisheries PTY. LTD.

Prepared by:
Chet Chaffee, Ph.D., Scientific Certification Systems

General Information

Certified Fishery	HIMI Mackerel Icefish Fishery	Australia
Fishery Agency	Australia Antarctic Division of The Australian Fisheries Management Authority and CCAMLR (Commission for Conservation of Antarctic Marine Living Resources)	Australia
Species	<i>Champsocephalus gunnari</i>	
MSC Registration No.	SCS-MFCP-F-0016	
Certification Date	31 March 2006	
Certification Expiration Date	31 March 2011	
Certification Body	Scientific Certification Systems, Inc. (SCS)	2200 Powell St., Suite 725, Emeryville, CA 94608
Certificate Holder	Austral Fisheries Pty. Ltd.	14 Neil Street, Osborne Park, WA 6007
Surveillance Team	Chet Chaffee, Ph.D. (SCS)	Project Leader
Surveillance Stage	1 st Annual Surveillance	2007

Preface

All facts in this report were provided to SCS by Austral Fisheries Pty. Ltd.. However, the interpretation, opinions, and assertions made in this report as to the compliance of the fishery with MSC requirements are the sole responsibility of Scientific Certification Systems, Inc.

Executive Summary

This is the 1st Annual Surveillance Report (2007) prepared by SCS to meet the requirements of the MSC for annual audits of certified fisheries. It is SCS's view that Australia's Heard and McDonald Island (HIMI) fishery for Mackerel Icefish continues to meet the standards of the MSC and to comply with the 'Requirements for Continued Certification'. SCS recommends the continued use of the MSC certificate through to the next annual surveillance audit with no additional corrective action requests other than those from the original assessment.

Background

The HIMI Mackerel Icefish fishery in Australia Antarctic waters was originally certified on 31 March 2006 by Scientific Certification Systems, Inc. The requirements of the Marine Stewardship Council (MSC) are that each certified fishery must undergo at a minimum an annual surveillance to ensure the basis of certification is still in place and that the fishery is meeting any conditional requirements from the original certification. Should a fishery fail the surveillance audit, and cannot address identified deficiencies in a reasonable period of time, then the use of the certificate and the MSC logo can be revoked by the certifier.

This report represents the first annual surveillance since the fishery was certified. The issues for the certifier are whether the fishery has sufficiently acted on the required conditions set forth in the original certification report, and whether a random check on the performance of the fishery verifies continued compliance with the MSC standards.

1st Annual Surveillance

The annual surveillance audit process (as always) is comprised of four general parts:

1. The certification body provides questions around areas of inquiry to determine if the fishery is maintaining the level of management observed during the original certification. In addition, the surveillance team requires that the client provide evidence that the fishery management system has taken the necessary actions to meet all conditions placed on the fishery during the initial certification assessment or any previous surveillance audits.
2. The surveillance/assessment team meets with the client fishery to allow the client to present the information gathered in answer to the questions asked by the surveillance team. The surveillance team can then ask questions about the information provided to ensure its full understanding of how well the fishery management system is functioning and if the fishery management system is continuing to meet the MSC standards.
3. The surveillance team presents its findings to the client fishery at the end of the site visit. The results outline the assessment team's understanding of the information presented and its conclusion regarding the fishery management system's continued compliance with MSC standards. Where indicated, the surveillance team may provide the client fishery with additional time to supplement the information provided if the surveillance team finds that there are still issues requiring clarification.

4. Where appropriate, the client fishery submits final information to the surveillance/assessment team for consideration in the surveillance findings and report. The surveillance team then reviews the final information and submits a final report to the client fishery and the MSC for posting on the MSC website. If there are continued compliance concerns, these are presented as non-conformances that require further action and audits as specified in the surveillance report.

Surveillance Meetings

The surveillance audit for 2007 comprised 4 parts:

1. An exchange of information indicating to the client the areas of inquiry by SCS for the surveillance audit. SCS provided a list of questions to the client.
2. A meeting by teleconference with the client in March 2007. This meeting was to discuss the questions put forth by SCS.
3. A meeting in Perth, Australia with Martin Exel and David Carter of Austral Fisheries Pty. Ltd. to discuss and exchange information needed to complete the surveillance audit. The discussion included a review of ongoing activities associated with the “Conditions” placed on the fishery by the original assessment was conducted.
4. An exchange of documents from the client to SCS through June 2007, in follow up to inquiries made during the meeting in Perth, Australia.

Results

Data Submitted to Assessment Team

Austral Fisheries answered questions put forward by SCS both in discussion and in the form of submitted documents. The documents compiled and submitted to SCS are:

- Letter from DEW (Department of the Environment and Water Resources) to AFMA (Australia Fisheries Management Authority) regarding the assessment of the HIMI Fishery under the EPBC Act (Environment Protection and Biodiversity Convention Act)
- Extract of Register of Statutory Fishing Rights Heard Island and MacDonal Islands Fishery Season 2007 (Extract Number 22154)
- AFMA Observer and Data Collection Officer Cruise Report for the Factory Trawler Southern Champion (Cruise 44; 1 February – 11 March, 2007; Heard and MacDonal Island – Area 58.5.2)
- Seabird and Marine Mammal Bycatch in tabular form (Fishing Year 2006 – 2007)
- Scientific Permit, Juvenile Icefish Survey Permit No. 901150.
- Future Operating Environment for Commonwealth Fisheries (AFMA)

- Sub-Antarctic Resource Assessment Group (SARAG) MINUTES SARAG 28 14 NOVEMBER 2006
- Research Plan: Sampling Benthic Communities in the Southern Shell Bank and Northern Plateau Region of the Heard and McDonald Islands
- Annual Report Heard Island and McDonald Islands Fishery
- Demersal fishing interactions with marine benthos in the Australian EEZ of the Southern Ocean: an assessment of the vulnerability of benthic habitats to damage by demersal gears. Draft Report of the Second Meeting of the Project Advisory Committee. 28 March 2007.
- SUB-ANTARCTIC RESOURCE ASSESSMENT GROUP (SARAG), MEETING 29, Agenda item number: 12. Agenda item title: Review of environmental interactions and gear loss
- SUB-ANTARCTIC RESOURCE ASSESSMENT GROUP (SARAG), MEETING 29, Agenda item number: 9. Agenda item title: Review of harvest strategies in the HIMI
- SOUTHMAC PUBLIC MEETING 2006. 16 November 2006 - CHAIRMAN'S SPEECH
- AFMA Observer and Data Collection Officer Cruise Report for the Factory Trawler (XXXXXX). February 2007.

1. Stock Status

The first two questions raised by SCS in the surveillance audit are whether the monitoring and assessment to determine the status of the stocks are still being conducted consistent to what was provided to the assessment team in the original assessment, and whether the status of the stock was still consistent with pre-determined reference points.

The indicators in the original assessment that cover monitoring were 1.1.2.1, and 1.1.2.2, 1.1.2.3, 1.1.2.4, 1.1.2.6, 1.1.2.8, and 1.3.1. The performance indicators associated with understanding the status of the stock were 1.1.3.1, 1.1.3.2, 1.1.4.1, 1.1.4.2, 1.1.5.1, and 1.1.5.2. The performance indicator associated with assessing the harvest strategy was 1.1.6.1.

Australian Antarctic Division (AAD) scientists undertake stock assessments each year as part of their core work. Upon completion of assessments, findings are subject to independent peer review and review by Sub Antarctic Fisheries Assessment Group (SAFAG).

The Australian delegation to CCAMLR then submits assessments to the CCAMLR WG-FSA (CCAMLR Working Group on Fish Stock Assessment), where they are open to international scrutiny and discussion.

WG-FSA then recommends to the Commission, via the CCAMLR Scientific Committee, TACs (Total Allowable Catch) for Statistical Division 58.5.2. Once approved by CCAMLR, TACs and other measures are then set out in Conservation Measures for the coming season.

CCAMLR agreed TACs are further considered by SouthMAC (Sub-Antarctic Fisheries Management Advisory Committee). The AFMA (Australian Fisheries Management Authority) Board then formally endorses the TAC (at or below the TAC set by CCAMLR) before the fishing season commences on 1 December.

The assessments of fish stocks in the Fishery are undertaken in accordance with a precautionary approach endorsed by CCAMLR in the mid 1990s. The objective of this approach is to maintain a stock at a proportion of its pre-exploitation abundance such that:

- escapement of the spawning stock must be sufficient to avoid the likelihood of declining recruitment
- abundance under exploitation must maintain a sufficient resource for the needs of dependant species (usually predators).

When these two objectives are articulated for a particular species they give rise to biological reference points that form the basis for decision rules. The decision rules provide the foundation for incorporating uncertainties regarding population parameters and stock status into assessments of fishing strategies designed to meet the objectives.

Steps used in calculating yield for target species in Australian Waters under CCAMLR

Objective	Method(s) used for each target species
	Mackerel icefish
Estimate year class strengths of recruits to the Fishery	Estimates of year-class strength at ages two, three and four on Heard Island Plateau obtained by decomposing length-density data from random stratified trawl surveys into age classes using statistical routines (de la Mare <i>et al</i> 1998)
Growth and natural mortality estimates	Derived primarily from length density information. Some otoliths are still collected however there is no consensus within CCAMLR on a technique for reading otoliths
Other biological and Fishery parameters determined	Obtained from <ul style="list-style-type: none"> • length at maturity information • catch weighted length frequency information from pre-recruit surveys • additional information on spatial separation of stocks may be used to update fishing selectivity functions • information on removals factored in
Biological reference points	<ul style="list-style-type: none"> • That the probability that spawning biomass will fall below 20% of the pre exploitation level over the two year projection period must not exceed 0.1; and • the median escapement for the Fishery of the spawning biomass shall not be less than 75% over a

	two year projection <ul style="list-style-type: none"> noting that lower figure derived from these calculations is taken as the TAC
SARAG	Domestic review of assessment
Assessment completed for WG-FSA	Submitted by the Australian delegation
WG-FSA recommends to the CCAMLR Scientific Committee	TAC by area/sub-area/gear type
CCAMLR annual meeting	TACs, closures and other measures set out in Conservation Measures
SARAG and SouthMAC	SARAG reviews CCAMLR TACs SouthMAC endorses TACs to AFMA Board
AFMA Board	Approves TACs, allocated as ITQ SFRs

Adapted from Table 9 in Annual Status Report Heard Island and Macdonald Islands Fishery, March 2007.

The catch limit for mackerel icefish in Division 58.5.2 was reassessed, and a TAC of 42 tonnes agreed for recommendation for the 2006/07 fishing season, for the area known as the Heard Island Plateau. This is consistent with an agreement made at CCAMLR in 2005 that the TAC of 1210 tonnes (a combined TAC for 2005/06 and 2006/07) could be taken in the one season on the understanding that a zero or limited TAC (to allow for research) would be set in 2006/07.

AAFMA and AAD note that there is a high level of recruitment variability of this stock. Currently, there is an absence of any indication of a strong 1+ or 2+ year class in the 2006 RSTS, indicating that yields are likely to be low into the future until a cohort as large as the 1+ cohort detected in the 2003 survey becomes evident.

The approach used to set TACs for Mackerel Icefish satisfies the agreed decision rules keeping the biomass of the stock greater than or equal to 75% of that which would have been present in the absence of fishing.

Based on the evidence presented, SCS is satisfied that the same level of work, or greater, is still occurring with regard to understanding the status of the stock and setting appropriate harvest limits.

2. Ecosystem Impacts from Fishing

SCS asked for evidence that the fishery management system is still functioning to keep ecosystem based impacts from fishing at acceptable levels.

The indicators in the original assessment that cover ecosystem impacts were 2.1.1.1, 2.1.1.2, 2.1.2.1, 2.1.2.2, 2.1.3.1, 2.1.3.2, 2.1.3.3, 2.1.5.1, 2.1.5.2, 2.1.5.3, 2.2.1.1, 2.2.1.2, 2.2.2.1, 2.2.3.1, 2.2.5.1, and 2.2.5.2.

Based on the evidence presented, SCS is satisfied that the same level of work, or greater, is still occurring with regard to understanding and managing for acceptable levels of impact in the Australian Mackerel Icefish fishery.

Again, the reports provided by Austral Fisheries Pty Ltd provided sufficient evidence that the management authorities responsible for the fishery are maintaining the same level of management and science that was present during the initial certification.

Seal and Seabird Interactions

No significant interactions were reported with seabirds in the HIMI Mackerel Icefish fishery. Since the fishery had a zero TAC, except for some research, this finding is consistent. A few bird interactions were reported by the same vessel while fishing for toothfish, but the interactions were minimal. With only a few interactions, none landed a bird. The only birds reported as injured or dead were a few that were found on deck well away from fishing operations. Observations report that these birds were thought to have run into the boat during low visibility circumstances and died as a result of impact.

Again, few significant interactions were reported with marine mammals. Given the situation with a zero TAC, this is to be expected as with seabirds. Again, reports of interactions by the same vessel while fishing toothfish did identify a few (5) interactions with seals, but these had nothing to with icefish fishing operations.

Bycatch

Bycatch limits are still in effect in the icefish fishery. According to the Heard and Macdonald Islands Fishery Conditions on Statutory Fishing Rights for the 2206/2007 season, licensed fishers with rights to fish for icefish “shall ensure that no midwater trawling occurs during the period 1 February to 31 March each year. At all other times midwater trawling can only occur at night (i.e. during the hours of darkness between the times of nautical twilight).” In addition, the Statutory Fishing Rights requires specific bycatch limits be enforced for all gear types combined, and they are:

- 360 tonnes of *Macrourus* spp.
- 120 tonnes of skates and rays (*Bathyraja* spp.)
- 80 tonnes of grey rockcod (*Lepidonotothen squamifrons*)
- 150 tonnes of unicorn icefish (*Channichthys rhinoceratus*)
- 50 tonnes each for any other fish species.

In addition, the Federal Minister for Fisheries, Forestry, and Conservation (Senator Ian Macdonald) issued formal direction to AFMA to”take decisive action to ensure the sustainability of our (Australia) fish stocks and to secure the Australian fishing industry’s future.: One part of the directive on reducing bycatch and discards mandates that:

- Discarding of species subject to a total allowable catch limit or quota management will be illegal in all Commonwealth fisheries by 2007.

- Assess and implement measures to significantly reduce bycatch in all Commonwealth fisheries, with the goal to halve it by 2008.

Further to the issue of discarding, the meeting minutes from the Sub-Antarctic Resource Assessment Group (SARAG) dated 14 November 2006 note:

- The issue of discarding target species under tagging programs and the release of live and vigorous bycatch species was to be considered at the October AFMA Board Meeting. Discussion of this issue was deferred, and the Board requested that AFMA management prepare a strategy on how to further address the discard issue across Commonwealth fisheries. The current tagging and release practices used in Antarctic fisheries will continue.
- No new assessments were carried out on bycatch species in 2006 so the bycatch limits from the 2005/06 season were retained for 2006/07.
- CCAMLR anticipates undertaking some stock assessments for bycatch species during the 2006/07 season.
- WG-FSA recommended that additional information on skate bycatch (and in particular cut-offs) be collected by vessels on the fine-scale C2 form. It was anticipated that this new information would provide a useful check given the inconsistent reporting of cut-off through observer forms.

Benthic Impacts

All aspects of research and management in place during the initial assessment are still active. In addition, an FRDC (Fisheries Research and Development Corporation) project is approved for a four year period commencing 1 July 2006 to investigate 'Demersal fishing interactions with marine benthos in the Australian EEZ of the Southern Ocean: an assessment of the vulnerability of benthic habitats to damage by demersal gears'. One of the key aims of the project is the development of underwater camera technology which can be attached to the fishing gear (trawl, longline and pot) to assess benthic interactions.

The CSIRO Risk Assessment on the HIMI Fishery is still in process, but will be completed soon and add to the base of knowledge on which to manage benthic impacts.

A large part of the Australian EEZ around the Heard and Macdonald Islands remains in a marine preserve, limiting the areas available for fishing and trawling. Of the remaining areas, only a small portion continue to be trawled. This assists in limiting benthic disturbance until such time as there is more information on the effects of fishing gear on benthic habitats.

3. Management and Regulation

SCS asked for evidence that the fishery management system is still functioning at the same levels that it was during the initial certification. SCS also asked about any pending litigation, changes to the harvest strategy, and changes in enforcement.

Based on the evidence presented, SCS is satisfied that the same level of functionality, or greater, is still occurring with regard to the structure and function of the management system.

Management plan amendments

According to the management plan, the amendments of 10 May 2006 are:

- amend the date for allocating monitoring responsibilities, under the Fisheries Assessment Plan, from 1 December to 1 March;
- provide AFMA with the capacity to determine catch limits for non-target species;
- alter the overcatch provisions to make them consistent with the overcatch provisions proposed for the Macquarie Island Toothfish Fishery; and
- specify the number of SFRs for Patagonian toothfish and mackerel icefish. Fishing in the HIMI Fishery is managed under the provisions of the *Heard Island and McDonald Islands Fishery Management Plan 2002* and associated legislative instruments.

Excerpts taken directly from the fishing management amendments state:

1. Changing the date for finalising the Fisheries Assessment Plan

Paragraph 9(2)(c) was amended to change the dates for finalising the Fisheries Assessment Plan. Previously the monitoring responsibilities under the Fisheries Assessment Plan were required to be finalised before the beginning of each fishing year, on 1 December. This date has proven to be impractical, as the personnel involved in developing the monitoring requirements are involved in annual meetings of CCAMLR and the sub-Antarctic Resource Assessment Group (SARAG) and the sub-Antarctic Fisheries Management Advisory Committee (SouthMAC) meetings until mid November. These meetings determine a number of the management arrangements for the HIMI Fishery and can dictate the fishery monitoring work. It is not practical to finalise the monitoring arrangements before 1 December, as the Fisheries Assessment Plan needs to be developed and signed by all statutory fishing right holders in the HIMI Fishery, who are located in different parts of Australia. As the monitoring work is not undertaken until later in the fishing year, amending the due date for finalising the assessment plan to 1 March allows more time for the monitoring requirements to be developed and agreed to by stakeholders.

2. Capacity to determine catch limits for non-target species

The changes to subsections 11(2) and 11(3) allow AFMA to determine catch limits for non-target species. The current plan has the Fishery defined in terms of target species alone. This amendment now allows AFMA to determine the bycatch levels adopted by CCAMLR each year for the HIMI Fishery. The consequential change to subsection 31(1) allows AFMA to issue a direction to restrict or prohibit further fishing if a total allowable catch or catch limit is reached.

3. Amending the overcatch provision

The changes to subsection 14(1), paragraph 14(1)(a), paragraph 14(1)(b) and subsection 14(2) bring the overcatch provisions of the plan into line with those determined in the *Macquarie Island Toothfish Fishery Management Plan 2006*. Any overcatch from 0–10 tonnes would come off the following season's quota on a one-for-one basis, and any overcatch from 10–20 tonnes would come off the following season's quota on a three-for-one basis. Any overcatch above 20 tonnes would be subject to the three-for-one reduction and possible prosecution. This amends the existing provision which has any catch taken above the quota allocation coming off the following year's quota on a three-for-one basis. The overcatch provision is included to allow for any inadvertent catch above the quota allocation which may be taken on the last operation for a boat in the season.

4. Number of statutory fishing rights

The plan was also amended to add a note after section 19 which states that the grant process for SFRs is complete. We granted 30,000 SFRs for each of the two target species – Patagonian Toothfish and Mackerel Icefish – and we do not intend to grant any further SFRs for these species.

Strategic research plan and data acquisition plan

A comprehensive program continues to be in place to collect catch, biological and effort data on both target and bycatch species. The Fisheries Assessment Plan 2005–06 for the HIMI Fishery meets the monitoring needs of the fishery, which includes the tagging and survey requirements to be undertaken by the SFR holders. The Antarctic Fisheries strategic Ecosystem Data Plan was finalized in February 2006.

Progress on Conditions for Continued Certification

In addition to the random audit of the management system, SCS checked on the progress toward completing the Action Plan for meeting the Conditions for Continued Certification as stated in the original assessment Report.

Indicator 1.1.1.3	Action Plan	Date	Progress
<p>Condition 1.1</p> <p>The client should provide evidence to the certification body contracted for surveillance reports that the current stock designations used for the Icefish assessments are the best choice for conservation and more precautionary than alternative stock designations. One approach might be a re-assessment under the alternative assumption that there is a single stock for the Indian Ocean region. This could be used to demonstrate that the management strategies that are currently used under the assumption of separate stocks are robust and ultimately more precautionary than alternative assumptions regarding stock structure. Other approaches may also be used, such as evidence from studies designed to further elucidate stock structure/distribution.</p>	<p>Austral, on behalf of the HIMI industry, to provide copies of papers, and organise meeting/communication between the certification body for surveillance reports and AAD scientists, to demonstrate that current stock designations for icefish are both more precautionary than alternative designations, and are the best choice for conservation and management of the stocks.</p>	<p>December 2007</p>	<p>Papers available and provided as listed below. In addition:</p> <ul style="list-style-type: none"> i) there is continuing development of population and food-web models that can be used for MSE work, with intent to deliver substantial elements of this by the end of the year. ii) the fishery is at a low level at present (natural variation) with little prospect of substantial expansion this year and next. Given that, there is no imminent threat of failure within the timeframes specified in the research plan iii) a stock structure with icefish being a single population throughout the Indian Ocean might be an interesting academic question but the managers believe that it is unlikely to impact on decisions about Heard Island as it is the only fishery for icefish in the Indian Ocean. <p>In the case of Icefish, the scientists and managers in the fishery consider it would be better to assume that the impacts of the fishery are only local. However, the assessment team disagrees with this, which is the basis of the Condition. While there may be a spawning population outside HIMI that provides recruits to HIMI and that HIMI spawners may provide recruits to areas elsewhere, the assessment/management strategy only provides for exploitation on the observable part of the population which means that sources and sinks are not assumed (i.e. the abundance of the stock is not inflated from the survey results in the assessment of yield). As a result, the managers and scientists for the HIMI Icefish fishery believe that the stock designation questions are much less important in the management of the fishery compared to how to manage a variable stock.</p> <p>Even given this situation, the client has already arranged for several additional papers to be given to the assessment team. The papers publicly available on this topic include:</p> <ul style="list-style-type: none"> - “An assessment of the mackerel icefish (<i>Champscephalus gunnari</i>) off Heard Island” 1998 by W.K. de La Mare, R Williams and A.J. Constable;

		<p>- “Mitochondrial DNA variation of <i>Champsocephalus gunnari</i> Lonnberg (Pisces:Channichthyidae) stocks on the Kerguelen Plateau, southern Indian Ocean” in Antarctic Science 6(3):347-352 (1994) R. Williams, A.J.Smolenski and R.W.G.White; and “The fishery for <i>Champsocephalus gunnari</i> and its biology at Heard Island (Division 58.5.2)” in the 2001 Workshop on Assessment of Mackerel Icefish, from the WGFS report in 1991 by R.Williams, E. van Wijk, A. Constable and T. Lamb.</p> <p>In addition, the client has agreed to continue to arrange a discussion between the SCS assessment team and the AAD scientists by December 2007, or soon thereafter, given the availability of ongoing work that will provide additional insights into this issue.</p> <p>The original aspect of the 80 scoring guidepost that was not met is: “Stock units have been shown to be precautionary for the purposes of conservation, fisheries management and stock assessment.”</p> <p>The additional papers provided and the upcoming discussion with AAD scientists should fully satisfy the scoring requirement, and therefore SCS’s determinatiuon is that the fishery client is on track in terms of both content and timeframe to meet the Condition for this performance indicator.</p>
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Indicator 1.1.2.8	Action Plan	Date	Progress
<p><u>Condition 1.2</u></p> <p>The client should provide evidence that the fishery assessments meet the first bullet point under the 80 scoring guidepost – “Impacts of inter-annual variability on stock abundance have been studied and are taken into account in the assessment”. For example, analyses could be provided that show how the fishery assessments factor in uncertainty in growth, mortality, size at first maturity and fecundity, and the influence of the environment on these variables.</p>	<p>A variety of activities by the managing authorities, and with participation by the client, are underway that specifically address this condition.</p> <p>Specifically, the client will provide to the certification body the finalisation and presentation of the ecosystem model currently under development as part of the HIMI Marine ecosystem study undertaken by AAD in 2004.</p> <p>This model will be used to explore the dynamics of mackerel icefish and its role in the foodwebs of the region. It will also be used to evaluate management strategies for icefish with the aim being to determine an alternative, ecologically sustainable, management strategy.</p> <p>Such a strategy will identify reference points, assessment methods (including indicators) and harvest rules based on outcomes.</p>	<p>Estimated times for completion:</p> <p>A number of relevant reports will be provided along the way to a final completion date of December 2010.</p> <p>The progress reports are:</p> <ol style="list-style-type: none"> 1. Progress reports in annual reports of the AFMA Sub-Antarctic Resources Assessment Group (SARAG) 2. CCAMLR paper (estimated to be available November 2008) 3. SARAG final report estimated to be available by September 2009 <p>The client will provide copies of each study within 30 days of its completion.</p> <p>If further clarification is requested by the certification body, the client will facilitate a meeting between the certification body, the client, and the management authorities to discuss the outcomes and implications of these studies.</p> <p>Also, if the planned studies are</p>	<p>SCS’s determination is that the client is currently satisfying the Action Plan approved by SCS and is making acceptable progress to meeting the Condition for this performance indicator.</p> <p>The requirement for this Condition is to meet one specific bullet point of the 80 scoring guidepost (Impacts of inter-annual variability on stock abundance have been studied and are taken into account in the assessment).</p> <p>Given the Action Plan stipulates that the answer will not be fully available until 2010, the assessment team looked for evidence of reasonable progress toward completion of the Condition. The evidence provided to the assessment team was to provide the current management discussions and outcomes associated with the HIMI Icefish stock, and to provide a progress report to the assessment team on the work promised by 2010 to answer this question.</p> <p>Reports provided to date to the assessment team include the SARAG reports for 2006/07 meetings, which illustrate how the management of the fishery is currently dealing with stock variability. With a zero directed TAC,</p>

		<p>not going to be completed on time, the client will advise the certification body as to any additional time required. The client notes that it does not have control over the estimated timeframes for completion of the identified work, and can only be responsible for submitting the work upon its completion.</p>	<p>the fishery is being managed precautiously.</p> <p>According to the information received, the work by AFMA, AAD, and CCAMLR on the CCAMLR paper, the MSE project (as outlined above), and the harvest strategy and rules assessments are all on track and progressing as anticipated. There is no evidence that the work will not be completed on time to address the concerns of the assessment team. These reports are to fully review stock dynamics, including associated food web interactions, and then review and where necessary, revise the harvest control rules. This goes well beyond the requirements for the performance indicator and would undoubtedly bring the score above 80 for this performance indicator.</p>
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Indicator 1.1.3.1	Action Plan	Date	Progress
<p><u>Condition 1.3</u></p> <p>The client should provide evidence that a comprehensive review has been or is being undertaken regarding appropriate Limit Reference Points for the Icefish fishery. Evidence should be provided that the LRPs used meet the AFMA requirements (are appropriate for maintaining both ecologically viable stocks of the target species and an ecologically sustainable fishery), are appropriate for the biology of the icefish stock and takes into account available knowledge of fishery impacts on non-target species and the ecosystem, and ensure with high probability that the spawning biomass of the icefish stock does not fall below a specified minimum level and that fishing mortality does not exceed a specified maximum level. The results of this review should be published.</p>	<p>The client will, as under Condition 1.2, deliver to the certification body the results of work being conducted by the managing authorities to develop a new model that incorporates ecosystem functions more fully into the assessment of icefish. In addition, the client will provide the results of the Management Strategy Evaluation work that will result from using the model to demonstrate the applicability of the chosen Limit Reference Points being used for ecologically sustainable management of the icefish fishery in the HIMI region.</p>	<p>Same as for Condition 1.2</p>	<p>The Condition references the scoring guidepost for 80, which is:</p> <p>“LRPs for target stocks are justified based on stock biology and take into account available knowledge of fishery impacts on non-target species and the ecosystem.”</p> <p>As indicated in the previous Condition for 1.1.2.8, the work being conducted by AAD scientists in conjunction with CCAMLR and AFMA is set to review stock dynamics, including food web interactions, and then review and where necessary revise harvest control rules. This should quite directly address the 80 scoring guidepost as the LRP will be directly reviewed by this work.</p> <p>The client reviewed with SCS the progress being made to date on the promised reports from CCAMLR and AAD, and it shows that all the work is progressing as anticipated, so adequate progress is being made on the Action Plan toward the goal of providing finalized information by 2010.</p>

Indicator: 1.1.3.2	Action	Completion Date	Progress
<p>Condition 1.4</p> <p>1. A review should be provided about what target reference points, which are based on the biology of the icefish stock and take into account available knowledge of fishery impacts on non-target species and the ecosystem, should be specified for the icefish fishery. The analysis should examine how target reference points considered are more precautionary than the corresponding limit reference points and how they ensure with high probability that the spawning biomass of the icefish stock does not fall below a specified minimum level and that fishing mortality does not exceed a specified maximum level.</p> <p>2. The review provided should discuss how the target reference points used or proposed for use by AFMA for the icefish fishery compare with those specified or applied by CCAMLR.</p>	<p>1. The review required will be provided through the MSE work being undertaken, as outlined in Conditions 1.2 and 1.3 above.</p> <p>In addition, the client will provide evidence to the certification body that the Target Reference Points are and will continue to be more precautionary than the Limit Reference Points.</p> <p>2. The AFMA reference points currently used for the icefish fishery, are those reference points specified and used by CCAMLR, as shown in all CCAMLR documentation including WGFSAs reports, Scientific Committee recommendations, and Commission Conservation Measures adopted.</p> <p>The client will also provide details on how</p>	<p>Same as for Condition 1.2.</p> <p>The timeline for completion of this work is also December 2010.</p>	<p>The 80 scoring guidepost for Indicator 1.1.3.2 states, “TRPs for target stocks are justified based on stock biology and take into account available knowledge of fishery impacts on non-target species and the ecosystem.”</p> <p>Again, the stipulation for this Condition is to review the TRP for Icefish and then discuss how the AFMA reference point relates to the CCAMLR proposed TRP</p> <p>As provided by the client, existing documentation provides that AFMA is currently using the CCAMLR Reference points for both LRP and TRP. This answers in part the second part of the Condition. However, it does not answer how well these account for the stock biology, including food web dynamics.</p> <p>The studies in progress by AAD, AFMA, and CCAMLR) as previously described) are designed to fully review the stock dynamics of icefish as well as review the harvest control rules – and all of this to include food web dynamics.</p> <p>When completed, it is anticipated by the client that these reports will answer the Condition directly. These studies are all on track to be completed as designated in the Action Plan, and there</p>

	<p>any changes to these reference points will be incorporated by CCAMLR and AFMA in future.</p>		<p>is no evidence to suggest otherwise. Therefore, SCS believes that satisfactory progress is till being made on meeting this Condition by 2010.</p>
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Indicator 1.1.4.2	Action	Completion Date	Progress
<p><u>Condition 1.5</u></p> <p>The approach that is used in determining the recommended TAC should be investigated relative to uncertainty in the estimate of natural mortality, the imprecision in the estimates of the parameters of the mixture of components of the length composition data and the uncertainty in the parameters of the growth curve, and alternative stock structures. There should be an explicit report demonstrating the precautionary nature of the approach and how additional information on these parameters is being incorporated.</p>	<p>The client will provide the certification body with the same information as in Condition 1.2 and 1.3. In addition, the client will ensure that the information includes a review of the methods for setting the TAC. The finalisation of the report on Management Strategy Evaluation will explicitly deal with the precautionary nature of the approach and how additional information on the parameters is being incorporated.</p>	<p>Same as for Condition 1.2.</p> <p>The Timeline for completion of this work is also December 2010.</p>	<p>The 80 scoring guideposts for Indicator 1.1.4.2 state,</p> <p>“The assessment takes into account major uncertainties in the data and functional relationships.”</p> <p>“The robustness of the management advice to sensitivities in the assessment has been investigated.”</p> <p>The Condition for this indicator requires a review of the TAC setting process to see how sensitive it is to the known uncertainties in stock dynamics.</p> <p>As indicated earlier, the studies underway by AAD, AFMA, and CCAMLR will fully review stock dynamics, food web interactions, and the the harvest control rules that utilliuze this information. Progress on completing these studies appears adequate to meet the 2010 deadline for submission to the assessment team.</p> <p>A review of the TAC setting process cannot be completed until these studies are finished, so there is nothing to review at this time.</p> <p>SCS has determined that, as with previous Conditions, the progress made toward this Condition is adequate at</p>

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Indicator 1.1.5.1	Action	Completion Date	Progress
<p>Condition 1.6</p> <p>Meet Condition 1.3. In meeting Condition 1.3, ensure that there is an assessment that shows the probability that the current spawning biomass lies above the chosen limit reference point for the icefish stocks at HIMI. This report should be reviewed by AFMA, AAD, and CCAMLR.</p>	<p>The client will provide the same information as submitted under Conditions 1.2, 1.3, 1.4 and 1.5. Again, it is anticipated that the MSE report in 2008/09 will specifically address the relationship between survey indicators of Spawning Stock Biomass, and the actual (modelled) level of SSB, and how well the management strategies perform against the survey results and indicators.</p>	<p>Same as for Conditions 1.2 and 1.3.</p> <p>The Timeline for completion of this work is also December 2010.</p>	<p>The 80 scoring guideposts for Indicator 1.1.5.5 states,</p> <p>“Stock assessments show that there is a greater than 80% probability that the stock is above the LRP.”</p> <p>The Condition for this indicator requires a review of the stock status.</p> <p>Given the current status of the fishery, no TAC for directed fishing other than for scientific surveys, a review of the status of the stock does not appear to be necessary this year.</p> <p>As indicated earlier, the studies underway by AAD, AFMA, and CCAMLR will fully review stock dynamics, food web interactions, and the harvest control rules that utilize this information. Progress on completing these studies appears adequate to meet the 2010 deadline for submission to the assessment team.</p> <p>SCS has determined that, as with previous Conditions, the progress made toward this Condition is adequate at this time.</p>

Indicator 1.1.5.2	Action	Completion Date	Progress
<p>Condition 1.7</p> <p>Meet Condition 1.3. In addition, show with what probability subsequent survey estimates of the biomass of the residual spawning stock exceeded the levels predicted over recent years.</p>	<ol style="list-style-type: none"> 1. Meet condition 1.3, as outlined above. 2. Include the feedback mechanisms described in review of the management measures being evaluated under the MSE outlined above. 3. Determine if the assessment needs to encompass a time series of surveys as part of the MSE work. 	<p>Same as for Condition 1.3.</p> <p>The timeline for completion of this work is December 2010.</p> <p>Papers that are relevant include, but may not be limited to:</p> <ol style="list-style-type: none"> 1. SARAG paper September 2009 2. WGFSa paper October 2007 on age specific mortality rates 3. MSE survey requirements by SARAG September 2008. 	<p>The 80 scoring guideposts for Indicator 1.1.5.5 states,</p> <p>“Stock assessments show that there is a greater than 80% probability that the current exploitation rate is below the LRP.”</p> <p>The Condition for this indicator requires a review of the stock status as in 1.1.5.1.</p> <p>The studies underway by AAD, AFMA, and CCAMLR are addressing this issue by reviewing the status of the stock and the applicability of the harvest control rules.</p> <p>In addition, a study of age specific mortality rates is being completed in 2007 and being delivered to the assessment team.</p> <p>SCS has determined that adequate progress is being made to provide a full review of the stock dynamics in the fishery and the harvest control rules that are applied.</p>

Indicator 1.1.6.1	Action	Completion Date	Progress
<p><u>Condition 1.8</u></p> <p>Carry out appropriate simulation testing to consider the harvest strategy in relation to the characteristics of the icefish stock to evaluate the robustness of the reference points and the fishery management model.</p>	<p>The client will provide the same information as required under Conditions 1.2 and 1.3 as it will answer the question about the appropriate management strategy, under the MSE approach being taken for condition 1.2 above.</p>	<p>Same as for Condition 1.2.</p> <p>The timeline for completion of this work is December 2010.</p>	<p>The 80 scoring guideposts for Indicator 1.1.6.1 state,</p> <ul style="list-style-type: none"> • The harvest control rule has been simulation tested and shown to be effective with respect to the uncertainty concerning the biology of the stock and the uncertainties associated with stock assessment. • Decisions about catch limits follow the agreed strategy. <p>The Condition for this indicator requires simulation testing of the harvest strategy to evaluate the robustness of the reference points.</p> <p>The studies underway by AAD, AFMA, and CCAMLR are addressing this issue by reviewing the status of the stock and the applicability of the harvest control rules. The outcomes of these studies will be made available to SCS as completed.</p> <p>SCS has determined that adequate progress is being made to provide a full review of the stock dynamics in the fishery and the harvest control rules that are applied.</p>

Indicator 1.2.1	Action	Completion Date	Progress
<p>Condition 1.9</p> <p>The client only needs to develop and abide by a condition for this indicator if it plans to begin fishing in areas previously described as depleted (i.e. Pike, Discovery, and Shell Banks). Before commercial harvesting is permitted to recommence on these populations/stocks, the fishery management system would have to:</p> <ol style="list-style-type: none"> 1. Provide an explicit specification of the conditions that require that the recovery strategy is invoked. 2. Specify precisely how the harvest is to be controlled as the stock recovers, the time period expected for recovery, and the conditions that signal that the stock has recovered. 3. Provide a simulation study that demonstrates that there is a high probability that the stock will recover if the recovery strategy is invoked. 	<p>The client will submit to the certification body information that shows how assessments will be done before areas now closed to fishing are opened for future fishing. The specific information to be submitted includes:</p> <ol style="list-style-type: none"> 1. Completion of food web model to determine likelihood of food depletion in recovery phase given natural variation in stock abundances 2. Where stock depletion is evident, maintain commercial harvest levels at zero, and maintain annual surveys of population(s) for assessment purposes 3. MSE work to be completed to derive appropriate indicators for recovery and options for harvesting zregimes, where applicable. 	<ul style="list-style-type: none"> - Annual reports to SARAG (September each year) - CCAMLR paper November 2008 - SARAG final report by September 2009 	<p>The Condition for this indicator is only applicable if fishing is to begin in areas now closed to fishing. There are currently no plans to fish in currently closed areas. However, in compliance with the MSC requirements, the client has agreed to provide the background necessary to meet the Condition.</p> <p>To start, the client is providing the annual SARAG reports to SCS so the assessment team can see what management measures are considered and adopted, as well as what scientific advice is being brought to bear on the fishery. The first annual report since certification was provided to SCS and no new fishing areas are under consideration.</p> <p>Second, the client has agreed to provide all the studies now currently underway to review the stock dynamics of icefish as well as the harvest control rules. The studies are underway and progress appears to be appropriate to deliver the final reports on the timeline suggested by the Action Plan submitted by the client.</p> <p>Given no new fishing area openings, SCS is satisfied that the client is</p>

			continuing to meet the progress agreed toward fulfilling this Condition.
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Indicator: 1.3.2	Action	Completion Date	Progress
<p><u>Condition 1.10</u></p> <p>Estimate the expected changes in size and age at maturity, age composition, and fecundity and establish a routine comparison of observed data with these expected values to ensure that unexpected changes might be detected.</p>	<p>Identify suitable indicators and estimate changes in parameters identified, as part of the MSE program identified in Condition 1.2</p>	<p>Same timeline as for Condition 1.2.</p>	<p>The 80 scoring guidepost for this indicator states:</p> <p>“The extent to which trends in age, sex, genetic structure, recruitment and spawning stock might deviate from the expected trends, allowing for both natural variability and uncertainty, has been specified. The values of the variables remain within these specified, acceptable ranges.”</p> <p>Studies on food web dynamics are underway by AFMA, AAD, and CCAMLR. These studies will be made available as soon as possible. According to the client, there is good progress on getting these studies completed. The client has already engaged in discussions with AAD and AFMA regarding the need for better data on age composition, age at maturity, and fecundity.</p> <p>Although this Condition is not due to be closed until 2010, SCS is satisfied that the client has made acceptable progress toward meeting this Condition by engaging with the scientists and managers in the icefish fishery about collecting and analysing better data on a number of life history parameters.</p>

Indicator: 2.1.3.1	Action	Completion Date	Progress
<p>Condition 2.1</p> <p>The fishery must complete a comprehensive scientifically robust assessment of the ecological risks of the fishery (such as the one started by CSIRO), including potential impacts on benthic systems, key land-based marine predators, and sharks, skates and rays, that is already underway. The report should be sure to include the range of stakeholder views/inputs and meet peer review standards for scientific assessments.</p>	<ol style="list-style-type: none"> 1. Upon completion of Ecological Risk Assessment (ERA) project by CSIRO for AFMA, identifying potential impacts of the fishery on the ecosystem and ecologically related species, the client will submit this to the certification body within 30 days of its completion, along with any peer reviews or commentaries on this report. 2. Seek funding for benthic habitat impact study from FRDC and other research providers 3. Conclude report on benthic habitat impacts of the icefish fishery 	<p>Completion dates are:</p> <ol style="list-style-type: none"> 1. ERA report due for completion and presentation to SARAG meetings in 2007. 2. Initial funding approval July 2006 3. Milestone reports on benthic study annually at SARAG; final report Sept 2010. <p>Again, if the planned studies are not going to be completed on time, the client will advise the certification body as to any additional time required. The client notes it does not have control over the estimated timelines for completion of the identified work, and can only be responsible for providing the work upon its completion.</p>	<p>The 80 Scoring Guidepost for this indicator states,</p> <ul style="list-style-type: none"> • The potential effects of the fishery have been determined by detailed, scientifically defensible and peer reviewed analysis of risks using existing data, and based on comparative studies between fished and non-fished but otherwise comparable ecosystems, considering space and time scales that are relevant to the scale of the fishery • The potential impacts of the fishery are established in consultation with stakeholders and a range of relevant experts • Causes and effects in the fishery are broadly known and include the range of habitats in the fishery and use ecologically relevant attributes and statistically robust designs. • A program of research targeting the main ecological risks posed by the fishery is underway. <p>To meet the 80 scoring guideposts, the fishery must complete the ERA identified during the assessment process.</p> <p>An ERA report draft was provided in November 2006. The finalised report</p>

			<p>is expected before the end of 2007. Good progress has been made on finalizing the report according to the client.</p> <p>In addition, the fishery has met some aspects of the Action Plan as it regards the direct study of benthic impacts from trawling. The fishery has already received funding from FRDC for a benthic research program that will in part examine the effects of trawling on benthic habitats and fauna. In addition, initial tests of camera gear for collecting information on benthic trawls have already been successfully conducted.</p> <p>SCS is satisfied that adequate progress is being made on meeting this Condition.</p>
<p><u>Condition 2.2</u></p> <p>Should any risks identified under the risk assessment be rated as moderate or high, the fishery would have to provide data and/or information showing what measures are being taken to mitigate the risks and analyses of why the measures are sufficient.</p>	<p>1. Participate fully with AFMA and other government agencies to achieve appropriate management responses to identified risks, and mitigation measures required (or to be developed). 2. Submit to the certification body evidence showing what measures are being taken by the managing authorities.</p>	<p>Timelines for submission of information are:</p> <ul style="list-style-type: none"> - Strategic review of HIMI fishery due for completion in 2010 - Annual reports of SARAG and SouthMAC - ERA report final Sept 2007 	<p>As under Condition 2.1 above, the client has provided SCS with information on schedule. Once all scientific analyses are completed, SCS will seek evidence that the management authorities are taking the results of the analyses into consideration in reformulating management processes.</p> <p>SCS is satisfied that adequate progress is being made to date on meeting this Condition under Indicator 2.1.3.1.</p>

Indicator: 2.1.3.3	Action	Completion Date	Progress
Condition 2.3 Conditions 2.1 and 2.2 apply.	As above	As above	As above

Indicator: 2.1.5.1	Action	Completion Date	Progress
Condition 2.4 Conditions 2.1 and 2.2 apply.	As above	As above	As above

Indicator: 2.2.1.2	Action	Completion Date	Progress
<p><u>Condition 2.5</u></p> <p>The client should provide evidence that AAD research on the trophic role of icefish in predator diets either has been or is being conducted. The AAD research should be properly peer reviewed and published. Once available, this information should be used in Condition 2.1.</p>	<p>Trophic interaction research started in 2004 to be completed, with full review by peer-reviewed journals, SARAG and CCAMLR. Use information for Condition 2.1 above.</p>	<p>Timelines for submission of information are:</p> <ul style="list-style-type: none"> - Annual reports to SARAG on progress - CCAMLR paper October 2008 - SARAG final report Sept 2009 	<p>The 80 Scoring guideposts for this indicator state:</p> <ul style="list-style-type: none"> • The basic structure of the regional foodwebs have been determined • There is a good basic knowledge of the trophic relationships and requirements of the main threatened, protected, or ‘icon’ species • The trophic role of the target species at each of its main life stages is broadly understood in relation to the trophic requirements of the main threatened, protected, or ‘icon’ species. • There is an ongoing research program designed to evaluate the natural dynamics and productivity in regional foodwebs, and to model and assess the impacts of the fishery on the trophic requirements of the main threatened, protected, or ‘icon’ species. <p>SCS was provided with a draft of the ERA report that is in progress on the Icefish fishery. The completion of this report will assist the fishery in meeting part of the Condition. The final ERA report is expected out in 2007. Significant work has already gone into the report, so adequate progress is</p>

			<p>being made to meet the Condition.</p> <p>Studies underway by CCAMLR and AFMA/AAD are looking at the food web interactions in the fishery. These studies will inform the fishery managers and are expected to be published upon their completion in 2008 and 2009.</p> <p>The client provided information that these studies are ongoing as originally identified.</p> <p>SCS believes that adequate progress is being made to meeting this Condition based on the ongoing work on the ERA and on food web interactions.</p>
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<u>Indicator: 2.2.3.1</u>	Action	Completion Date	Progress
<p><u>Condition 2.6</u></p> <p>Condition 2.1 applies.</p>	As above for 2.1	As above for 2.1	As above

Indicator: 3.2.1.4	Action	Completion Date	Progress
<p><u>Condition 3.1</u></p> <p>The management system must be improved to contain criteria for assessing when a stock within the fishery is overfished, the strategies to be adopted when the stock is classified as overfished, and the conditions under which an overfished (stock or) fishery is considered to have recovered. This is considered in more detail under Principle 1. To the extent possible, this condition should be informed by or be coincident with conditions in Principle 1.</p>	<p>Implement actions as identified under Principle 1, Condition 1.2.</p>	<p>Same as for Condition 1.2 – Sept 2009 SARAG report</p>	<p>The 80 Scoring Guideposts state:</p> <p>The management system has effective provisions for achieving targets for rebuilding and recovery of overfished stocks within a specified time frame.</p> <p>The studies to date on stock dynamics and harvest control rules are progressing as expected are expected to inform management as to any additional measures that may need to be enacted to maintain or recover the icefish stock. This will include an evaluation of when the stock is considered depleted, and what type of recover plan may be required to rebuild the stock. However, this work is not scheduled to be completed until 2009/2010.</p> <p>SCS finds the work to date by AAD/AFMA and CCAMLR to be adequate in terms of making progress toward meeting the specific Condition under this performance indicator.</p>

Indicator: 3.2.1.7	Action	Completion Date	Progress
<p>Condition 3.2</p> <p>Meet Conditions 2.1 and 2.2. In addition, provide evidence to the certifier that there is</p>	<ul style="list-style-type: none"> - Finalise benthic habitat impacts study - Maintain consistent, appropriate, observer coverage 	<p>Timelines for completion are:</p> <ul style="list-style-type: none"> - FRDC report final due Sept 2010. 	<p>The 80 Scoring Guidepost for this performance indicator states:</p> <p>Specific actions have been taken to</p>

<p>some process in place to provide an ongoing, although periodic, process to identify, document, assess, reduce and ameliorate risks to habitat resulting from fishing practices. This process should meet requirements set out in the Management Plan.</p>	<p>on all operations</p> <ul style="list-style-type: none"> - Report annually to SARAG on bycatch species, quantities and profiles for evaluation and risk reduction strategies to be developed - Maintain shot-by-shot recording of fishing operations including benthic bycatch - Evaluate alternative fishing methods to reduce risks of habitat damage <p>The client notes that the process of the Ecological Risk Assessment is an ongoing one. The AFMA requirements for ERA reporting have increased dramatically with a series of recent Ministerial Directions to AFMA, that outline major changes in the way Australian fisheries are to be managed. Aside from this, there are also direct requirements under the Environment Protection and Biodiversity Convention Act, which require formal review every 5 years, for any Commonwealth fishery, as well as any fishery in Australia that wishes to export product.</p>	<ul style="list-style-type: none"> - Annual reports to SARAG - Monitoring and observers on a constant basis - EPBC Act review due December 2009 	<p>restrict fishing gear and fishing practices to prevent, mitigate, or minimize actual or potential impacts on habitat caused by fishing.</p> <p>To meet this Condition, the client has agreed to maintain all relevant activities that are now in practice such as bycatch reporting, evaluation of gear, and maintenance of observer coverage to assure adequate data collection on bycatch and benthic habitat disturbance.</p> <p>In addition, the client is working with AAD/AFMA and CCMLR to complete the benthic studies on the effects of bottom trawling through an FRDC funded research project, and is stressing the importance of completing the Ecological Risk Assessment started by CSIRO.</p> <p>SCS received information attesting to the fact that all ongoing activities are still in place. Also, SCS received information showing that the benthic studies have been funded and preliminary work already underway on testing camera gear for benthic observations. Last, the ERA is being completed and the client says is due out by end of 2007.</p> <p>Additional actions that have been taken that are applicable to meeting this</p>
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			<p>Condition have been:</p> <ul style="list-style-type: none"> - voluntary measures for bird bycatch mitigation have been implemented including no midwater trawling for icefish during peak seabird foraging months, and no daytime midwater trawling at other times. - revised permit conditions. <p>SCS finds that the combined efforts are adequate to show progress toward meeting the required Condition.</p>
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Summary

Overall, SCS finds that the HIMI Mackerel Icefish fishery management system is still in general compliance with the MSC standard.

SCS also finds that the progress being made on meeting Conditions in the HIMI Mackerel Icefish fishery are adequate to maintain the MSC certificate for another year.