#### **Assessment of the Tasmanian Marine Plant Fishery**

November 2020

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**Disclaimer**

This document is an assessment carried out by the Department of Agriculture, Water and the Environment 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 on the fishery in relation to decisions under Part 13A of the *Environment Protection and Biodiversity Conservation Act 1999*. The views expressed do not necessarily reflect those of the Minister for the Environment or the Australian Government.

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Contents

[Executive Summary of Assessment of the Tasmanian Marine Plant Fishery 4](#_Toc56503774)

[Section 1: Assessment Summary 6](#_Toc56503775)

[Section 2: Summary of Issues Requiring Conditions, November 2020 7](#_Toc56503776)

[Assessment History: 13](#_Toc56503777)

[Fishery Reporting 13](#_Toc56503778)

[Key Links 13](#_Toc56503779)

[Section 3: Detailed Analysis Against The Guidelines 16](#_Toc56503780)

[Section 4: Assessment Against the EPBC Act 30](#_Toc56503781)

[Part 12 – Identifying and monitoring biodiversity and making bioregional plans 30](#_Toc56503782)

[Part 13A – International movement of wildlife specimens 30](#_Toc56503783)

[Part 16 – Precautionary principle and other considerations in making decisions 35](#_Toc56503784)

[References 36](#_Toc56503785)

# EXECUTIVE SUMMARY

On 30 September 2020, the Tasmanian Department of Primary Industries, Parks, Water and the Environment (DPIPWE) submitted an application for the Tasmanian Marine Plant Fishery (the fishery) to the Department of Agriculture, Water and the Environment (the Department) for assessment under the wildlife trade provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The sustainability of the fishery’s management arrangements have also been assessed against the Australian Government ‘Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition’. A public comment period was open from 2 October 2020 until 4 November 2020. One public comment was received.

*Description of fishery*

The small-scale community-based fishery targets beach cast native and exotic marine plants from designated beaches and coastal waters in Tasmania for the production and export of alginate. The fishery has been in operation on King Island since the 1970s and was expanded to the mainland, conditional on licence approval, following the Departments approval of the Management regime in 2017. Operations currently occur on King Island and the north west of the Tasmanian mainland coast.

*Fishery management arrangements*

The Marine Plant Fishery is managed in accordance with the *Fisheries (Marine Plant) Rules 2017* (Tas) (the Rules) in force under the *Living Marine Resources Management Act 1995* (Tas) (LMRMA). Harvest is controlled by output (catch) and input (effort) controls with harvest only occurring in designated coastal waters and beaches under an approved fishing licence. It is a limited entry fishery with conditions attached to each harvesting licence specifying the area and amounts to be collected. Harvesters use hand collection methods with the use of land-based vehicles permitted in non-sensitive areas. Harvest is restricted to dead beach cast material and it is prohibited to harvest native species from the water, either floating or attached to the seabed.

*Target Stocks*

Harvest is limited to beach cast seaweed or ‘wrack’ which has become detached from the substrate, washed ashore and died. No endemic species attached to the substrate can be harvested under the management plan.

*Protected species and ecological communities, and Ecosystem impacts*

It is possible that harvesting of cast marine plant may affect listed nesting species of migratory shorebirds. The Tasmanian coastline provides foraging and roosting habitat for EPBC-listed shorebirds and other EPBC-listed species. These include the vulnerable *Thinornis cucullatus cucullatus* (Eastern Hooded Plover), the Marine-listed *Charadrius ruficapillus* (Red-capped Plover) and the vulnerable *Sternula nereis nereis* (Australian Fairy Tern), as well as the critically endangered and migratory *Neophema chrysogaster* (Orange-Bellied Parrot). Cast marine plants contain essential macrofauna food items such as amphipods and larvae, and roosting habitat, and provides camouflage and protection from inclement weather and human activity on beaches (Kirkman & Kendrick 1997; PIRSA 2014). Any significant changes to macrofaunal communities can create broader impacts on predator communities such as insects and birds. In addition, repeated human disturbance to important habitat including the use of heavy machinery on beaches and foreshores is likely to have a detrimental impact on shorebird behaviour if not managed appropriately, and may pose a risk to flightless chicks of resident shorebirds and terns. No comprehensive conservation assessment of beach nesting and migratory shorebirds has been undertaken since 2002. However, DPIPWE staff have internal access to the data derived from annual and other ongoing bird surveys that intersect with harvest areas, including full Birdlife Tasmanian beach-nesting shorebird and tern mapping dataset, most recently submitted to DPIPWE February 2020. The management strategies outlined in section 3 sufficiently mitigate risks to EPBC-listed species and communities. Nonetheless, while the risk interactions may be low, the fishery currently has no system in place to educate fishers regarding possible interactions with either threatened, endangered and protected species (TEPS) or threatened ecological communities (TECs), nor any reporting mechanism.

Given the selective application process and hand collection methods in use and restrictions on harvest amounts and locations to minimise this risk, the impact on byproduct or bycatch species is considered negligible.

*Research and monitoring*

Tasmania Police provides compliance for fisheries legislation in Tasmania and activities are generally directed by intelligence. Compliance is also supported by the Parks and Wildlife Service whose rangers may also be fisheries officers. A pre-harvest biomass assessment is taken before the issue of a land permit, required for harvest. DPIPWE has also advised that there have been no concerns raised by rangers working on the island in relation to the harvest activity.

*Public Submissions*

One submission was received in response to the invitation for public comment. The submission included a list of recommendations relating to the temporal prohibition of harvesting during breeding and migratory seasons, concerns about the unit of harvest limits authorised under the Rules and the need for better compliance and public and operator awareness of coastal ecosystems. In their response to the submission, DPIPWE provided further detail on compliance, stated that they consider the management regime provide clear and appropriate processes to sustainably manage the fishery activity and agreed that better publicly available information would improve public and operator awareness. The points raised in the submission and the response from DPIPWE have been taken into account as part of this assessment.

*Conclusion*

While the management arrangements implemented in 2017 aim to ensure that harvesting is conducted in a way that is ecologically sustainable, a number of risks and uncertainties have been identified, that must be managed. The conditions outlined in Section 2 of this report aim to address the issues identified in the assessment of the fishery during the term of the proposed three-year approval. On this basis it is recommended that the declaration of the harvest operations of the Tasmanian Marine Plant Fishery as an approved wildlife trade operation for three years from the day after date of registration on the Federal Register of Legislation.

Unless a specific time frame is provided, each condition must be addressed within the period of the approved wildlife trade operation declaration for the fishery.

# SECTION 1: ASSESSMENT SUMMARY

Assessment of the Tasmanian Marine Plant Fishery against the Guidelines for the Ecologically Sustainable Management of Fisheries (2nd edition).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Guideline categories** | **Meets** | **Partially meets** | **Does not meet** | **Details** |
| Management regime | 6 of 9 | 3 of 9 | 0 of 9 | While the management regime is likely to be effective it would be improved with the addition of performance criteria, a mechanism to report interactions with threatened, endangered or protected species (TEPS) or threatened ecological communities (TECs) and take of byproduct and a formal mechanism for periodic review. |
| Principle 1 (target stocks)  7 of 11 not applicable | 3 of 11 Meets | 1 of 11 | 0 of 11 | While harvesting operations are unlikely to impact on the survival of target species, it is important that management decisions are based on accurate and up-to-date fishery data. |
| Principle 2; Objectives 1 and 2 (bycatch, TEPS and TECs)  3 of 12 not applicable | 4 of 12 | 3 of 12 | 2 of 12 | There is no data collected regarding the impact of harvest on bycatch species, or possible interactions with threatened, endangered or protected species (TEPS) or threatened ecological communities (TECs).  Some of the management practices, and the pre-harvesting assessments conducted by land managers provide some assurance that interactions and impacts with TEPS will be minimised. It is important however that DPIPWE ensure adequate monitoring and reporting of TEPS and TECs interactions to inform future management regimes. |
| Principle 2; Objective 3 (ecosystem impacts)  1 of 5 not applicable | 1 of 5 | 3 of 5 | 0 of 5 | Given the management measures in place, it is considered that the fishery is unlikely to have a significant impact on the structure, productivity, function and biological diversity of the ecosystem. |
| **EPBC requirements** | **Meets** | **Partially meets** | **Does not meet** | **Details** |
| Part 12 |  |  |  | Not applicable as no marine bioregional plan occurs in the area in which the fishery operates. |
| Part 13 |  |  |  | Not applicable as the fishery operates within state waters and coastal areas only. |
| Part 13A |  |  |  | Meets requirements subject to the Part 13A conditions. |
| Part 16 |  |  |  | Meets requirements subject to the Part 13A conditions. |

# SECTION 2: SUMMARY OF ISSUES REQUIRING CONDITIONS, NOVEMBER 2020

| **Issue** | **Condition** |
| --- | --- |
| General Management  Export decisions relate to the management arrangements in force at the time of any decision(s) made under the EPBC Act. To ensure that the decision(s) remain valid and export approval continues uninterrupted, the Department of Agriculture, Water and the Environment (the Department) needs to be advised of any changes that are made to the management regime and make an assessment that the new arrangements are equivalent or better, in terms of ecological sustainability, than those in place at the time of the original decision(s). This includes operational and legislated amendments that may affect the sustainability of the target species or negatively impact on byproduct, bycatch, EPBC Act protected species or the ecosystem. | **Condition 1**:  Operation of the Tasmanian Marine Plant Fishery will be carried out in accordance with the management regime under the *Living Marine Resources Management Act 1995* (Tas) and *Fisheries (Marine Plant) Rules 2017* (Tas).  **Condition 2**:  The Tasmanian Department of Primary Industries, Parks, Water and Environment to inform the Department of Agriculture, Water and the Environment of any intended material changes to the Tasmanian Marine Plant Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* (Cth) decisions are made. |
| Annual Reporting  It is important that reports on the Tasmanian Marine Plant Fishery are provided to the Department annually in order for the performance of the fishery and progress in implementing the conditions described in the WTO instrument and other managerial commitments to be monitored and assessed throughout the life of the export approval. Annual reports should follow Appendix B to the 'Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition' and include a description of the fishery, management arrangements in place, research and monitoring outcomes, recent catch data for all sectors of the fishery, status of target stock, interactions with EPBC Act protected species and communities, impacts of the fishery on the ecosystem in which it operates and progress in implementing the Department’s conditions described in the previous assessment for the fishery. Electronic copies of the guidelines are available from the Department’s website at <http://www.environment.gov.au/resource/guidelines-ecologically-sustainable-management-fisheries>. | **Condition 3**:  The Tasmanian Department of Primary Industries, Parks, Water and Environment to produce and present reports to the Department of Agriculture, Water and the Environment annually as per Appendix B of the ‘*Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition’.* |
| Collection of up-to-date and accurate data  The current management arrangements for the Tasmanian Marine Plant Fishery were implemented in 2017 under the *Fisheries (Marine Plant) Rules 2017*. The revised management arrangements have allowed greater control over the marine plant resource in Tasmania.  Prior to the new management arrangements coming into force, the environmental performance associated with harvesting cast bull kelp from the King Island sector of the fishery was assessed (Commonwealth of Australia 2005; 2008; 2011). Following the implementation of the new management regime, which facilitated harvest outside of King Island, the environmental performance associated with harvest of marine plants from all fishery harvesting areas within Tasmania was assessed (Commonwealth of Australia 2017).  Notwithstanding the implementation of improved management arrangements for the fishery, it is important that DPIPWE continues to collect accurate and up-to-date harvesting data for the commercial sector of the fishery, and use this information develop baseline data to ensure the sustainable harvest of marine plants.  DPIPWE have provided the Department with harvesting data for the entire fishery as part of their annual reports for the fishery in accordance with the reporting conditions included in the current export approval for the fishery. Where possible it would be valuable to also delineate harvest amounts by processing plant or by general harvest area.  It is important that DPIPWE consider the fishery’s overall impact on the broader ecosystem prior to the granting a harvest licence, particularly potential impacts on shorebirds. DPIPWE undertakes ongoing monitoring of harvesting activities and enforces strict licencing conditions that require licence holders to identify specific harvesting areas and to have in place relevant access permission to identified sites from land owners/managers (such as the Tasmanian Parks and Wildlife Service (TPWS).  It is important for DPIPWE to advise the Department of any intended changes to management arrangements for the fishery in line with annual reporting requirements specified in Conditions 2 and 3 above. | **Condition 4:**  The Department of Primary Industries, Parks, Water and Environment to collect and analyse logbook data for each harvesting site, and provide this information to the Department of Agriculture, Water and the Environment as part of the annual report for the fishery in line with Conditions 2 and 3. |
| Shorebird habitat and ecosystem protection  Harvesting operations for the Tasmanian Marine Plant Fishery occurs in some sites identified as important habitat for beach nesting and migratory shorebird species listed under the EPBC Act. Shorebirds present in these areas (hooded plovers, fairy terns and oyster catchers) demonstrate high site fidelity and are sensitive to a range of human activities that can cause habitat loss or degradation, interrupt feeding or nesting habits, injury or death (e.g. vehicle strikes). Harvest areas also likely intersect with migratory habitat of the Orange-Bellied Parrot which is listed as Critically Endangered and Marine under the EPBC Act.  Successful migration of the identified shorebird species requires access to ‘important habitat’ with abundant food reserves and suitable roosting sites to ensure individuals are prepared for the return journey. Cast wrack is vital in this regard as it contains essential macrofauna food items (amphipods and larvae) (Kirkman & Kendrick 1997; PIRSA 2014) and provides camouflage and protection from inclement weather. Any change to these macrofaunal communities will likely affect predator communities, including insects and birds.  DPIPWE has previously worked collaboratively with key stakeholders and government agencies to undertake shorebird surveys, identify important shorebird habitat and the potential interactions with harvesters. It is important that DPIPWE continue this coordinated effort. Existing management measures in place in the fishery aim to avoid adverse impacts to threatened and migratory shorebirds through area or seasonal closures and commercial harvest limits.  Licence applications are assessed individually by local experts using an approved process to determine licence conditions and the appropriate level of harvest activity for each specific area. Local expert advice is also used for ongoing observations of impacts and provided to DPIPWE to implement any changes to management strategies that may be required.  It is important that DPIPWE, in collaboration with other state government agencies, local councils, industry, interest groups (such as Birdlife Australia), and the community, continue to monitor harvesting activity and make appropriate changes to minimise the impact of the fishery’s operations on the wider ecosystem.  The Department encourages continued cooperation between Birdlife Tasmania and the operators of the three processing plants with the aim of improving data collection concerning shorebirds and coastal habitat.  Currently the lack of information provided to fishers regarding possible interactions with threatened, endangered and protected species (TEPS) and threatened ecological communities (TECs) during the process of harvest, as well as the lack of a mandatory reporting system impedes appropriate data collection and a fully comprehensive assessment of the fishery against the Guidelines and the EPBC Act. It is important that DPIPWE and the operators of each processing plant provide accurate and up-to-date information regarding the possible ecosystem impacts of any harvesting or processing activity to fishers and the community. For example, as it currently stands, the policy document does not recognise the potential impact of the fishery on the critically endangered and migratory *Neophema chrysogaster* (Orange-Bellied Parrot), nor on endangered species and ecosystems other than shorebirds, such as:   * *Dermochelys coriacea* (Leatherback Turtle) * Subtropical and Temperate Coastal Saltmarsh * *Charadrius ruficapillus* (Red-capped Plover) * *Calidris ruficollis* (Red-necked Stint) * *Arenaria interpres* (Ruddy Turnstone) * *Calidris alba* (Sanderling)   The Department understands that there is some harvest of exotic plant species in the marine environment within the fishery. While not directly relevant to this assessment, it is possible that some bycatch of native species may occur during this activity due to the visibility challenges during hand collection. Where this occurs, it should be recorded in mandatory logbooks and provided to the Department to ensure an accurate assessment of the level of bycatch in the fishery.  DPIPWE should provide to the Department any updates on regular and ad hoc surveys concerning shorebird and migratory bird activity and other TEPS and TECs as a part of the annual report for the fishery. Data collection must also consider the number of protected species (for individuals and for the population) and ecological community interactions, and the intensity and duration of these interactions. To assist in the production of information concerning possible interactions with TEPS and TECs, the Department also recommends DPIPWE undertakes an assessment of the fishery using the Commonwealth’s self-assessment guidelines for possible impacts on Matters of National Environmental Significance, the [*Significant Impact Guidelines 1.1*](http://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf)*.* | **Condition 5:**  The Department of Primary Industries, Parks, Water and Environment to continue to collaborate with other state government agencies, industry, and the community, to develop, maintain and improve appropriate licencing conditions and monitoring activities to ensure ongoing protection of listed shorebird and migratory species.  Any data obtained from monitoring programs must be included in the annual report sent to the Department in line with Conditions 2 and 3.  **Condition 6**:  By 31 January 2022, The Department of Primary Industries, Parks, Water and Environment to amend and implement mandatory logbooks to facilitate the reporting of interactions with Threatened, Endangered and Protected Species (TEPS) and Threatened, Endangered and Protected Communities (TECs), as well as any bycatch incidentally collected during the harvest of all species in the fishery.  **Condition 7:**  By 31 January 2022, The Department of Primary Industries, Parks, Water and Environment is to produce and make available to fishers information concerning possible EPBC-Act protected matters that may be interacted with during the harvest process, and particularly threatened, endangered and protected species (TEPS) and threatened ecological communities (TECs). |

### Assessment history:

Information on previous assessments for the Tasmanian Marine Plant Fishery is available on the Department’s website at <http://www.environment.gov.au/marine/fisheries/tas/marine-plants>

1st assessment finalised February 2005 – Exempt from export approval until 19 February 2008 while an approved wildlife trade operation (WTO) is in place for the fishery. The list of exempt native specimens (LENS) was amended. Export approval was subject to 6 conditions and 3 recommendations.

2nd assessment finalised February 2008 – Exempt from export approval until 15 February 2011 while an approved wildlife trade operation (WTO) is in place for the fishery. The list of exempt native specimens (LENS) was amended. Export approval was subject to 6 conditions and 3 recommendations.

3rd assessment finalised August 2011 – The list of exempt native specimens (LENS) was amended until 4 August 2016. One further amendment to the LENS extended the exemption until 22 December 2017. Export approval was subject to 5 recommendations.

4th assessment finalised December 2017 – Exempt from export approval until 11 December 2020 while an approved wildlife trade operation (WTO) is in place for the fishery. The list of exempt native specimens (LENS) was amended. Export approval was subject to 5 conditions.

### Fishery reporting

*Annual report*

The Marine Plant Fishery was only formalised under its current management plan in September 2017, and the *Fisheries (Marine Plant) Rules* and related explanatory policy document were only accepted by the Department in December 2017-January 2018. As such, it was agreed that the reporting may commence in the first full financial year, 2018-2019. DPIPWE has provided annual reports for [2018-2019](http://spire.environment.gov.au/spire/886644/246810/338/Annual%20Reports%20-%20All%20Fisheries/TAS%20-%20Marine-Plant-Fishery-%202018-2019-Annual-Report.docx) and [2019-2020](http://spire.environment.gov.au/spire/886644/246810/338/Annual%20Reports%20-%20All%20Fisheries/TAS%20-%20Marine-Plant-Fishery%20-%202019-2020.docx).

*Protected species report*

not applicable because the fishery operates within state waters and coastal areas.

### Key links

*Fishery information*

* [2020 EPBC Act Export Application – Marine Plant Fishery](http://www.environment.gov.au/marine/fisheries/tas/marine-plants/application-2020) (the submission)
* [TAS DPIPWE Commercial Fishing - Seaweed Fishery](https://dpipwe.tas.gov.au/sea-fishing-aquaculture/commercial-fishing/seaweed-fishery)

*Management plan*

A management regime was enacted in 2017.

* [Fisheries (Marine Plant) Rules 2017](https://www.legislation.tas.gov.au/view/html/inforce/current/sr-2017-057)

A non-legal explanatory document for the management plan has also been produced.

* [Tasmanian Marine Plant Fishery Policy Document September 2017](https://dpipwe.tas.gov.au/Documents/Marine%20Plant%20Policy%20Sept%202017.pdf)

*Enforcing legislation*

* [Living Marine Resources Management Act 1995](https://www.legislation.tas.gov.au/view/html/inforce/current/act-1995-025) (primary legislation for managing the state’s fisheries)
* [Fisheries (General and Fees) Regulations 2016](https://www.legislation.tas.gov.au/view/html/inforce/current/sr-2016-030)
* [Fisheries (Penalty) Regulations 2011](https://www.legislation.tas.gov.au/view/html/inforce/current/sr-2011-012)
* [Fishing Registration (Fees) Regulations 2012](https://www.legislation.tas.gov.au/view/html/inforce/current/sr-2012-030)

Legislative framework for Tasmania’s fisheries is available at <http://dpipwe.tas.gov.au/sea-fishing-aquaculture/sustainable-fisheries-management/legislation>.

*Ecological Risk Assessment*

* No ERA has been developed for the fishery

*Stock Assessment*

* Stock assessments for the fishery are not undertaken because only cast native plants can be harvested.

*Other*

* [Wildlife Conservation Plan for Migratory Shorebirds](https://www.environment.gov.au/biodiversity/publications/wildlife-conservation-plan-migratory-shorebirds-2016)
* [Protection of Migratory Birds in Australia](http://www.environment.gov.au/biodiversity/migratory-species/migratory-birds)
* [Conservation advice for Subtropical and temperate coastal saltmarsh](http://www.environment.gov.au/biodiversity/threatened/communities/pubs/118-conservation-advice.pdf)
* [Giant Kelp Marine Forests of South East Australia Ecological Community](https://www.environment.gov.au/system/files/resources/5d1bb6b0-341a-4aeb-b285-408440660512/files/giant-kelp-marine-forests-fact-sheet.pdf)
* [EPBC Act Policy Statement 3.21 – Shorebirds guidelines](https://www.environment.gov.au/epbc/publications/shorebirds-guidelines)
* [Tasmanian Undaria (Wakame) Action Plan](https://dpipwe.tas.gov.au/conservation/the-marine-environment/marine-pests-and-diseases/undaria-action-plan)
* [Revision of the East Asian-Australasian Flyway Population Estimates for 37 listed Migratory Shorebird Species](http://www.environment.gov.au/system/files/resources/da31ad38-f874-4746-a971-5510527694a4/files/revision-east-asian-australasian-flyway-population-sept-2016.pdf)
* [Tasmanian Bird Report 40, June 2020, Birdlife Tasmania](https://birdlife.org.au/images/uploads/branches/documents/Tas_-_TBR_40_2020.pdf)
* [Conservation assessment of beach nesting and migratory shorebirds in Tasmania – DPIPWE 2002](https://dpipwe.tas.gov.au/Documents/finalreportwithcovers.pdf)
* [Regulatory impact statement for Draft Fisheries (General and Fees) Amendment Regulations 2016](http://dpipwe.tas.gov.au/Documents/Marine%20Plant_RIS%20and%20CBA.pdf)
* [*Conservation advice - Thinornis rubricollis rubricollis*](http://www.environment.gov.au/biodiversity/threatened/species/pubs/66726-conservation-advice.pdf) (Hooded plover – eastern)
* [National Recovery Plan for the Orange-Bellied Parrot](http://www.environment.gov.au/biodiversity/threatened/recovery-plans/orange-bellied-parrot-2016) (*Neophema chrysogaster*)
* [Recovery Plan for Marine Turtles in Australia](http://www.environment.gov.au/marine/publications/recovery-plan-marine-turtles-australia-2017)
* [National Policy on Fisheries Bycatch](https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/fisheries/environment/bycatch/national-bycatch-policy-1999.pdf).

# SECTION 3: DETAILED ANALYSIS AGAINST THE GUIDELINES

|  |  |
| --- | --- |
| **Guidelines Criteria** | **Comment** |
| **THE MANAGEMENT REGIME**  The management regime may include non-statutory management arrangements or management policies and programs. The regime should: | |
| Be documented, publicly available and transparent | **Meets – arrangements are documented, publicly available and transparent**  The fishery is managed by the Tasmanian Department of Primary Industries, Parks, Water and Environment (DPIPWE) in accordance with the *Fisheries (Marine Plant) Rules 2017* (Tas) and the *Living Marine Resources Management Act 1995* (Tas). The management regime and a non-legal explanation of the rules, the *Marine Plant Fishery Policy Document - September 2017*,are publicly available (see web links above).  A voluntary code of conduct is in place for harvesting on King Island (document is not publicly available). |
| Be developed through a consultative process providing opportunity to all interested and affected parties, including the general public | **Meets – consultation was a fully open and a transparent public process**  The management plan (*Fisheries (Marine Plant) Rules 2017*) was developed in consultation with all interested and affected parties, and included a 60 day public exhibition period. Key stakeholders were identified through a targeted consultation process during the development of the management plan. Any further changes to the management plan will require further public consultation.  TAS DPIPWE confirmed in correspondence with the Department during the assessment of the submission that First Nation communities are considered a primary stakeholder when management plans are developed or changed and  is a key consideration prior to any new licences being issued. No specific detail was provided regarding any consultation with First Nations groups during the development of the management plan. However, DPIPWE noted that licence applications have been rejected on the basis of concerns by the First Nation Community in the Arthur Pieman Conservation area. |
| Ensure that a range of expertise and community interests are involved in individual fishery management committees and during the stock assessment process | **Meets – consultation with experts and the community occurs as part of applications for licences to harvest in new areas**  DPIPWE appropriately consults with other government agencies, local experts and community interest groups as required.  The submission indicates that there is no stock assessment process for the fishery as the harvest of native species is restricted to beach cast material that has been separated from the sea floor and is dead or decaying. The management regime does however include a process for assessing the amounts harvested from specific harvesting areas. The process includes a pre-harvesting assessment of the available biomass undertaken by the relevant land manager (Tasmanian Parks and Wildlife Service, Crown Land Services, local government authority or private landowner) prior to granting a land access permit. During the assessment of any harvest application, DPIPWE consults with threatened species and ecological community experts to determine likely impacts and provide advice on regulating proposed activities. |
| Be strategic, containing objectives and performance criteria by which the effectiveness of the management arrangements are measured | **Partially Meets – the regime contains objects but not performance criteria regarding management effectiveness**  The *Living Marine Resources Management Act* includes broad objectives for managing the fishery. While no performance criteria are specified, the overall objective of the *Fisheries (Marine Plant) Rules 2017* is the sustainable and orderly use of the state’s marine resources. |
| Be capable of controlling the level of harvest in the fishery using input and/or output controls | **Meets – the management regime is appropriately equipped to control the levels harvest through both input and output controls**  The submission indicates that harvest is managed by input (effort) and output (catch) controls. The level of harvest is controlled through:   * limited entry to the fishery via issuance of harvest licences * licence conditions and endorsements attached to individual licences (may specify: area of operation, species to be harvested, nominated persons permitted to supervise or assist, limited harvest to less than 50 per cent of the available biomass) * mandatory logbook reporting and pre-reporting that identifies the specific location and target species * prior reporting assessment and compliance monitoring operations undertaken by the relevant land manager * area restrictions and seasonal closures including areas to protect nesting shorebirds * gear restrictions (e.g. vehicles or machinery used for harvest must be land-based to make it clear to compliance officers that all marine plants have been cast)   No licence is required for the non-commercial harvest of marine plants, although harvest is restricted. Local councils require a permit for the removal of marine plants for aesthetic purposes.  The management plan also contains provisions for closing parts of the fishery to certain fishing activities. |
| Contain the means of enforcing critical aspects of the management arrangements | **Meets – contains the means of enforcing critical aspects of management arrangements**  Fishing operators are required to adhere to the conditions and endorsements on both the land access permit (provided by the relevant land manager), and the fishing licence (provided by DPIPWE) which must be clearly displayed in vehicles whilst harvesting. On King Island, all collectors are required to abide by a voluntary code of conduct.  Compliance activities are undertaken by the Tasmanian Police supported by Parks employees in reserved land or by the land manager that issues the land access permit (i.e. the Tasmanian Parks and Wildlife Service, Crown Land Services, local government authority or private landowner).  Penalties for any infringements are also outlined under schedule 1 of the management plan. |
| Provide for the periodic review of the performance of the fishery management arrangements and the management strategies, objectives and criteria. | **Partially meets – the management plan is periodically reviewed but there is no formal stock assessment as collected material is dead and beach cast**  DPIPWE advised in correspondence with the Department during the assessment of the submission that a review process can be initiated as required when relevant issues arise in the fishery and when directed to do so by the Minister for Primary Industries. DPIPWE has also informed the Department that the management plan for the fishery is scheduled for review in 2027. For example, DPIPWE has noted that one such issue relating to the restriction of operations in the north west Arthur Pieman Conservation Area (APCA) may require a formal review of the management plan. While there are no resource sustainability restraints that may warrant limited entry (i.e., cast kelp is already detached and dead – cutting of any live endemic marine plant is prohibited), orderly harvest and limiting competition for limited quantities of cast kelp may require limited entry and this is something that DPIPWE is actively monitoring.  . |
| 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. | **Partially meets – Licence conditions are designed to minimise spread of exotic species to other areas, but there are no mechanisms to report TEP and TEC interactions**  The fishery is not likely to have a significant impact on the wider marine ecosystem as the harvest of native species is limited to beach-cast marine plants.  The submission indicates that since logbooks were introduced in 2017, DPIPWE has used collected data to inform management decisions with the aim of avoiding or minimising adverse impacts to the environment (DPIPWE has not granted any additional kelp harvest licences since the plan’s introduction). Analysis of the data by DPIPWE does not support increased activity at this stage with competition for the resource strong and the harvest remaining stable.  Although not directly relevant to this assessment, the harvest of exotic species, including the introduced and invasive *Undaria* pinnatifida *(wakame)* using dive gear may inadvertently assist dispersal of exotic marine plants. Licence conditions and educational material have been produced and are readily available to minimise the spread of exotic species to other marine areas.  Lack of a reporting mechanism for bycatch or interactions with threatened, endangered and protected species (TEPS) and threatened ecological communities (TECs), and the lack of educational material available to fishers on this matter, reduce any accurate assessment or monitoring. This has been addressed in the proposed conditions in section 2 of this report. |
| Requires compliance with relevant threat abatement plans, recovery plans, the National Policy on Fisheries Bycatch, and bycatch action strategies developed under the policy. | **Meets - compliant with all relevant plans, strategies and policies**  The management arrangements detailed in the submission have been checked against and found to be compliant with the following relevant Commonwealth plans, strategies and policies:   * [Conservation advice - *Thinornis rubricollis rubricollis*](http://www.environment.gov.au/biodiversity/threatened/species/pubs/66726-conservation-advice.pdf) (Hooded plover – eastern) * [National Recovery Plan for the Orange-Bellied Parrot](http://www.environment.gov.au/biodiversity/threatened/recovery-plans/orange-bellied-parrot-2016) (*Neophema chrysogaster*) * [Recovery Plan for Marine Turtles in Australia](http://www.environment.gov.au/marine/publications/recovery-plan-marine-turtles-australia-2017)(This assessment particularly relates to *Dermochelys coriacea* – Leatherback Turtle) * [National Policy on Fisheries Bycatch](https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/fisheries/environment/bycatch/national-bycatch-policy-1999.pdf).   There are no such plans for the listed Red-Capped Plover (*Charadrius ruficapillus*), Ruddy Turnstone (*Arenaria interpres),* Sanderling (*Calidris Alba*) and fairy terns (*Sternula nereis)* which may also be present at some harvest sites, and no such bycatch action strategy developed under the policy.  Although the Orange-Bellied Parrot (listed under the EPBC Act as critically endangered) does not breed in or near any of the harvest areas the species is known to undertake its annual migrations between south-east mainland Australia and Tasmania’s far south west. There is some evidence to suggest that individuals may stop briefly in wetland, coastal heath and saltmarsh communities on King Island or on the Tasmania’s coast, during both the northward migration (~April) and the southward migration (~October). The species is known to be sensitive to noise disturbance which can interrupt feeding cause individuals to flush to cover. The species is known to be sensitive to noise disturbance which can interrupt feeding and cause individuals to flush to cover. It is unknown what frequency of disturbance will create energetic stress for birds or lead to abandonment of a site ([National Recovery Plan for the Orange-Bellied Parrot](http://www.environment.gov.au/biodiversity/threatened/recovery-plans/orange-bellied-parrot-2016), p.12).  Given the management practices in force on King Island, including area restrictions and seasonal closures, it is considered unlikely that beach access activities would have a significant impact – either directly or indirectly – on Orange-Bellied parrots. Nonetheless, because the beach closures do not include autumn, during which some birds have been recording as stopping at King Island during their northward migration (Holdsworth 2006), a proposed condition is included in section 2 of this report requiring DPIPWE and processing plant operators to enforce mandatory reporting of any interaction as well as generate and make available educational material on the possibility of interactions with Orange-Bellied Parrots and other protected species or ecological communities. |

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| **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**.** | |
| **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. | |
| ***Information requirements*** | |
| ***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. | **Partially Meets – there is a reliable fishery-dependent information collection system, however there is minimal and non-continuous fishery-independent monitoring**  The submission indicates that the fishery has a reliable information collection system in place following the introduction of mandatory logbook reporting under the revised management arrangements in 2017. Logbook reports include the amounts of marine plants harvested each day as well as the area where the harvest took place. Since implementation this information has been used to inform management arrangements in the fishery. Data collected by DPIPWE to date has not supported increased activity in the fishery with competition for the resource strong and the harvest remaining stable.  With the exception of a pre-harvest biomass assessment performed by the landowner during the application process for harvest in a new area, there is no independent monitoring or research into stock levels. No application to harvest elsewhere on the mainland has been made since 2017, and licences are already capped in some areas to ensure stock sustainability. |
| ***Assessment*** | |
| ***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. | **Not applicable**  The submission states that native target species are harvested as dead beach cast wrack which have independently become detached from the ocean substrate by natural events and washed ashore by wave action. Harvest of deceased beach-cast specimens does not directly impact on living communities of the target species. |
| ***1.1.3*** The distribution and spatial structure of the stock(s) has been established and factored into management responses*.* | **Not applicable**  See 1.1.2 above. |
| ***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. | **Not applicable**  The submission states that mandatory logbook reports are required to include the species and amounts of marine plants harvested each day as well as the area they were harvested from and the time taken to undertake the harvest. Logbooks provide an estimate of all commercial removals and how these may change over time. These estimates are not factored into stock assessments and target species catch levels for the reasons outlined in 1.1.2 above. However, they have been used to support a Ministerial guideline capping the number of licences in the north west of the State until the Department is satisfied that it would be appropriate to issue more licences.  Currently, no data is collected concerning harvest by the recreational sector or by First Nations people. DPIPWE has stated that any attempt to quantify the harvest of marine plants for traditional uses (as authorised under the LMRMA) would require some level of regulation that would be strongly resisted by the community. It is also considered that the level of harvest activity for these purposes would be negligible. |
| ***1.1.5*** There is a sound estimate of the potential productivity of the fished stock/s and the proportion that could be harvested. | **Not applicable**  See 1.1.2 above. |
| ***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. | **Not applicable**  See 1.1.2 above. |
| ***1.1.7*** There are management strategies in place capable of controlling the level of take. | **Meets – appropriate and effective management strategies are in place.**  Harvest controls measures mentioned in the assessment of the management regime above are considered capable of controlling the level of commercial harvest. |
| ***1.1.8*** Fishing is conducted in a manner that does not threaten stocks of byproduct species. | **Meets – harvest methods pose a very low risk to byproduct species**  While there is currently no mechanism for reporting byproduct covered by the management plan, the risk to byproduct species stocks is considered negligible as the harvest of beach cast marine plants is selective and undertaken manually (hand collection). |
| (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 and precautionary management actions, has a high chance of achieving the objective. | **Meets – the management response is considered to have a high likelihood of achieving the objective**  The management regime addresses issues concerning data collection and orderly harvest of marine plants and has a high chance of achieving the objective. Some improvement could be made regarding fishery-independent monitoring of harvest levels, the take of byproduct, interactions with TEPS and TECs. These concerns have been captured in the conditions. |
| **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**  No precautionary recovery strategy is required as stocks are assessed as sustainable. |
| ***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**  The fished stock is not considered to be at or below the biological and/or effort bottom line. |
| **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. | **Does not meet – there is no information collected regarding bycatch composition and abundance in the fishery**  Beach wrack is an important habitat for macrofauna such as amphipods and larvae, which are important food items for shore- and migratory birds (Kirkman & Kendrick 1997; PIRSA 2014). It is also a place of refuge for flightless chicks when distressed by local disturbances (PIRSA 2014). Any interaction with flightless chicks or eggs would require reporting as an interaction with a TEPS. While the management measures in place reduce the risk of collection of non-target bycatch species, there is no current requirement to record bycatch in logbooks. A proposed condition has been included in section 2 of this report requiring DPIPWE to introduce bycatch reporting to logbooks by January 2022. | |
| ***Assessments*** | | |
| ***2.1.2*** There is a risk analysis of the bycatch with respect to its vulnerability to fishing. | **Not applicable**  A risk analysis for bycatch has previously been considered unnecessary because of the low risk (see 2.1.1). | |
| ***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 - measures are in place to avoid capture and mortality of bycatch species**  The management arrangements detailed in the submission include measures such as hand-collection harvest methods, licence conditions (including beach closure periods) and harvesting quotas to minimise any impacts on any non-target species. | |
| ***2.1.4*** An indicator group of bycatch species is monitored. | **Not applicable**  Monitoring of indicator group of bycatch species is not required as the harvest is restricted to the hand collection of native beach cast marine plant species which limits the risk of incidental take of non-target species. | |
| ***2.1.5*** There are decision rules that trigger additional management measures when there are significant perturbations in the indicator species numbers*.* | **Not applicable**  The submission indicates that bycatch and byproducts are not recorded because the majority of harvest concerns the hand collection of beach cast marine plants (>99% in 2019/2020 licencing year). Due to the selective harvest method used, the likelihood of collection of non-target (bycatch and byproduct) is considered low. | |
| ***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 is considered to have a high likelihood of achieving the objective**  Given the available information the management regime has a high chance of achieving the objective to conduct the fishery in a manner that does not threaten bycatch species | |
| **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. | **Does not meet - no formal reporting system in place to record any interactions that may occur**  While the risk of interactions with beach nesting and migratory seabirds is considered low due to mitigation strategies in place under the management regime as detailed in the submission, there is currently no reporting system in place to record any interactions that may occur. Government authorities and private landowners assess the application to harvest prior to granting a land access permit to the proposed harvesting area. Past licence applications to Tasmanian government and private landowners has led to the finding of the presence of protected species and led to stricter conditions being enforced on harvesting licences to minimise any risk of interaction.  DPIPWE provides financial and ‘in kind’ support to Birdlife Tasmania to undertake coastal bird surveys (mainly in the north-west of Tasmania). The results are incorporated into the Natural Values Atlas to assist in decision making. However, there is no indication that licence holders are required to report interactions during the process of harvesting. or of educational material being provided to applicants to inform accurate understanding of possible interactions.  The activities undertaken by the fishery also have a probability of overlap with Subtropical and Temperature Coastal Saltmarsh threatened ecological communities (TECs). Nonetheless, the fishery has no information collection system in place in relation to interactions with TECs, nor any educational material provided to operators or harvesters.  Proposed conditions have been included in section 2 of this report to address these concerns. | |
| ***Assessments*** | | |
| ***2.2.2*** There is an assessment of the impact of the fishery on endangered, threatened or protected species. | **Partially meets – while no formal risk assessment has been completed DPIPWE supports a number of beach nesting and migratory shorebird surveys, and the pre-application biomass assessment has proved to be an effective tool in informing mitigation strategies**  The submission does not detail any formal risk assessment of the impact of the operation of the fishery on TEPS or TECs.  The submission made in response to the request for public comment highlighted the possibility impact of the fishery at a number of harvest locations on breeding populations of the following species:   * Fairy Terns (listed as vulnerable, and included as a listed marine species under the EPBC Act), and; * Hooded Plover (listed as vulnerable, and included as a listed Marine species under the EPBC Act)   and non-breeding populations of the following species:   * Red-necked Stint, (included as a listed marine and migratory species under the EPBC Act) * Ruddy Turnstone, (included as a listed marine and migratory species under the EPBC Act) * Double-banded Plover (included as a listed marine and migratory species under the EPBC Act) * Sanderlings (included as a listed marine and migratory species under the EPBC Act), and; * Curlew Sandpiper (listed as critically endangered under the EPBC Act)   The public comment submission highlighted the possible presence of migrating Orange-Bellied Parrots (listed as critically endangered under the EPBC Act) on King Island and on coastal margins of the Arthur Pieman Conservation Area.  Being aware of the potential for interactions, both DPIWE and the operators have actively monitored for impacts on listed shorebird species on King Island in consultation with Birdlife Tasmania.  Land managers (i.e. the Tasmanian government) undertake assessments for potential impacts prior to the approval of any new harvesting operations. In the past, this has justified the reduction of approved harvest areas and the enforcement of strict licence conditions to minimise impacts on protected species. | |
| ***2.2.3*** There is an assessment of the impact of the fishery on threatened ecological communities. | **Partially Meets – harvest of dead beach cast seaweed is not considered part of the Giant Kelp TEC. Potential interactions with Subtropical and Temperate Coastal Saltmarsh TECs is minimised by the strict regulation of access routes to harvest sites**  The Giant Kelp Marine Forests of South East Australia threatened ecological community (see link in Notes section) is listed as endangered under the EPBC Act. Giant kelp (*Macrocystis pyrifera*) forests are located in the waters of south east Australia. While playing a key role in dispersal and possible recovery of populations Giant kelp plants that have detached from the substrata and washed ashore (wrack) are excluded from the definition of the ecological community and therefore do not trigger the need for referral under national environmental law (TSSC 2012). The management arrangements in place for the fishery prohibit the take of native specimens that are attached to the substrate or floating in the water.  The submission states that harvest of exotic species from the water or attached to the substrate is authorised under certain permits. This may pose a risk to indirect interactions with Giant Kelp Forests. In the 2019-2020 licensing year seven tonnes of exotic species were harvested, representing 0.65% of the total harvest. However, DPIPWE has stated that this harvest does not occur in areas where Giant Kelp Forest populations are known to occur.  Vehicular access to harvest sites may also pose a risk of interactions with the Subtropical and Temperate Coastal Saltmarsh TEC. While DPIPWE noted that this risk was low, due to fishers being required to adhere to strict access routes, there has been no comprehensive assessment of this risk across each harvest site. | |
| ***Management responses*** | | |
| ***2.2.4*** There are measures in place to avoid capture and/or mortality of endangered, threatened or protected species. | **Meets – there are appropriate and enforceable measures in place to avoid capture and/or mortality of endangered, threatened or protected species**  The management arrangements as detailed in the submission (including licence conditions and endorsements that restrict entry to each harvesting site during certain times of the year, limit harvest methods to hand collection only and restrict harvest quotas to 50% of available beach-cast plants at each site) minimise the risk of disturbance to nesting and foraging habitat for shorebirds and other species. Parts of the fishery may also be closed at specific times to restrict harvesting in specific areas to protect breeding populations of shorebirds. On King Island, the harvesting and transportation of kelp and/or equipment is prohibited from August to March (inclusive) on sandy beaches (except for areas where harvesting would not be detrimental to nesting hooded plovers). | |
| ***2.2.5*** There are measures in place to avoid impact on threatened ecological communities. | **Meets – defined access routes limit the potential risk to TECs**  DPIPWE advised in correspondence with the Department during the assessment of the submission that harvesters are required to adhere to established access provisions under their licence. Access routes are regulated by land managers to avoid impacts on sensitive ecological communities. | |
| ***2.2.6*** The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective. | **Partially meets – the management response has a medium chance of meeting the objective**  The management response has a medium chance of achieving the objective to conduct the fishery in a manner that avoids mortality of, or injuries to, TEPS and avoids or minimises impacts on TECs. Effective management decisions should be based on accurate and up-to-date information. It is important that DPIPWE collaborate with land managers and private landowners in relation to reporting TEPS interactions and implement suitable management actions as required. Proposed conditions have been included in section 2 of this report to further address these concerns. | |
| **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. | **Partially meets – while some information is collected it does not adequately cover the fishery’s impact of the ecosystem and environment generally**  There is a lack of publicly available information to adequately assess the fishery’s general impact on the ecosystem and environment. The submission indicates that the introduction of mandatory logbooks in the 2017 management plan has facilitated a better understanding of the distribution of commercial fisheries activity across all harvest sites and has shown that the level of commercial harvest has remained relatively stable.  The quantum of marine plants harvested by the recreational sector, by Aboriginal communities, and by local councils and government agencies is unknown, although considered negligible by DPIPWE. | |
| ***Assessment*** | | |
| **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.  1. Impacts on ecological communities  • Benthic communities  • Ecologically related, associated or dependent species  • Water column communities  2. Impacts on food chains  • Structure  • Productivity/flows  3. Impacts on the physical environment  • Physical habitat  • Water quality | **Partially meets – Information is collected but there is no formal risk assessment of the impact of the operation of the fishery**  The submission does not detail any formal risk assessment of the impact of the operation of the fishery has been conducted.  The land manager responsible for issuing the land access permit is required to undertake an assessment of the impacts of harvesting operations. This assessment is undertaken prior to harvesting, and requires licence holders to specify the area in which harvesting is to take place, and the target species to be taken. Government authorities have a standard process under which the application to harvest is assessed. DPIPWE considers the risk level, any impacts to natural or cultural assets and the environment, the control measures in place, and whether the action complies with legislation. They do so by consulting with other expert authorities, including the Coastal Conservations Natural and Cultural Heritage Division, as well as utilising data obtained by community-based monitoring through the publicly-accessible Natural Values Atlas.  The amounts harvested in each area is sporadic and varies according to the prevailing weather conditions. However, without identifying accurate shorebird numbers and their foraging or habitat needs, there is no certainty that the removal of any amount of plant material will not have a detrimental impact on species, ecological communities, the food chain, or the physical environment. It is for this reason that conditions have been added to improve the operators’ and fishers’ understanding of TEPS and TECs, as well as mandate reporting of any interactions. Proposed conditions have been included in section 2 of this report to address these concerns. | |
| ***Management responses*** | | |
| ***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. | **Meets – appropriate management actions are in place**  Management actions in place for the fishery as described in the submission (including the pre-harvesting assessments by land managers and the closure of parts of the fishery during certain breeding seasons) have the capacity to minimise the impacts described in 2.3.1. The ongoing support of shorebird surveys and the Ministerial Guideline limiting further licences in the North-West of the mainland are both effective mechanisms for minimising the risk of significant damage to ecosystems.  Proposed conditions have been included in section 2 of this report to improve the reporting of potential interactions with TEPS and TECs. se concerns. However, it is important that DPIPWE implement ongoing monitoring of activities and introduce mandatory reporting of TEPS and TECs interactions. | |
| ***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. | **Not applicable**  The submission does not indicate that there are any decision rules in place, although given the scale of the fishery, it is likely that the management arrangements detailed in the submission will reduce the risk of any significant impacts from fishing activities. | |
| ***2.3.5*** The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective. | **Partially meets – the management response has a medium chance of meeting the objective**  The management regime has a medium chance of achieving the objective of conducting the fishery in a manner that minimises the impact of fishing operations on the ecosystem generally. | |

# SECTION 4: ASSESSMENT AGAINST THE EPBC ACT

The table below is not a complete or exact representation of the EPBC Act. It is intended to show that the relevant sections and components of the EPBC Act have been taken into account in the formulation of advice on the fishery in relation to decisions under Part 13A.

## Part 12 – Identifying and monitoring biodiversity and making bioregional plans

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| **Section 176 Bioregional Plans** | **Comment** |
| (5) Minister must have regard to relevant bioregional plans | **Not applicable**  There is no Marine Bioregional Plan for the South-east Marine Region in which the Tasmanian Marine Plant Fishery (the fishery) operates. |

## Part 13A – International movement of wildlife specimens

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| **Section 303BA Objects of Part 13A** | **Comment** |
| The objects of this Part are as follows:  (a) to ensure that Australia complies with its obligations under CITES and the Biodiversity Convention;  (b) to protect wildlife that may be adversely affected by trade;  (c) to promote the conservation of biodiversity in Australia and other countries;  (d) to ensure that any commercial utilisation of Australian native wildlife for the purposes of export is managed in an ecologically sustainable way;  (e) to promote the humane treatment of wildlife;  (f) to ensure ethical conduct during any research associated with the utilisation of wildlife; and  (h) to ensure the precautionary principle is taken into account in making decisions relating to the utilisation of wildlife | The management arrangements for the Tasmanian Marine Plant Fishery have been assessed as not inconsistent with the general guidance provided in the objects of Part 13A as:   * 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 (see Section 3) * the operation of the Tasmanian Marine Plant Fishery is unlikely to be unsustainable and threaten biodiversity within the next three years, and * the Environment Protection and Biodiversity Conservation Regulations 2000 do not specify marine plants in relation to the welfare of live specimens. |
| **Section 303 CG Minister may issue permits (CITES species)** | Comment |
| (3) The Minister must not issue a permit unless the Minister is satisfied that:  (a) the action or actions specified in the permit will not be detrimental to, or contribute to trade which is detrimental to:  (i) the survival of any taxon to which the specimen belongs; or  (ii) the recovery in nature of any taxon to which the specimen belongs; or  (iii) any relevant ecosystem (for example, detriment to habitat or biodiversity); and | **Not applicable**  The fishery does not harvest any CITES-listed species. |
| **Section 303DC Minister may amend list (non CITES species)** | **Comment** |
| (1) The Minister may, by legislative instrument, amend the list referred to in section 303DB [list of exempt native specimens] by:  (a) doing any of the following:  (i) including items in the list;  (ii) deleting items from the list;  (iii) imposing a condition or restriction to which the inclusion of a specimen in the list is subject;  (iv) varying or revoking a condition or restriction to which the inclusion of a specimen in the list is subject; or  (b) correcting an inaccuracy or updating the name of a species. | The existing listing for the fishery on the list of exempt native specimens allows the export of the specimen, or the fish or invertebrate from which it is derived, (as long as it) was taken lawfully; and the specimens are covered by the declaration of an approved Wildlife Trade Operation under section 303FN of the Act in relation to the fishery.  If the fishery is granted approval as a Wildlife Trade Operation the listing will not need to be amended. |

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| **Section 303FN Approved wildlife trade operation** | **Comment** |
| (3) The Minister must not declare an operation as an approved wildlife trade operation unless the Minister is **satisfied** that:  (a) the operation is consistent with the objects of Part 13A of the Act; and  (b) the operation will not be detrimental to:  i. the survival of a taxon to which the operation relates; or  ii. the conservation status of a taxon to which the operation relates; and  (ba) the operation will not be likely to threaten any relevant ecosystem including (but not limited to) any habitat or biodiversity; and | **Meets**  The operation of the fishery is consistent with the Objects of Part 13A.  The operation of the Tasmanian Marine Plant Fishery is unlikely to be detrimental to the survival or conservation status of a taxon to which it relates, nor is it likely to threaten any relevant ecosystem, within the next 3 years, given the management measures in place, including licence caps, gear restrictions, mandatory logbooks, pre-harvest land assessments, harvest limits of 50% of available biomass and both area and seasonal closures. Proposed conditions have been included in this assessment to further mitigate any risks to habitat or biodiversity. |
| (c) if the operation relates to the taking of live specimens that belong to a taxon specified in the regulations – the conditions that, under the regulations, are applicable to the welfare of the specimens are likely to be complied with; and | **Not applicable**  The submission states that native plant material harvested in the fishery is dead or decaying at the time of harvesting.  The Environment Protection and Biodiversity Conservation Regulations 2000 (EPBC Regulations) do not specify marine plants in relation to the welfare of live specimens. |
| (d) such other conditions (if any) as are specified in the regulations have been, or are likely to be, satisfied. | **Not applicable**  No other conditions are specified in relation to commercial fisheries in the EPBC Regulations. |
| (4) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have **regard** to:  (a) the significance of the impact of the operation on an ecosystem (for example, an impact on habitat or biodiversity); and | **Meets**  The fishery is unlikely to have a significant impact on any relevant ecosystem within the next 3 years, given the management measures currently in place, which include the arrangements described above at s303FN 3(b). |
| (b) the effectiveness of the management arrangements for the operation (including monitoring procedures). | **Meets**  The management arrangements that will be employed for the Tasmanian Marine Plant Fishery as outlined in in the assessment against the Guidelines (above), are likely to be effective. |
| (5) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have **regard** to:  (a) whether legislation relating to the protection, conservation or management of the specimens to which the operation relates is in force in the State or Territory concerned; and  (b) whether the legislation applies throughout the State or Territory concerned; and  (c) whether, in the opinion of the Minister, the legislation is effective. | **Meets**  The fishery will be managed according to the *Fisheries (Marine Plant) Rules 2017* (Tas), in force under the *Living Marine Resources Management Act 1995* (Tas).  The Act under which the fishery is managedapplies throughout Tasmanian waters.  The Department considers that the legislation is likely to be effective. |
| (10) For the purposes of section 303FN, an operation is a wildlife trade operation if, an only if, the operation is an operation for the taking of specimens and:   * the operation is a commercial fishery. | **Meets**  The Tasmanian Marine Plant Fishery is a commercial fishery. |

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| **Section 303FR Public consultation** | **Comment** |
| (1) Before making a declaration under section 303FN, the Minister must cause to be published on the Internet a notice:  (a) setting out the proposal to make the declaration; and  (b) setting out sufficient information to enable persons and organisations to consider adequately the merits of the proposal; and  (c) inviting persons and organisations to give the Minister, within the period specified in the notice, written comments about the proposal.  (2) A period specified in the notice must not be shorter than 20 business days after the date on which the notice was published on the Internet.  (3) In making a decision about whether to make a declaration under section 303FN, the Minister must consider any comments about the proposal to make the declaration that were given in response to the invitation in the notice. | **Meets**  A public notice, which set out the proposal to declare the Tasmanian Marine Plant Fishery as an approved wildlife trade operation and included the application from the Tasmanian Department of Primary Industries, Parks and Water (DPIPWE), was released for public comment from 2 October 2020 to 4 November 2020 a total of 23 business days.  One public comment was received on the submission which raised the following issues:   * potential for interactions with and impacts on threatened, endangered and protected species (TEPS) and threatened ecological communities (TECs), * the need for better compliance and public and operator awareness of coastal ecosystems.   The Department has considered the public comments received on the submission included proposed conditions included in Section 2 of this assessment to address these concerns. The Department is satisfied that DPIPWE have appropriately addressed the issues raised by the public comment process, or will do so during the life of the wildlife trade operation, should it be approved. |

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| **Section 303FT Additional provisions relating to declarations** | **Comments** |
| (1) This section applies to a declaration made under section 303FN, 303FO or 303FP. | **Meets**  A declaration for the Tasmanian Marine Plant Fishery will be made under section 303FN. |
| (4) The Minister may make a declaration about a plan or operation even though he or she considers that the plan or operation should be the subject of the declaration only:   1. during a particular period; or 2. while certain circumstances exist; or 3. while a certain condition is complied with.   In such a case, the instrument of declaration is to specify the period, circumstances or condition. | **Meets**  The standard conditions applied to commercial fishery wildlife trade operations include:   * operation in accordance with the management regime * notifying the Department of changes to the management regime, and * annual reporting in accordance with the *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition.*   The wildlife trade operation instrument for the Tasmanian Marine Plant Fishery specifies the standard and additional conditions applied. |
| (8) A condition may relate to reporting or monitoring. | **Meets**  One of the standard conditions relates to reporting. |
| (9) The Minister must, by instrument published in the *Gazette*, revoke a declaration if he or she is satisfied that a condition of the declaration has been contravened. | **Noted** |
| (11) A copy of an instrument under section 303FN,or this section is to be made available for inspection on the internet. | **Meets**  The instrument made under sections 303FN and the conditions under section 303FT will be registered as a notifiable instrument and made available through the Department’s website. |

## Part 16 – Precautionary principle and other considerations in making decisions

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| **Section 391 Minister must consider precautionary principle in making decisions** | **Comment** |
| (1) Minister must take account of the precautionary principle in making a decision, to the extent that the decision is consistent with other provisions under this Act.  (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 where there are threats of serious or irreversible environmental damage. | **Meets**  The assessment has identified a range of issues that require attention by DPIPWE. The conditions proposed for inclusion on Part 13A approvals are designed to address these issues and represent a precautionary approach to the management of environmental uncertainty and risk. The management regime, when supported by these conditions should be enough to prevent serious or irreversible environmental damage being caused by this fishery. |

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