



Australian Government

Department of the Environment and Energy

Assessment of the
Tasmanian Scallop Fishery

August 2016

© Copyright Commonwealth of Australia, 2016.



Assessment of the Tasmanian Scallop Fishery August 2016 is licensed by the Commonwealth of Australia for use under a Creative Commons By Attribution 3.0 Australia licence with the exception of the Coat of Arms of the Commonwealth of Australia, the logo of the agency responsible for publishing the report, content supplied by third parties, and any images depicting people. For licence conditions see: <http://creativecommons.org/licenses/by/3.0/au/>.

This report should be attributed as '*Assessment of the Tasmanian Scallop Fishery August 2016*, Commonwealth of Australia 2016'.

Disclaimer

This document is an assessment carried out by the Department of the Environment and Energy of a commercial fishery against the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition*. It forms part of the advice provided to the Minister for the Environment and Energy on the fishery in relation to decisions under Parts 13 and 13A of the *Environment Protection and Biodiversity Conservation Act 1999*. The views expressed do not necessarily reflect those of the Minister for the Environment and Energy or the Australian Government.

While reasonable efforts have been made to ensure that the contents of this report are factually correct, the Australian Government does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this report. You should not rely solely on the information presented in the report when making a commercial or other decision.

CONTENTS

Section 1: Summary of the Assessment for the Tasmanian Scallop Fishery Against the Guidelines for the Ecologically Sustainable Management of Fisheries (2nd Edition)	2
Section 2: Detailed Analysis of the Tasmanian Scallop Fishery Against the Guidelines for the Ecologically Sustainable Management of Fisheries (2nd Edition).....	5
Section 3: Assessment of the Tasmanian Scallop Fishery Against the Requirements of the EPBC Act.....	13

SECTION 1: SUMMARY OF THE ASSESSMENT FOR THE TASMANIAN SCALLOP FISHERY AGAINST THE GUIDELINES FOR THE ECOLOGICALLY SUSTAINABLE MANAGEMENT OF FISHERIES (2ND EDITION)

Purpose: To enable transparent articulation of which commercial fisheries assessed under the EPBC Act clearly meet all legislative requirements and all Guidelines, and those which may require further investigation or assessment to demonstrate requirements are met.

Overview of the Tasmanian Scallop Fishery against the relevant requirements of the Guidelines and the EPBC Act.

Guidelines	Meets	Partially meets	Does not meet	Details
Management regime	8 of 9 1 of 9 N/a			The management regime is effective. Management arrangements for the Tasmanian Scallop Fishery (the fishery) are regulated by the Fisheries (Scallop) Rules 2010 (Scallop Rules) and the Fisheries (General and Fees) Regulations 2016 and closely monitored by the Department of Primary Industries, Parks, Water and Environment (DPIPWE). Management is transparent, information is publicly accessible, and the general public is involved in consultation processes.
Principle 1 (target stocks)	9 of 11 2 of 11 N/a			Target stocks are generally well managed. Managing stocks is inherently challenging due to scallops having high natural variation. However, the spatial management system provides flexibility to respond to fluctuations and clear control rules to constrain fishing effort if early season surveys show low abundance.
Principle 2 (bycatch and TEPS)	11 of 12	1 of 12		Risks to bycatch and protected species are minimal. Risk to bycatch and threatened, endangered and protected species (TEPS) comprehensively addressed through an ecological risk assessment (ERA). Subsequent assessments are conducted prior to opening any area to fishing. The suitability of proposed open areas for commercial scallop harvesting consider TEPS interactions together with 13 biological, environmental, economic and social performance measures. A risk to syngnathids was recognised. However, the risk is considered low due to the localised nature of the fishery in comparison to the relatively large distribution of syngnathid species. Fishers are required to record TEPS interactions in the Scallop Catch Record portion of the Scallop Quota Docket. Due to the complexities of identification, these industry records serve to monitor bycatch of large taxonomic groups only.
Principle 2 (ecosystem impacts)	4 of 5 1 of 5 N/a			Ecological risk is low due to the arrangements of the spatial management system The spatial management system reduces the impact to the environment and broader ecosystem. Dredge fishing will continue in discrete areas that are ranked as suitable for opening.

EPBC requirements				
Part 12				Not applicable. There is no fishing activity within areas covered by a bioregional plan
Part 13	11 of 11			The management regime for the fishery continues to require operators to take all reasonable steps to ensure that listed threatened species are not killed or injured as a result of the fishing.
Part 13A	1 of 3 1 of 3 N/a	1 of 3		The Department considers that the amendment of the list of exempt native specimens (LENS) to include product derived from the fishery would be consistent with the provisions of Part 13A. There is limited consultation if LENS is amended, although it is sufficient for strict requirements, as per advice to Minister in MS14-002367.
Part 16	1 of 1			The Department has accounted for the precautionary principle in the preparation of its advice.
<p>Conclusion:</p> <p>This fishery targets Commercial Scallop (<i>Pecten fumatus</i>) using a scallop harvester (dredge). Scallops have high natural variability, and the fishery has been overfished at various times over the last decade. However, with the adoption of a spatial management system (all areas closed unless specifically opened) and a total allowable commercial catch, the management regime has the flexibility to respond to these natural stock fluctuations.</p> <p>Impacts to bycatch, TEPS and ecosystems have been assessed and mitigated through DPIPWE's ERA process, and pre-season surveys collect data to assess against 13 biological, environmental, economic and social performance measures before any area is open to harvesting. Thus, the spatial management system effectively manages the impact to the environment and the broader ecosystem.</p>				
<p>Final recommendation for 2016 assessment of the Tasmanian Scallop Fishery:</p> <p>Low risk, eligible for 10 year approval (2016-2026).</p>				

Notes:**Assessment history:**

The assessment history for the Tasmanian Scallop Fishery is available on the Departments website at <http://environment.gov.au/marine/fisheries/tas/scallop>.

1st assessment finalised November 2005 – Exempt from export provisions under Part 13A of the EPBC Act until 24 November 2010 (F2005L03813). Export approval was subject to nine recommendations. Accredited under Part 13 in November 2005.

2nd assessment finalised January 2012 – Exempt from export provisions under Part 13A of the EPBC Act until 30 January 2017 (F2012L00094). Export approval was subject to four recommendations. Accredited under Part 13 in January 2012.

Fishery reporting:

Annual report – last report published in 2015 on the DPIPWE website.

Protected species interactions – fishers record any interactions in their scallop quota docket book and provide the reports to DPIPWE.

Key links and references:

The fishery is managed in accordance with provisions in the following Tasmanian legislation and regulations, and is available at <https://www.legislation.tas.gov.au/>:

- *Fisheries (Scallop) Rules 2010*
- *Fisheries (General and Fees) Regulations 2016*
- *Fisheries (Scalefish) Rules 2015*

Department of Primary Industries, Parks, Water and Environment 2010 'The management of the Tasmanian Scallop Fishery policy and decision making guidelines draft document', Department of Primary Industries, Parks, Water and Environment, Hobart TAS.

Haddon M, Harrington JJ, and Semmens JM 2006 'Juvenile scallop trashing rates and bed dynamics: Testing the management rules for scallops in Bass Strait', Fisheries Research and Development Corporation, Canberra ACT and Tasmanian Aquaculture and Fisheries Institute, University of Tasmania, Hobart TAS, Available at http://www.imas.utas.edu.au/__data/assets/pdf_file/0008/743354/Juvenile-Scallop-Discare-Rates-and-Bed-Dynamics-Testing-the-Management-rules-for-scallops-in-bass-strait.pdf.

Harrington JJ, Haddon M, and Semmens JM 2008 'Facilitating industry self-management for spatially managed stocks: A scallop case study', Tasmanian Aquaculture and Fisheries Institute, University of Tasmania, Hobart TAS, Available at <http://www.afma.gov.au/wp-content/uploads/2014/02/Facilitating-industry-self-management-for-spatially-managed-stocks-a-scallop-case-study-FRDC-2005-027.pdf>.

Fisheries Research and Development Corporation (FRDC) 2014 'Status of Key Australian Fish Stocks Reports 2014', Available at http://www.fish.gov.au/Pages/SAFS_Report.aspx, pp. 109-116.

SECTION 2: DETAILED ANALYSIS OF THE TASMANIAN SCALLOP FISHERY AGAINST THE GUIDELINES FOR THE ECOLOGICALLY SUSTAINABLE MANAGEMENT OF FISHERIES (2ND EDITION)

Guidelines	Meets	Partially meets	Does not meet	Comment
THE MANAGEMENT REGIME				
The management regime does not have to be a formal statutory fishery management plan as such, and may include non-statutory management arrangements or management policies and programs. The regime should:				
Be documented, publicly available and transparent	Meets. Management arrangements are documented, publicly available and transparent. Fisheries under Tasmanian jurisdiction are administered through the provisions of the Tasmanian <i>Living Marine Resources Management Act 1995</i> (the LMRM Act) and its subordinate legislation. The Fisheries (Scallop) Rules 2010 (Scallop Rules) and the Fisheries (General and Fees) Regulations 2016 are the overarching legislation for the Tasmanian Scallop Fishery (the fishery). All Tasmanian legislation is available on the Tasmanian legislation website (links above). Information on this fishery, and policy frameworks for the management of other Tasmanian fisheries, is also available on the Department of Primary Industries, Parks, Water and Environment (DPIPWE) website (links above).			
Be developed through a consultative process providing opportunity to all interested and affected parties, including the general public	Meets. All changes to a management regime must be released for public consultation with all stakeholders and the wider public.			
Ensure that a range of expertise and community interests are involved in individual fishery management committees and during the stock assessment process	Meets. Advisory committees are formed under the provisions of the LMRM Act to provide advice to the Tasmanian Minister on the management of the state's fisheries, including considerations of stock viability. To ensure a range of expertise and community interests are represented, these advisory committees include a range of expertise from the recreational fishery, management, police, scientists and broader community. Relevant fishing industry representatives are also provided membership to the relevant advisory committee to ensure appropriate representation and consultative processes. The commercial sector is also represented by the Scallop Fishery Advisory Committee (ScFAC), Tasmanian Fishing Industry Council (TFIC), the Recreational Fishery Advisory Committee (RFAC), the Tasmanian Scallop Fishermen's Association (TSFA) and the Tasmanian Association for Recreational Fishing (TarFish).			
Be strategic, containing objectives and performance criteria by which the effectiveness of the management arrangements are measured	Meets. The objectives and performance measures for assessing the effectiveness of management arrangements for the harvesting of Commercial Scallop are contained within the Scallop Rules and relevant fishery assessment reports. The Fisheries Research and Development Corporation (FRDC) produce a report on the status of key Australian fish stocks. The performance measures for the fishery are detailed in the latest report.			

Be capable of controlling the level of harvest in the fishery using input and/or output controls	<p>Meets.</p> <p>Management measures include the following input and output controls:</p> <ul style="list-style-type: none"> • annual total allowable commercial catch (TACC) limits • limited entry (fishers must also hold a scallop entitlement) and a minimum unit holding to operate • minimum size limits • spatial management regime, where most of the fishery area is closed and only certain defined areas opened if criteria met • seasonal closure – fishing only allowed when scallops have reached optimum condition and to maximise opportunity for successful recruitment • limits on number, dimensions and structure of dredges, and • possession limits.
Contain the means of enforcing critical aspects of the management arrangements	<p>Meets.</p> <p>The Scallop Rules contain penalties that can be imposed by the Court if an offence is proven. Also, provisions apply for infringement notices with mandated smaller penalties, which can be issued at the discretion of a fisheries officer for lesser or first offences. Enforcement of these rules is undertaken by Tasmania Police, who are authorised fishery officers under the LMRM Act.</p>
Provide for the periodic review of the performance of the fishery management arrangements and the management strategies, objectives and criteria	<p>Meets.</p> <p>All management plans and rules are subject to periodic formal review – generally every ten years. However, if issues arise then more specific reviews can be undertaken if statutory management changes are required. Stock assessment and TACC limits are reviewed annually.</p>
Be capable of assessing, monitoring and avoiding, remedying or mitigating any adverse impacts on the wider marine ecosystem in which the target species lives and the fishery operates	<p>Meets.</p> <p>Ecosystem impacts for the fishery are limited through area and seasonal closures. The entire fishery may be closed with discrete areas being opened on a rotational or staged basis to fishing if they meet strict criteria. Scallop fishing is conducted using dredge equipment on coarse sandy bottoms. Scallop dredging is a non-selective fishing method, which has a direct impact on the substrate and associated biota in fishing areas. Management have implemented strategies to manage any adverse effects on the wider ecosystem which include:</p> <ul style="list-style-type: none"> • monitoring the amount of bycatch using the catch record data • undertaking fishery independent research that collects and analyses data on bycatch species • collecting bycatch information in areas before allowing fishing to commence • prohibiting the take of all species other than scallops • limiting the area open to fishing • protecting any threatened ecological communities (TECs) through the development and implementation of comprehensive, adequate and representative marine protected areas (MPAs)

	<ul style="list-style-type: none"> prohibiting scallop dredging in sheltered shallow areas that may have complex and fragile benthic invertebrate communities such as shark refuge areas monitoring compliance with fishery closures by requiring all vessels with commercial dredges to have a functioning vessel monitoring system (VMS), and limiting the number of fishers able to participate by restricting the number of commercial licences issued.
Requires compliance with relevant threat abatement plans, recovery plans, the National Policy on Fisheries Bycatch, and bycatch action strategies developed under the policy	<p>Not applicable.</p> <p>There are no relevant plans or strategies relating to threat abatement, recovery or bycatch with which the fishery is required to be compliant.</p>
<p>PRINCIPLE 1 - A fishery must be conducted in a manner that does not lead to over-fishing, or for those stocks that are over-fished, the fishery must be conducted such that there is a high degree of probability the stock(s) will recover.</p>	
<p>Objective 1 - The fishery shall be conducted at catch levels that maintain ecologically viable stock levels at an agreed point or range, with acceptable levels of probability.</p>	
<p>Information requirements</p>	
<p>1.1.1 There is a reliable information collection system in place appropriate to the scale of the fishery. The level of data collection should be based upon an appropriate mix of fishery independent and dependent research and monitoring.</p>	<p>Meets.</p> <p>Mandatory logbooks record daily catch and effort. Scientific and industry based surveys overseen by the Institute for Marine and Antarctic studies (IMAS) are conducted to locate and establish the characteristics of scallop beds in nominated areas. This data is then used to assess the suitability of the proposed open area for commercial scallop harvesting after being presented to and considered by the ScFAC against 13 biological, environmental, economic and social performance measures. Past catch history, anecdotal information (such as scallops attached on shark nets) and exploratory surveys assist in locating scallop beds and targeting surveys. It is not mandatory to record byproduct species. However, the pre-season surveys pick up any areas that have a disproportionately high level of Doughboy Scallop (<i>Mimachlamys asperimus</i>) or Queen Scallop (<i>Equichlamys bifrons</i>), and management arrangements adjusted accordingly. Commercially viable quantities of secondary species have not been landed in the last ten years.</p>
<p>Assessment</p>	
<p>1.1.2 There is a robust assessment of the dynamics and status of the species/fishery and periodic review of the process and the data collected. Assessment should include a process to identify any reduction in biological diversity and /or reproductive capacity. Review should take place at regular intervals but at least every three years.</p>	<p>Meets.</p> <p>Annual stock assessments are based on pre-season surveys which consider abundance, density, size and reproductive capacity. The stock is managed by a 'paddock fishing' approach where all areas are closed to fishing with only discrete areas opened, determined by the pre-season surveys. Scallop density, extent of scallop beds and population structure of the beds are used to rank areas in terms of suitability for opening and those requiring monitoring. Areas having a population structure with more than 20 per cent undersize (i.e. <90 mm for commercial scallop) are not considered for opening and may be monitored. Some scallop beds may be deemed commercially unviable due to the size or location of the bed. Leaving these beds unfished may have some long-term benefits in that they may assist in recruitment. The detection of significant numbers of very small scallops (i.e. <40 mm) indicates recent successful recruitment, which assists in determining stock information trends.</p>

1.1.3 The distribution and spatial structure of the stock(s) has been established and factored into management responses.	Meets. There is assumed to be one genetically homogeneous population of Commercial Scallop extending from the WA/SA border, around Tasmania and Victoria to central NSW. Additionally, distinct genetic links have been identified between some beds, but not others, most likely due to non-random dispersal and subsequent settlement of larvae, meaning that recruitment does not occur in a simple, predictable manner. FRDC reports on the status of Commercial Scallop on an annual basis at a whole of stock level, providing a cross-jurisdictional (Commonwealth, Victoria and Tasmania) stock analysis.
1.1.4 There are reliable estimates of all removals, including commercial (landings and discards), recreational and indigenous, from the fished stock. These estimates have been factored into stock assessments and target species catch levels.	Meets. The commercial and recreational harvest of Commercial Scallop is factored into local stock assessments and target species catch levels. Although no estimate of Indigenous harvest of Commercial Scallop has been provided, the catch is considered to be low.
1.1.5 There is a sound estimate of the potential productivity of the fished stock/s and the proportion that could be harvested.	Meets. There is no comprehensive estimate of potential productivity for all available areas of the fishery. However, the spatial management system limits fishing activity to discrete areas. Pre-season scientific and industry based surveys are conducted to locate and establish the characteristics of scallop beds in nominated areas. This information is considered by the ScFAC to determine open areas and setting the TACC.
Management responses	
1.1.6 There are reference points (target and/or limit), that trigger management actions including a biological bottom line and/or a catch or effort upper limit beyond which the stock should not be taken.	Meets. The fishery is quota managed with the TACC based on pre-season surveys. Additionally there are performance indicators relating to the sustainability of the resource and decision-making criteria regarding opening and closing areas, and altering the TACC.
1.1.7 There are management strategies in place capable of controlling the level of take.	Meets. Management measures, including the input and output controls described above, are capable of controlling the level of harvest.
1.1.8 Fishing is conducted in a manner that does not threaten stocks of byproduct species.	Meets. Commercial Scallop, Doughboy Scallop and Queen Scallop are the only species permitted to be retained in the fishery. Impacts of harvesting these species have been considered in an ecological risk assessment (ERA). As there is not much overlap between the primary target species (Commercial Scallop), and the byproduct species (Doughboy and Queen Scallops), fishing is not likely to threaten stocks of byproduct species. However, the pre-season surveys will pick up any areas that have a disproportionately high level of Doughboy and Queen Scallops, and management arrangements adjusted accordingly.
(Guidelines 1.1.1 to 1.1.7 should be applied to byproduct species to an appropriate level)	
1.1.9 The management response, considering uncertainties in the assessment	Meets.

and precautionary management actions, has a high chance of achieving the objective.	The capability of the spatial management strategy to constrain the harvest of scallops to within sustainable levels is high. The range of management controls is sufficient to ensure that the fishery is conducted in a manner that does not lead to over-fishing and that there are arrangements to recover any overfished stocks.
If overfished, go to Objective 2: If not overfished, go to PRINCIPLE 2:	
Objective 2 - Where the fished stock(s) are below a defined reference point, the fishery will be managed to promote recovery to ecologically viable stock levels within nominated timeframes.	
Management responses	
1.2.1 A precautionary recovery strategy is in place specifying management actions, or staged management responses, which are linked to reference points. The recovery strategy should apply until the stock recovers, and should aim for recovery within a specific time period appropriate to the biology of the stock.	Not applicable. The stock is not currently below a defined reference point. However, the spatial management strategy approach is predicated on precautionary TACC limits and accounts for natural stock fluctuations.
1.2.2 If the stock is estimated as being at or below the biological and / or effort bottom line, management responses such as a zero targeted catch, temporary fishery closure or a 'whole of fishery' effort or quota reduction are implemented.	Not applicable. Stock is not currently below a defined reference point, but the status of the fishery is uncertain due to natural fluctuation. Control rules in the spatial management strategy appear adequate.
PRINCIPLE 2 - Fishing operations should be managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.	
Objective 1 - The fishery is conducted in a manner that does not threaten bycatch species.	
Information requirements	
2.1.1 Reliable information, appropriate to the scale of the fishery, is collected on the composition and abundance of bycatch.	Meets. Fishers are required to record bycatch information as part of their daily catch records. Due to the complexities of identification for some taxa such as sponges, these industry records serve to monitor bycatch of large taxonomic groups only. IMAS produce survey reports which outline the size frequency, densities and locations of scallop beds along with any other item of note such as if a category of bycatch is particularly high in an area.
Assessments	
2.1.2 There is a risk analysis of the bycatch with respect to its vulnerability to fishing.	Meets. An ERA workshop was held in November 2003. Workshop participants included DPIPW staff, researchers from the Tasmanian Aquaculture and Fisheries Institute (TAFI), scallop industry representatives, and the

	community and conservation representative from the ScFAC. The ERA evaluated bycatch for invertebrates, exotics and finfish as low. As fishing is rotational, occurring in discrete areas, the risk to any particular bycatch species, which is not endemically localised, is likely to be low.
Management responses	
2.1.3 Measures are in place to avoid capture and mortality of bycatch species unless it is determined that the level of catch is sustainable (except in relation to endangered, threatened or protected species). Steps must be taken to develop suitable technology if none is available.	Meets. The spatial management strategy by default closes all state waters to commercial dredge fishing. Scientific and industry based surveys overseen by IMAS are conducted to locate and establish the characteristics of scallop beds in nominated areas. This data is then used to assess the suitability of the proposed open area for Commercial Scallop harvesting after being presented to and considered by the ScFAC against 13 biological, environmental, economic and social performance measures. As fishing effort is confined and focussed in areas of relatively high abundance of scallops, which helps to minimise bycatch. All vessels participating in the fishery are required to have a functioning VMS, which allows real time monitoring of vessel positions.
2.1.4 An indicator group of bycatch species is monitored.	Meets. Monitoring of indicator species is not undertaken. However, data from logbook, observer and pre-season surveys is reviewed at least annually for any emerging issues.
2.1.5 There are decision rules that trigger additional management measures when there are significant perturbations in the indicator species numbers.	Meets. The pre-season surveys allow areas to be assessed before being opened to fishing. Any change in the composition of species caught can be identified and the area will remain closed to fishing.
2.1.6 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	Meets. The management response has a high chance of achieving the objective.
Objective 2 - The fishery is conducted in a manner that avoids mortality of, or injuries to, endangered, threatened or protected species and avoids or minimises impacts on threatened ecological communities.	
Information requirements	
2.2.1 Reliable information is collected on the interaction with endangered, threatened or protected species and threatened ecological communities.	Partially meets. DPIPWE introduced new changes to the Scallop Catch Record portion of the Scallop Quota Docket in 2006 to include TEPS interactions, with the record book instructions clearly stating that a 'Protected Species Interaction Record', must be completed for every interaction which occurs. Copies of dockets are forwarded to DPIPWE within 48 hours from the time of unloading. Interactions with large TEPS, such as seals and seabirds, are highly unlikely with this fishing method. Interactions with smaller, more cryptic species, such as syngnathids, is possible although unlikely to be reported due to the rarity of occurrence or because fishers do not notice these animals being excluded by the mechanical processing and discarding that happens at sea. DPIPWE continues to engage with fishers to explain how to report TEPS interactions and promote the importance of TEPS reporting.

Assessments	
2.2.2 There is an assessment of the impact of the fishery on endangered, threatened or protected species.	<p>Meets.</p> <p>The ERA considered the impact of the fishery on TEPS. A risk to syngnathids was recognised and further evaluation found a low risk [Consequence 1, Likelihood 2] of the fishery having a high impact. The risk is considered low due to the localised nature of the fishery in comparison to the relatively large distribution of syngnathid species. Pre-season surveys are used to determine areas found to have significant interactions with TEPS and those areas are not considered for opening. A range of measures are developed to ensure that scallop harvesting has a minimal impact on the identified TEPS and may include closed areas, closed seasons or other measures appropriate to reduce or minimise the interaction.</p>
2.2.3 There is an assessment of the impact of the fishery on threatened ecological communities.	<p>Meets.</p> <p>Pre-season scientific and industry based surveys overseen by IMAS are conducted to locate and establish the characteristics of scallop beds in nominated areas. This data is then used to assess the suitability of the proposed open area for commercial scallop harvesting after being presented to and considered by the ScFAC against 13 biological, environmental, economic and social performance measures. While the fishery includes areas of the Giant Kelp Marine Forests of South East Australia threatened ecological community (TEC), the pre-season surveys ensure that any areas found to contain sensitive habitat types are precluded from opening to fishing.</p>
Management responses	
2.2.4 There are measures in place to avoid capture and/or mortality of endangered, threatened or protected species.	<p>Meets.</p> <p>The pre-season surveys provide an indication of the risk to TEPS. Any area identified as having an unacceptable risk to TEPS remains closed to fishing.</p>
2.2.5 There are measures in place to avoid impact on threatened ecological communities.	<p>Meets.</p> <p>Pre-season surveys ensure that any areas found to contain sensitive habitat types are precluded from opening to fishing.</p>
2.2.6 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	<p>Meets.</p> <p>The range of management actions available would be expected to provide a high chance of achieving the objective.</p>
Objective 3 - The fishery is conducted, in a manner that minimises the impact of fishing operations on the ecosystem generally.	
Information requirements	
2.3.1 Information appropriate for the analysis in 2.3.2 is collated and/or collected covering the fisheries impact on the ecosystem and environment generally.	<p>Meets.</p> <p>Pre-season scientific and industry based surveys overseen by IMAS are conducted to locate and establish the characteristics of scallop beds in nominated areas. This data is then used to assess the suitability of the proposed open area for commercial scallop harvesting after being presented to and considered by the ScFAC against 13 biological, environmental, economic and social performance measures.</p>
Assessment	

<p>2.3.2 Information is collected and a risk analysis, appropriate to the scale of the fishery and its potential impacts, is conducted into the susceptibility of each of the following ecosystem components to the fishery:</p> <ol style="list-style-type: none"> 1. Impacts on ecological communities <ul style="list-style-type: none"> • Benthic communities • Ecologically related, associated or dependent species • Water column communities 2. Impacts on food chains <ul style="list-style-type: none"> • Structure • Productivity/flows 3. Impacts on the physical environment <ul style="list-style-type: none"> • Physical habitat • Water quality. 	<p>Meets.</p> <p>An ERA has been undertaken to consider the scallop fisheries impact on communities, food chains and the physical environment.</p>
<p>Management responses</p>	
<p>2.3.3 Management actions are in place to ensure significant damage to ecosystems does not arise from the impacts described in 2.3.1.</p>	<p>Meets.</p> <p>Although the aim of introducing the spatial management system, where all waters are closed to scallop dredging, was primarily to overcome the 'boom and bust' trends with the fishery, the concept significantly reduces the impact to the environment and broader ecosystem. Dredge fishing will continue in discrete areas that are ranked as suitable for opening. Therefore, the impact to the majority of the state and Commonwealth waters is carefully managed.</p>
<p>2.3.4 There are decision rules that trigger further management responses when monitoring detects impacts on selected ecosystem indicators beyond a predetermined level, or where action is indicated by application of the precautionary approach.</p>	<p>Meets.</p> <p>The spatial management regime employed in the fishery ensures that most areas are closed and only certain defined areas opened if criteria met. Scientific and industry based surveys overseen by scientists from the IMAS are conducted to locate and establish the characteristics of scallop beds in nominated areas. This data is then used to assess the suitability of the proposed open area for commercial scallop harvesting after being presented to and considered by the ScFAC against 13 biological, environmental, economic and social performance measures.</p>
<p>2.3.5 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.</p>	<p>Not applicable.</p> <p>As per 2.3.4</p>

SECTION 3: ASSESSMENT OF THE TASMANIAN SCALLOP FISHERY AGAINST THE REQUIREMENTS OF THE EPBC ACT

Please Note – the table below is not a complete or exact representation of the EPBC Act. It is intended as a checklist of relevant sections and components of the EPBC Act to provide advice on the fishery in relation to decisions under Part 13 and Part 13A.

Part 12

	Meets	Partially meets	Does not meet	Comment
Section 176 Bioregional Plans				
(5) Minister must have regard to relevant bioregional plans	Not applicable. There is no fishing activity within areas covered by a bioregional plan.			

Part 13

	Meets	Partially meets	Does not meet	Comment
Accreditable plan, regime or policy (Division 1, Division 2, Division 3, Division 4)				
s. 208A (1) (a-e) , s.222A (1) (a-e), s.245A (1) (a-e), s.265 (1) (a-e) Does the fishery have an accreditable plan of management, regime or policy?	Meets. The fishery is managed under the Fisheries (Scallop) Rules 2010 and the Tasmanian <i>Living Marine Resources Management Act 1995</i> .			
Division 1 Listed threatened species, Section 208A Minister may accredit plans or regimes				
(f) Will the plan, regime or policy require fishers to take all reasonable steps to ensure that members of listed threatened species (other than conservation dependent species) are not killed or injured as a result of the fishing?	Meets. The management regime for the fishery was accredited in January 2012. The Department considers that the management regime for the fishery continues to require operators to take all reasonable steps to ensure that listed threatened species are not killed or injured as a result of the fishing.			
(g) And, is the fishery likely to adversely affect the survival or recovery in nature of the species.	Meets. Due to the spatial management regime and the pre-season surveys, the likelihood of interactions with listed threatened species is minimal. Therefore, the Department considers the current operation of the fishery is not likely to adversely affect the conservation status of a listed threatened species or a population of that species.			
Division 2 Migratory species, Section 222A Minister may accredit plans or regimes				

(f) Will the plan, regime or policy require fishers to take all reasonable steps to ensure that members of listed migratory species are not killed or injured as a result of the fishing?	Meets. The management regime for the fishery was accredited in January 2012. The Department considers that the management regime for the fishery continues to require operators to take all reasonable steps to ensure that listed migratory species are not killed or injured as a result of the fishing.
(g) And, is the fishery likely to adversely affect the conservation status of a listed migratory species or a population of that species?	Meets. Due to the spatial management regime and the pre-season surveys, the likelihood of interactions with listed migratory species is minimal. Therefore, the Department considers the current operation of the fishery is not likely to adversely affect the conservation status of a listed migratory species or a population of that species.
Division 3 Whales and other cetaceans, Section 245 Minister may accredit plans or regimes	
(f) Will the plan, regime or policy require fishers to take all reasonable steps to ensure that cetaceans are not killed or injured as a result of the fishing?	Meets. The management regime for the fishery was accredited in January 2012. The Department considers that the management regime for the fishery continues to require operators to take all reasonable steps to ensure that whales and cetaceans are not killed or injured as a result of the fishing.
(g) And is the fishery likely to adversely affect the conservation status of a species of cetacean or a population of that species?	Meets. Due to the spatial management regime and the pre-season surveys, the likelihood of interactions with whales and cetaceans is minimal. Therefore, the Department considers the current operation of the fishery is not likely to adversely affect the conservation status of a species of cetacean or a population of that species.
Division 4 Listed marine species, Section 265 Minister may accredit plans or regimes	
(f) Will the plan, regime or policy require fishers to take all reasonable steps to ensure that members of listed marine species are not killed or injured as a result of the fishing?	Meets. The management regime for the fishery was accredited in January 2012. The Department considers that the management regime for the fishery continues to require operators to take all reasonable steps to ensure that listed marine species are not killed or injured as a result of the fishing.
(g) And is the fishery likely to adversely affect the conservation status of a listed marine species or a population of that species?	Meets. Due to the spatial management regime and the pre-season surveys, the likelihood of interactions with listed marine species is minimal. Therefore, the Department considers the current operation of the fishery is not likely to adversely affect the conservation status of a listed marine species or a population of that species.
Section 303AA Conditions relating to accreditation of plans, regimes and policies	
(1) This section applies to an accreditation of a plan, regime or policy under section 208A, 222A, 245 or 265.	Meets. The Department recommends that the fishery be accredited under sections 208A, 222A, 245 and 265.
(2) The Minister may accredit a plan, regime or policy under that section even though he or she considers that	Meets. No condition has been imposed on the fishery under Part 13.

<p>the plan, regime or policy should be accredited only:</p> <p>(a) during a particular period; or</p> <p>(b) while certain circumstances exist; or</p> <p>(c) while a certain condition is complied with.</p> <p>In such a case, the instrument of accreditation is to specify the period, circumstances or condition.</p>	
<p>(7) The Minister must, in writing, revoke an accreditation if he or she is satisfied that a condition of the accreditation has been contravened.</p>	<p>Not applicable.</p>

Part 13A

Section 303BA Objects of Part 13A				
<p>(1) The objects of this Part are as follows:</p> <p>(a) to ensure that Australia complies with its obligations under CITES and the Biodiversity Convention;</p> <p>(b) to protect wildlife that may be adversely affected by trade;</p> <p>(c) to promote the conservation of biodiversity in Australia and other countries;</p> <p>(d) to ensure that any commercial utilisation of Australian native wildlife for the purposes of export is managed in an ecologically sustainable way;</p> <p>(e) to promote the humane treatment of wildlife;</p> <p>(f) to ensure ethical conduct during any research associated with the utilisation of wildlife; and</p> <p>(h) to ensure the precautionary principle is taken into account in making decisions relating to the utilisation of wildlife.</p>				
	Meets	Partially meets	Does not meet	Comment
Section 303DC Minister may amend list (non CITES species)				
<p>(1) The Minister may amend the LENS by:</p> <p>(a) doing any of the following:</p> <p>(i) including items in the list;</p> <p>(ii) deleting items from the list;</p> <p>(iii) imposing a condition or restriction to which the inclusion of a specimen in the list is subject;</p>	<p>The Department recommends that specimens that are or are derived from fish or invertebrates, taken in the Tasmanian Scallop Fishery as defined in the management regime in force under the Tasmanian <i>Living Marine Resources Management Act 1995</i>, but not including</p> <ul style="list-style-type: none"> specimens that belong to eligible listed threatened species, as defined under section 303BC of the EPBC Act, or specimens that belong to taxa listed under section 303CA of the EPBC Act (Australia's CITES list) <p>be included in the list of exempt native specimens until 25 July 2026.</p>			

(iv) varying or revoking a condition or restriction to which the inclusion of a specimen in the list is subject	
(1A) In deciding to amend LENS, Minister must rely primarily on outcomes of Part 10, Div 1 Or 2 assessment	Not applicable. No assessment under Part 10 of the EPBC Act has been completed as the Tasmanian Scallop Fishery is not a Commonwealth fishery.
(1C) The above does not limit matters that may be considered when deciding to amend LENS.	Meets. The Department considers that the amendment of the list of exempt native specimens to include product derived from the fishery would be consistent with the Objects of Part 13A as: <ul style="list-style-type: none"> the fishery will not harvest any Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) listed species there are management arrangements in place to ensure that the resource is being managed in an ecologically sustainable way, and the operation of the fishery is unlikely to be unsustainable and threaten biodiversity within the next ten years.
(3) Before amending LENS, Minister must consult: <ul style="list-style-type: none"> (a) other Minister or Ministers as appropriate; and (b) other Minister or Ministers of each State and self-governing Territory as appropriate; and (c) other persons and organisations as appropriate. 	Partially meets. General consultation with the (TAS) Minister for Fisheries in October 2014 (MS14-002367).

Part 16

	Meets	Partially meets	Does not meet	Comment
Section 391 Minister must consider precautionary principle in making decisions				
(1) Minister must take account of precautionary principle (2) The precautionary principle is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment	Precautionary management measures in place The precautionary principle has been considered by the Department when making its recommendation to the delegate to include specimens in the list of exempt native specimens.			

where there are threats of serious or irreversible environmental damage.

