****

Assessment of the

###### WESTERN AUSTRALIAN

###### WEST COAST ROCK LOBSTER MANAGED FISHERY

May 2015

© Copyright Commonwealth of Australia, 2015.



*Assessment of the Western Australian West Coast Rock Lobster Managed Fishery May 2015* 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 Western Australian West Coast Rock Lobster Managed Fishery May 2015*, Commonwealth of Australia 2015’.

**Disclaimer**

This document is an assessment carried out by the Department of 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 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 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

**Table 1: Summary of the Western Australian (WA) West Coast Rock Lobster Managed Fishery 1**

Table 1 contains a brief overview of the operation of the fishery, including: the gear used, species targeted, byproduct species, bycatch species, annual catch, management regime and ecosystem impacts.

**Table 2: Progress in implementation of conditions and recommendations made in the 2013 assessment of the** **WA West Coast Rock Lobster Managed Fishery 1**

Table 2 contains an update on the progress that has been made by the WA Department of Fisheries in implementing the conditions and recommendations made in the 2013 assessment.

**Table 3: The Department of the Environment’s assessment of the WA West Coast Rock Lobster Managed Fishery against the requirements of the EPBC Act related to decisions made under Part 13 and Part 13A. 1**

Table 3 contains the Department’s assessment of the fishery’s management arrangements against all the relevant parts of the *Environment Protection and Biodiversity Conservation Act 1999* that the delegate must consider before making a decision.

**The Department of the Environment’s final conditions and recommendations to the WA Department of Fisheries for the WA West Coast Rock Lobster Managed Fishery 1**

This section contains the Department’s assessment of the fishery’sperformance against the Australian Government’s *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition* and outlines the reasons the Department recommends that the fishery be declared an approved wildlife trade operation.

**Table 4: The WA West Coast Rock Lobster Managed Fishery Assessment – Summary of Issues, Conditions and Recommendations May 2015 1**

Table 4 contains a description of the issues identified by the Department with the current management regime for the fishery and outlines the proposed conditons and recommendations that would form part of the delegate’s decision to declare the fishery an approved wildlife trade operation.

**References 36**

# Table 1: Summary of the western Australian (WA) west coast rock lobster managed fishery

|  |  |  |
| --- | --- | --- |
| **Key documents relevant to the fishery** | * WA *Fish Resources Management Act 1994* * WA Fish Resources Management Regulations 1995 * West Coast Rock Lobster Managed Fishery Management Plan 2012 * West Coast Rock Lobster Harvest Strategy and Control Rules  2014-2019 * West Coast Rock Lobster Fishery Ecological Risk Assessment 2013 * Western Rock Lobster Fishery Environmental Management Strategy, November 2010 – October 2015 * Marine Stewardship Council Assessment: The Western Australia Rock Lobster Fishery, March 2012 * WA *State of the Fisheries and Aquatic Resources Reports* 2011-12 to 2013-14 * WA Department of Fisheries' Application to the Department of the Environment on the Western Rock Lobster Fishery, March 2015 * West Coast Rock Lobster Managed Fishery Responsible Code of Practice for Reducing Whale Entanglements 2013 * Marine Bioregional Plan for the North-west Marine Region 2012 * Marine Bioregional Plan for the South-west Marine Region 2012 | |
| **Area** | The WA West Coast Rock Lobster Managed Fishery operates in WA and Commonwealth waters between North West Cape (Exmouth Gulf) and Cape Leeuwin (from 34°24'S to 21°44'S).  The fishery is managed by the WA government under an Offshore Constitutional Settlement arrangement that concedes management responsibility to WA to the outer edge of the Australian fishing zone.  Part of the fishery’s operation occurs in the North-west and South-west Marine Regions. The western rock lobster is noted as a key ecological feature in the South-west Marine Region. | |
|  | http://www.fish.wa.gov.au/PublishingImages/Maps%20and%20graphs/zones.png | **Figure 1:** Management boundaries of the WA West Coast Rock Lobster Managed Fishery (Source: WA Department of Fisheries, 2001). |
| **Target species** | Western rock lobster (*Panulirus cygnus*).  Western rock lobster is a highly productive species that reaches a maximum age of more than 20 years, attains a maximum carapace length of 200 millimetres (mm) and a maximum weight of 4.5 kilograms, although growth rates vary considerably along the coast.  The species is endemic to the west coast of Australia and has greatest abundance between Geraldton and Perth. After the breeding season, planktonic larvae are carried into the Indian Ocean up to 1,500 kilometres from the coast. The return of puerulus (post-larval stage, resembling fully formed miniature adults, carapace length to 8 mm) to the continental shelf is dependent on the strength of the Leeuwin Current, winter/spring westerly wind strength and water temperatures. Fluctuations in these environmental variables can significantly impact annual puerulus settlement rates. Juveniles then migrate from shallow to deeper water as they mature. | |
| **Fishery status** | The WA *State of the Fisheries and Aquatic Resources Report 2013-14* (de Lestang *et al*. 2014) describes western rock lobster as having 'adequate' spawning stocks. This assessment is based on a range of fishery and fishery-independent data and indicates that annual variations in stock size are due to environmental impacts rather than fishing pressure and that parental biomass is sufficient for ongoing successful spawning.  The fishery has a long-term scientific monitoring program that includes monthly sampling for post larval-stage lobsters (puerulus) settling on inshore reefs along the west coast, mainly between August and January each year. This puerulus settlement index reliably shows a strong correlation with catches of lobsters three and four years later. The current managed reduction in catch was made in response to detection of very low numbers of puerulus settling in 2008-09 and ongoing low levels of puerulus detected in subsequent years.  The main performance measure for the fishery is that the breeding stocks remain above 1980s pre-exploitation levels, based on indices of egg production. Fishing effort is further managed in accordance with the puerulus settlement index so that breeding stocks can be predictably maintained above this level for least five years into the future. This performance measure has been met since 2007. | |
| **Byproduct species** | The main byproduct taxa taken in the fishery are octopus (various species), when fishing in shallow water less than 40 metres (m) deep.  No retention of finfish is permitted, however a number of crustacean species can be retained as byproduct, including:   * snow crab (*Chaeceon bicolor*) * champagne crab (*Hypothalassia armata*) * giant crab (*Pseudocarcinus gigas*) | |
| **Gear** | All fishing is conducted with baited pots, consisting of a cage with an opening accessed through a funnel shaped net. Dimensions of pots, including neck sizes and escape gaps, are specified in Schedule 13 of the WA Fish Resources Management Regulations 1995.  The use of sea lion excluder devices (a rod inside the rock lobster pot secured to the base of the pot and rising vertically towards the neck) are mandatory for identified zones of the fishery in close proximity to Australian sea lion colonies. | |
| **Season** | The WA West Coast Rock Lobster Managed Fishery is open year round. For management purposes the fishing season commences on 15 January and closes on 14 January each year. | |
| **Commercial harvest** | Catch across the whole fishery has historically been close to 11,000 tonnes annually. However, with the introduction of catch limits and catch targets for each zone in 2009-10, total annual catch for the commercial fishery has been significantly reduced to less than 6, 000 tonnes (t).  In 2013, the total allowable commercial catch for western rock lobster was 5, 554 t ± 10%. Total landings were within this limit, at 5, 641 t.  Catch of octopus in 2013 was 0.009 octopus per pot lift in waters shallower than 40 m.  The total allowable commercial catch in 2014 was 5, 859 t ± 10%. Data on actual landings in 2014 is not yet available. | |
| **Value of commercial harvest** | The estimated price commercial fishers received for western rock lobster in 2013 was $48.02 per kilogram, leading to an overall commercial fishery value of $271 million. | |
| **Take by other sectors** | Commercial  Western rock lobster is a significant component of the catch in the Windy Harbour/Augusta sector of the WA South Coast Crustacean Fishery. There are only two licence holders in this fishery so catch data cannot be published. The average annual catch of western rock lobster in this sector between 2000-01 and 2010-11 was 16.3 t.  Recreational  The recreational catch of western rock lobster for 2012-13 was estimated at 128 t, with 95 t caught with pots and 24 t caught by hand.  The season for recreational fishing of rock lobsters starts on 15 November and concludes on 30 June each year. | |
| **Commercial licences issued** | Commercial fishing licences can be obtained by any fisher who holds quota in the fishery. The number of quota units in the fishery is fixed, with quota initially allocated to commercial fishers according to their share of pot entitlements at the time of transition from an effort controlled fishery to a quota management system in 2011.  Individual quota is fully transferable and accounts for all catch within the annually prescribed total allowable commercial catch. The total allowable catch in 2013 was fished by 251 vessels. | |
| **Management arrangements** | The fishery is managed under the *West Coast Rock Lobster Managed Fishery Management Plan 2012* and the WA *Fish Resources Management Act 1994*.  Management of the fishery is primarily through output controls, via the annual setting of a total allowable commercial catch, applied through individual transferable quota. Annual catch limits are set in accordance with the fishery’s *Harvest Strategy and Control Rules 2014-2019*.  Additional input controls include:   * zonal management (Zones A, B and C) * restrictions on pots (size, configuration and escape gaps) * minimum size limits   Management measures to reduce whale entanglements  In 2012, development began on a suite of measures to reduce rising entanglements of humpback whales in pot lines from the fishery. These measures were developed through collaboration between the fishing industry, the WA Department of Fisheries, the WA Department of Parks and Wildlife and the Australian Government Department of the Environment.  The additional measures were first adopted as a code of practice by the fishing industry in 2013. In 2014 the measures were refined and enforced through an amendment to the *West Coast Rock Lobster Managed Fishery Management Plan 2012.* The additional measures focus on operational practices to reduce the amount of slack line in the water, specifically by mandating the length of potlines according to water depth and specifying maximum soak times. The measures also prescribe float configurations and the proportion of line that must hang vertically in the water column (ie, through weighting).  Arrangements for recreational fishing The recreational sector is allocated 5 % of the total western rock lobster catch. This is managed through recreational fishing licences that describe spatial closures around marine conservation areas, minimum and maximum legal sizes, gear restrictions and a ban on night fishing in summer and winter months.  Recreational fisheries also have a daily bag limit of eight per person per day and 24 per boat per day, a pot limit of two pots per person and restrictions on pot sizes and size of escape gaps.  Marine bioregional planning Part of the fishery operates within the South-west and North-west Marine Regions. The western rock lobster is a key ecological feature in the South-west Marine Region. | |
| **Export** | The majority of product is exported to China, with some product also going to Hong Kong, Taiwan, Japan, the United States and Europe. | |
| **Bycatch** | Fishery independent monitoring has shown that bycatch in the fishery is minimal. A regulation in the fishery requires the mandatory use of escape gaps on pots which lowers the risk of taking bycatch. Commercial fishers were not permitted to retain incidentally caught finfish during 2013. | |
| **Interaction with Protected Species[[1]](#footnote-1)** | The WA West Coast Rock Lobster Managed Fishery has previously recorded interactions with Australian sea lions, marine turtles, humpback whales and southern right whales. The 2013 WA West Coast Rock Lobster Managed Fishery Ecological Risk Assessment and Environmental Management Strategy rates the fishery as posing a low-negligible risk to these species, as the level of the interactions is unlikely to significantly impact the population status of any of these taxa.  Whale entanglements:  Populations of baleen whales have been increasing in WA waters since the cessation of commercial whaling in the mid 1980s. This has coincided with an increase in the number of entanglements of these whales with fishing gear (Groom and Coughran 2012), as whales pass through fishing grounds during annual winter migrations between Antarctica and waters offshore of the Kimberley region. Humpback whales are the most common species entangled, with almost half of the 63 entanglements recorded between 1982 and 2010 being attributed to rock lobster fishing gear (Groom and Coughran 2012). Entanglement of baleen whales with fishing gear occurs in a number of other fisheries around the world and scientists consider that interactions between baleen whales and fisheries are likely to continue for the foreseeable future (Groom and Coughran 2012).  Between 1989 and 2010, the entanglement rate for whales in the WA West Coast Rock Lobster Managed Fishery was between zero and four per year (Groom and Coughran 2012). A fishery performance indicator over this time was that entanglement rates should not exceed this historic rate. Prior to 2011, this indicator was generally met.  In 2011, quota management arrangements were introduced into the fishery to improve harvest sustainability of the target species and to increase economic viability. These new arrangements included the phased removal of winter seasonal closures to rock lobster fishing, allowing fishers to have lobster pots in the water all year round by 2013. Following the introduction of this change in management arrangements, there was a sharp rise in whale entanglements, peaking at 18 entanglements in 2013, as humpback whales migrated through the active fishery over winter (see Table 1).  **Table 1: Number of entanglements in the WA West Coast Rock Lobster Managed Fishery from 2008 to 2014.**   |  |  | | --- | --- | | **Year** | **Entanglements** | | 2008 | 4 | | 2009 | 1 | | 2010 | 1 | | 2011 | 7 | | 2012 | 13 | | 2013 | 18 | | 2014 | 6 |   The change in management arrangements from 2011 coinciding with the sharp increase in whale entanglements in the fishery between 2010 and 2013 indicated that the temporal change in fishing effort was a significant factor in the increased entanglements. Around a third of entangled whales in any season are successfully disentangled by trained teams from the WA Department of Parks and Wildlife. The fate of whales that remain entangled is unknown. Research on right whales from the northern hemisphere found that whales that are unable to self-disentangle generally die within ten months (Moore *et al*. 2006).  As described above under ‘Management Arrangements’, a suite of measures to mitigate the risk of whale entanglements was adopted voluntarily by industry in 2013 and then enforced by amendment to the fishery’s management plan in 2014. Encouragingly, there were less entanglements in 2014 than in 2013, although the number was still higher than pre-2011 levels. The efficacy of the management measures to minimise entanglements will continue to be considered annually.  Australian sea lions  There have been no recorded interactions with Australian sea lions in the WA West Coast Rock Lobster Managed Fishery since the introduction of sea lion exclusion devices in 2006. These devices, a long blunt spike that prevents sea lions from getting their heads stuck inside pots they are attempting to rob, are required for both commercial and recreational rock lobster pots near Australian sea lion breeding colonies in the Abrolhos Islands region.  Turtles  Three leatherback turtles became entangled in potlines in the fishery in 2013. This is within the performance indicator for the fishery regarding turtle entanglements, where no more than the historical average (between two and five turtle interactions per season) should occur in the fishery. Many marine turtles entangled in the fishery are successfully released. | |
| **Ecosystem Impacts** | Due to the harvesting method used in the WA West Coast Rock Lobster Managed Fishery (traps), impacts to the physical ecosystem are considered to be low. The 2013 Environmental Risk Assessment of the fishery considered all identified potential ecological threats and concluded that the risks posed were all either low or negligible.  The Marine Bioregional Plans for the North-west and South-west Marine Regions 2012 have identified that there are key ecological features present in the area of the fishery (canyons, Ningaloo Reef, demersal fish communities, Exmouth Plateau, western rock lobster stock, Houtman Abrolhos Islands, eddies and an upwelling) which some are noted as also being of regional priority.  The Bioregional Plan for the North-west Marine Region 2012 notes that there are pressures in the area of the fishery from the harvesting of living resources, bycatch and physical habitat modification. The Bioregional Plan for the South-west Marine Region 2012 notes that there are pressures in the area of the fishery from chemical pollutants (from fishing vessels), physical habitat modification, harvesting of living resources, bycatch and oil pollution (from fishing vessels).  While noting these concerns, given the low impact harvesting method used in the fishery (pots) and the healthy status of target stocks, the Department considers that impacts to the physical ecosystem are likely to be low. | |

### Table 2: Progress in implementation of conditions and recommendations made in previous assessment of the Western Australian (WA) West Coast Rock Lobster Managed Fishery

| **Condition** | **Progress** | **Recommended Action** |
| --- | --- | --- |
| **Condition 1 (Part 13A)**  Operation of the fishery will be carried out in accordance with the WA West Coast Rock Lobster Managed Fishery management regime made under the WA *Fish Resources Management Act 1994.* | On 15 January 2013, the WA West Coast Rock Lobster Managed Fishery completed its transition from an input based total allowable effort system to an output based individual transferable quota management model. Under this new system, each individual fisher is allocated a discrete share of a total allowable commercial catch.  The fishery is now managed in accordance with the *West Coast Rock Lobster Managed Fishery Management Plan 2012*, the *Fish Resources Management Act 1994* and other relevant subsidiary legislation. | The Department of the Environment considers that this condition has been met.  The Department considers that a new approved wildlife trade operation declaration for the WA West Coast Rock Lobster Managed Fishery specify a similar condition (see **Condition 1, Table 4**). |
| **Condition 2 (Part 13A)**  The WA Department of Fisheries to advise the department of any intended material change to the WA West Coast Rock Lobster Managed Fishery legislated management plan and arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)decisions are made. | Amendments to the management arrangements were made in 2014 to mitigate the impact of the fishery on migrating whales. The WA Department of Fisheries developed these amendments transparently and in consultation with the Department of the Environment. | The Department considers that this condition has been met.  The Department considers that a new approved wildlife trade operation declaration for the WA West Coast Rock Lobster Managed Fishery specify a similar condition (see **Condition 2, Table 4**). |
| **Condition 3 (Part 13A)**  The WA Department of Fisheries, in its Annual State of the Fisheries Report, to report on the performance of the fishery against performance measures that relate to the sustainability of the fishery. | A report on the performance of the WA West Coast Rock Lobster Managed Fishery against its identified sustainability measures is included in the WA Department of Fisheries publication, the ‘Annual State of the Fisheries and Aquatic Resources’. This report is provided annually to the Department of the Environment. | The Department considers that this condition has been met.  The Department considers that a new approved wildlife trade operation declaration for the WA West Coast Rock Lobster Managed Fishery specify a similar condition (see **Condition 3, Table 4**). |
| **Condition A (Part 13):**  The WA Department of Fisheries to:  a) implement interim measures to reduce the risk of the fishery interacting with migrating whales in 2013, including through supporting the update of the WA West Coast Rock Lobster Managed Fishery Code of Practice For Reducing Whale Entanglements (the Code) | In May 2013, the Code was updated by the Western Rock Lobster Council, in collaboration with the WA Department of Fisheries and WA Department of Parks and Wildlife. Copies of the Code were made available to fishers electronically and through printed brochures. Officers from the WA Department of Fisheries and the Western Rock Lobster Council also gave presentations to fishers about the Code at annual meetings in 2013 at the six key ports in the fishery.  Additional interim measures in 2013 included the establishment of a Whale Entanglement Mitigation Taskforce by the WA Minister for Fisheries. The Taskforce has overseen the development and implementation of strategies to reduce entanglements since it commenced and maintains an ongoing role to review the efficacy of mitigation measures.  Also in 2013, the WA Department of Fisheries obtained tactical research funding from the Fisheries Research and Development Corporation (FRDC) for the project *“Cost benefit analysis of mitigation measures to reduce interactions between commercial fishing gear and whales”* (FRDC 2013/037) and commenced this project. | The Department considers that this part of Condition A has been met. |
| b) monitor and evaluate the uptake and effectiveness of interim measures, including robust validation and an analysis of the circumstances when entanglements do occur | Monitoring and evaluation of the uptake and effectiveness of the interim measures was conducted through direct research projects and consideration of the circumstances of entanglements that occurred over 2013. This included analysis of the specifics of the fishing gear, snag points around entangled whales, location of entanglements, water depth and time of year. | The Department considers that this part of Condition A has been met. |
| c) by 31 March 2014, complete a robust evaluation of longer term operational management measures to reduce the risk of whale entanglements, which could include the removal of some restrictions on western rock lobsters (such as removal of some size limits and removal of the restriction on keeping some pre-breeding females), spatial and seasonal closures and potential gear modifications | By the end of March 2014, the WA Department of Fisheries had undertaken a variety of activities to assess measures likely to be effective in reducing whale entanglements.  These included further analysis of the circumstances of whale entanglements, trials of modified fishing gear, ongoing satellite tracking of whales to better elucidate migration pathways and adjustments to size limits and harvest restrictions for western rock lobsters to maximise fishing efficiency during whale migrations.  Evaluation of the likely effectiveness of the mitigation measures considered the new information and the total number of entanglements in 2013. Advice on longer term mitigation measures to commence in 2014 was developed by the WA Department of Fisheries and endorsed by the Whale Entanglement Mitigation Taskforce. | The Department considers that this part of Condition A has been met. |
| d) taking account of the evaluation of the interim measures and the evaluation of longer term management arrangements, and in consultation with the department and the WA Department of Environment and Conservation, determine a suite of management measures to minimise the entanglements of whales before the 2015 migration season, and | A number of gear modification requirements were applied to the fishery during the 2014 humpback whale migration period. As described above, these measures were developed with consideration to preliminary research findings and in consultation with industry and relevant government agencies. The number of whale entanglements confirmed as being attributable to the West Coast Rock Lobster Managed Fishery declined from eighteen in 2013 to six in 2014.  The WA Department of Fisheries formed an Operational Whale Entanglement Reference Group in January 2015 to increase industry participation in reviewing the 2014 measures and refining the suite of measures for the 2015 humpback whale migration season. Recommendations from this group were made to the Whale Entanglement Mitigation Taskforce, who agreed on a final suite of measures in March 2015. The 2015 amendments require minor changes to gear configurations, which will encourage fishing in shallower areas where interactions with whales are less likely. | The Department considers that this part of Condition A has been met.  The Department considers that a new Part 13 accreditation for the WA West Coast Rock Lobster Managed Fishery specify a similar condition (see **Condition A, Table 4**). |
| e) in consultation with marine mammal experts, continue to monitor and review the adequacy of management measures to avoid mortality of, or injuries to whales. | The WA Department of Fisheries has consulted extensively with marine mammal experts. The WA Department of Parks and Wildlife, the Australian Antarctic Division and the Murdoch University Cetacean Unit have all been collaborators on the FRDC research projects described below in response to progress made against Recommendation 2. Rates of whale entanglement in the future will continue to be closely monitored and the Operational Whale Entanglement Reference and the Whale Entanglement Mitigation Taskforce will be convened as required to review the efficacy of mitigation measures and provide advice on further improvements. | The Department considers that this part of Condition A has been met.  The Department considers that a new Part 13 accreditation for the WA West Coast Rock Lobster Managed Fishery specify a similar condition (see **Condition A, Table 4**). |

| **Recommendation** | **Progress** | **Recommended Action** |
| --- | --- | --- |
| **Recommendation 1**  The WA Department of Fisheries to:   1. continue considering the outcomes of the most recent Ecological Risk Assessment review and other relevant fishery research projects in light of the new quota management arrangements, and | A full ecological risk assessment of the WA West Coast Rock Lobster Managed Fishery was undertaken in February 2013, in support of renewal of the Marine Stewardship Council accreditation of the fishery. The ecological risk assessment concluded that none of the threats identified constituted a high or medium risk, as such no new management response was required to reduce risk rankings. However, the results of the ecological risk assessment, along with research projects on puerulus settlement, were used to develop and refine the *West Coast Rock Lobster Harvest Strategy and Control Rules 2014-2019.* | The Department of the Environment considers that this part of Recommendation 1 has been met. |
| 1. adjust management arrangements as appropriate, including through updating the Environmental Management Strategy for the fishery. | Management arrangements for the fishery have been amended over 2013-2015 to mitigate the risk of entanglement for migrating humpback whales.  Updating of the Western Rock Lobster Fishery Environmental Management Strategy November 2010 – October 2015 to incorporate these amendments is currently underway and will be finalised during 2015. | The Department of the Environment considers that this part of Recommendation 1 has been met.  The Department considers that this issue is ongoing and should continue to be addressed (see **Condition A, Table 4**). |
| **Recommendation 2**  The WA Department of Fisheries to improve understanding of whale migration patterns and sites of whale entanglements as these relate to fishing effort in the fishery. | In early 2015, the WA Department of Fisheries completed a research project (FRDC 2013/037) on mitigation measures to reduce interactions between commercial fishing gear and whales, which included analysis of whale migration patterns and the sites of entanglements in the West Coast Rock Lobster Managed Fishery.  A further research project (FRDC 2014/004) is underway, that will further improve understanding of fine-scale spatial and temporal whale migration patterns and whale entanglement sites in the fishery. This project is due for completion in June 2016.  The WA Department of Fisheries, in collaboration with the WA Department of Parks and Wildlife, has also developed and launched a new app called Whale Sighting WA. Sightings from the public, the whale watching industry, the fishing industry and other users of WA coastal waters can be reported via smart phones, with all records of sightings recorded in the WA Department of Fisheries database. This will assist the WA Department of Fisheries and researchers learn more about whale movement patterns and inform further work to reduce the potential for entanglements with fishing gear. | The Department of the Environment notes that work to meet this recommendation is ongoing. |

###### Table 3: The Department of the Environment’s assessment of the Western Australian (WA) West Coast Rock Lobster Managed Fishery against the requirements of the EPBC Act related to decisions made under Part 13 and Part 13A.

**Please Note** – the table below is not a complete or exact representation of the EPBC Act. It is intended as a summary 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. A complete version of the EPBC Act can be found at http://www.comlaw.gov.au/.

**Part 13**

|  |  |
| --- | --- |
| **Division 1 Listed threatened species**  **Section 208A Minister may accredit plans or regimes** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) Minister may, by instrument in writing, accredit for the purposes of this Division:   1. a plan of management, or a policy, regime or any other arrangement, for a fishery that is:    1. made by a State or self-governing Territory; and    2. in force under a law of the State or self-governing Territory;   if **satisfied** that:   1. the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy 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; and    1. the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the survival or recovery in nature of the species. | The WA West Coast Rock Lobster Managed Fishery will be managed under the WA *West Coast Rock Lobster Managed Fishery Management Plan 2012* in force under the Western Australian Fish Resources Management Act 1994.  Reported interactions of the fishery with humpback whales (listed as vulnerable) increased between 2010 and 2013, peaking at eighteen humpback whales entangled in potlines from the fishery in 2013. A low level of entanglements with southern right whales (listed as endangered) has been ongoing in the fishery for a number of decades.  However, the department considers the actions taken by the WA Department of Fisheries in response to the rise in humpback whale interactions between 2010 and 2013 to be appropriate to reduce the risk of future interactions. These actions include working with industry to refine fishing practises to reduce the risk of interactions with these species, mandating key gear modifications in 2014 and 2015, committing to ongoing reviews of operational measures to minimise whale entanglements and undertaking research to identify improved management responses in the future. These measures are described above in Table 1 and in the application from the WA Department of Fisheries. Subject to these measures remaining in place, as required by proposed **Condition A** (Table 4), the Department considers that the fishery’s management plan requires persons fishing in accordance with the plan to take all reasonable steps to ensure listed threatened species are not killed or injured as a result of fishing.  The fishery has a low level of ongoing interactions with leatherback turtles (listed as endangered). The rate of interaction is typically less than four per year, which is within the fishery’s prescribed performance measure for interactions with turtles. A number of entangled turtles are successfully released.  The fishery has historically interacted with Australian sea lions (listed as vulnerable), with Australian sea lion pups reported drowning after becoming trapped in pots. However, since the introduction of sea lion exclusion devices in 2006, interactions in the fishery have been nil to low with no deaths reported.  Given the low numbers of interactions with marine turtles and the mitigation measures that have reduced interactions with Australian sea lions to negligible, the Department considers that fishers are taking all reasonable steps to ensure listed threatened species are not killed or injured as a result of fishing.  Given the current measures in place in the fishery, summarised above and in Table 1, the Department considers the current operation of the WA West Coast Rock Lobster Managed Fishery is not likely to adversely affect the survival or recovery in nature of any listed threatened species. |

**Part 13** *(cont.)*

|  |  |
| --- | --- |
| **Division 2 Migratory species**  **Section 222A Minister may accredit plans or regimes** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) Minister may, by instrument in writing, accredit for the purposes of this Division:   1. a plan of management, or a policy, regime or any other arrangement, for a fishery that is:    1. made by a State or self-governing Territory; and    2. in force under a law of the State or self-governing Territory;   if **satisfied** that:   1. the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that members of listed migratory species are not killed or injured as a result of the fishing; and    * 1. the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a listed migratory species or a population of that species. | The WA West Coast Rock Lobster Managed Fishery will be managed under the WA *West Coast Rock Lobster Managed Fishery Management Plan 2012* in force under the Western Australian Fish Resources Management Act 1994.  Reported interactions of the fishery with migrating humpback whales increased between 2010 and 2013, peaking at eighteen humpback whales entangled in potlines from the fishery in 2013. A low level of entanglements with migrating southern right whales has been ongoing in the fishery for a number of decades.  However, the department considers the actions taken by the WA Department of Fisheries in response to the rise in humpback whale interactions between 2010 and 2013 to be appropriate to reduce the risk of future interactions. These actions include working with industry to refine fishing practises to reduce the risk of interactions with these species, mandating key gear modifications in 2014 and 2015, committing to ongoing reviews of operational measures to minimise whale entanglements and undertaking research to identify improved management responses in the future. Subject to these measures remaining in place, as required by proposed **Condition A** (Table 4), the department considers that the fishery’s management plan requires persons fishing in accordance with the plan to take all reasonable steps to ensure listed migratory species are not killed or injured as a result of fishing.  The fishery has a low level of ongoing interactions with leatherback turtles. The rate of interaction is typically less than four per year, which is within the fishery’s prescribed performance measure for interactions with turtles. A number of entangled turtles are successfully released. Given the low number of interactions, the Department considers that fishers are taking all reasonable steps to ensure listed migratory species are not killed or injured as a result of fishing.  Given the current measures in place in the fishery, summarised above and in Table 1, the Department considers the current operation of the WA West Coast Rock Lobster Managed Fishery is not likely to adversely the conservation status of a listed migratory species or a population of that species. |

**Part 13** *(cont.)*

|  |  |
| --- | --- |
| **Division 3 Whales and other cetaceans**  **Section 245 Minister may accredit plans or regimes** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) Minister may, by instrument in writing, accredit for the purposes of this Division:   1. a plan of management, or a policy, regime or any other arrangement, for a fishery that is:    1. made by a State or self-governing Territory; and    2. in force under a law of the State or self-governing Territory;   if **satisfied** that:   1. the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that cetaceans are not killed or injured as a result of the fishing; and 2. the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a species of cetacean or a population of that species. | The WA West Coast Rock Lobster Managed Fishery will be managed under the WA *West Coast Rock Lobster Managed Fishery Management Plan 2012* in force under the Western Australian Fish Resources Management Act 1994.  Reported interactions of the fishery with migrating humpback whales increased between 2010 and 2013, peaking at eighteen humpback whales entangled in potlines from the fishery in 2013. A low level of entanglements with migrating southern right whales has been ongoing in the fishery for a number of decades.  However, the department considers the actions taken by the WA Department of Fisheries in response to the rise in humpback whale interactions between 2010 and 2013 to be appropriate to reduce the risk of future interactions. These actions include working with industry to refine fishing practises to reduce the risk of interactions with these species, mandating key gear modifications in 2014 and 2015, committing to ongoing reviews of operational measures to minimise whale entanglements and undertaking research to identify improved management responses in the future. Subject to these measures remaining in place, as required by proposed **Condition A** (Table 4), the department considers that the fishery’s management plan requires persons fishing in accordance with the plan to take all reasonable steps to ensure cetaceans are not killed or injured as a result of fishing.  Given the current measures in place in the fishery, summarised above and in Table 1, the Department considers the current operation of the WA West Coast Rock Lobster Managed 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** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) Minister may, by instrument in writing, accredit for the purposes of this Division:   1. a plan of management, or a policy, regime or any other arrangement, for a fishery that is:    1. made by a State or self-governing Territory; and    2. in force under a law of the State or self-governing Territory;   if **satisfied** that:   1. the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that members of listed marine species are not killed or injured as a result of the fishing; and 2. the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a listed marine species or a population of that species. | The WA West Coast Rock Lobster Managed Fishery will be managed under the WA *West Coast Rock Lobster Managed Fishery Management Plan 2012* in force under the Western Australian Fish Resources Management Act 1994.  The fishery has historically interacted with Australian sea lions, with sea lion pups reported drowning after becoming trapped in pots. However, since the introduction of sea lion exclusion devices in 2006, interactions in the fishery have been nil to low with no deaths reported. Given the effectiveness of this mitigation measure in reducing interactions with Australian sea lions, the Department considers that fishers are taking all reasonable steps to ensure listed marine species are not killed or injured as a result of fishing.  Given the current measures in place in the fishery, summarised above and in Table 1, the Department considers the current operation of the WA West Coast Rock Lobster Managed Fishery is not likely to adversely affect the conservation status of a listed marine species or a population of that species. |

**Part 13** *(cont.)*

|  |  |
| --- | --- |
| **Section 303AA Conditions relating to accreditation of plans, regimes and policies** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) This section applies to an accreditation of a plan, regime or policy under section 208A, 222A, 245 or 265. | The Department recommends that the management regime for the  WA West Coast Rock Lobster Managed 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 the plan, regime or policy should be accredited 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 accreditation is to specify the period, circumstances or condition. | To satisfy the requirements of section 208A, 222A, 245 and 265 the Department recommends that the WA West Coast Rock Lobster Managed Fishery be accredited under Part 13 subject to one condition that requires the Western Australian Department of Fisheries to:   1. maintain management measures clearly directed toward minimising the impact of fishing activity on migrating whales      1. continue to monitor and annually review the efficacy of management measures to avoid entanglement of whales, and 2. implement further mitigation measures to minimise entanglements, should whale entanglement rates increase.   The Part 13 instrument for the WA West Coast Rock Lobster Managed Fishery specifies this condition. |
| (7) The Minister must, in writing, revoke an accreditation if he or she is satisfied that a condition of the accreditation has been contravened. |  |

**Part 13A**

|  |
| --- |
| **Section 303BA Objects of Part 13A** |
| 1. The objects of this Part are as follows: 2. to ensure that Australia complies with its obligations under CITES[[2]](#footnote-2) and the Biodiversity Convention; 3. to protect wildlife that may be adversely affected by trade; 4. to promote the conservation of biodiversity in Australia and other countries; 5. to ensure that any commercial utilisation of Australian native wildlife for the purposes of export is managed in an ecologically sustainable way; 6. to promote the humane treatment of wildlife; 7. to ensure ethical conduct during any research associated with the utilisation of wildlife; and 8. to ensure the precautionary principle is taken into account in making decisions relating to the utilisation of wildlife. |

**Part 13A**

|  |  |
| --- | --- |
| **Section 303DC Minister may amend list** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) Minister may, by instrument published in the Gazette, amend the list referred to in section 303DB (list of exempt native specimens) by:   1. including items in the list; 2. deleting items from the list; or 3. imposing a condition or restriction to which the inclusion of a specimen in the list is subject; or 4. varying or revoking a condition or restriction to which the inclusion of a specimen in the list is subject; or 5. correcting an inaccuracy or updating the name of a species. | The Department recommends that specimens derived from species harvested in the WA West Coast Rock Lobster Managed Fishery, other than specimens that belong to species listed under Part 13 of the EPBC Act, be included in the list of exempt native specimens while the WA West Coast Rock Lobster Managed Fishery is subject to a declaration as an approved wildlife trade operation. |
| (1A) In deciding whether to amend the list referred to in section 303DB (list of exempt native specimens) to include a specimen derived from a commercial fishery, the Minister must rely primarily on the outcomes of any assessment in relation to the fishery carried out for the purposes of Division 1 or 2 of Part 10. | No assessment of the WA West Coast Rock Lobster Managed Fishery has been carried out under Part 10 of the EPBC Act. |
| (1C) The above does not limit the matters that may be taken into account in deciding whether to amend the list referred to in section 303DB (list of exempt native specimens) to include a specimen derived from a commercial fishery. | It is not possible to list exhaustively the factors that you may take into account in amending the list of exempt native specimens. The objects of Part 13A, which are set out above this table, provide general guidance in determining factors that might be taken into account. A matter that is relevant to determining whether an amendment to the list is consistent with those objects is likely to be a relevant factor.  The Department considers that the amendment of the list of exempt native specimens to include product taken in the WA West Coast Rock Lobster Managed Fishery wildlife trade operation would be consistent with the provisions of Part 13A (listed above) as:   * the fishery will not harvest any CITES listed species * there are management arrangements in place to ensure that the resource is being managed in an ecologically sustainable way (see Table 1) * the operation of the WA West Coast Rock Lobster Managed 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 crustaceans as a class of animal in relation to the welfare of live specimens. |
| (3) Before amending the list referred to in section 303DB (list of exempt native specimens), the Minister:   1. must consult such other Minister or Ministers as the Minister considers appropriate; and 2. must consult such other Minister or Ministers of each State and self-governing Territory as the Minster considers appropriate; and 3. may consult such other persons and organisations as the Minister considers appropriate. | The Department considers the consultation requirements have been met.  On 10 August 2004, the then Minister for the Environment and Heritage wrote to all fisheries ministers seeking their views on inclusion of product derived from commercial fisheries in the list of exempt native specimens, while subject to declaration as approved wildlife trade operations. Responses in support of the proposal were received from all state and territory fisheries ministers and the Commonwealth minister.  The application from the WA Department of Fisheries was released for public comment from 25 March 2015 to 5 May 2015. The public comment period sought comment on:   * the proposal to amend the list of exempt native specimens to include product derived from the fishery, and * the WA Department of Fisheries’ application for the fishery.   No comments were received. |
| (5) A copy of an instrument made under section 303DC is to be made available for inspection on the Internet. | The instrument for the WA West Coast Rock Lobster Managed Fishery made under section 303DC will be gazetted and made available through the Department’s website. |

|  |  |
| --- | --- |
| **Section 303FN Approved wildlife trade operation** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (2) The Minister may, by instrument published in the *Gazette*, declare that a specified wildlife trade operation is an ***approved wildlife trade operation*** for the purposes of this section. |  |
| (3) The Minister must not declare an operation as an approved wildlife trade operation unless the Minister is **satisfied** that:   1. the operation is consistent with the objects of Part 13A of the Act; and 2. the operation will not be detrimental to:    1. the survival of a taxon to which the operation relates; or    2. 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   1. 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 2. such other conditions (if any) as are specified in the regulations have been, or are likely to be, satisfied. | The Department considers that the operation of the WA West Coast Rock Lobster Managed Fishery is consistent with the objects of Part 13A (listed above) as:   * the fishery will not harvest any CITES listed species * there are management arrangements in place to ensure that the resource is being managed in an ecologically sustainable way (see Table 1) * the operation of the WA West Coast Rock Lobster Managed Fishery is unlikely to be unsustainable and threaten biodiversity within the next three years, and * the EPBC Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.   The Department considers that the WA West Coast Rock Lobster Managed Fishery will not be detrimental to the survival or conservation status of a taxon to which it relates, or any relevant ecosystem, within the next three years, given the management measures currently in place, which include:   * total allowable commercial catch limits * minimum legal size limits, and * vessel and gear restrictions.   The Environment Protection and Biodiversity Conservation Regulations 2000 (EPBC Regulations) do not specify crustaceans as a class of animal in relation to the welfare of live specimens.  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:   1. the significance of the impact of the operation on an ecosystem (for example, an impact on habitat or biodiversity); and 2. the effectiveness of the management arrangements for the operation (including monitoring procedures). | The Bioregional Plan for the North-west Marine Region has identified that there are pressures in the area of the fishery from the harvesting of living resources, bycatch and physical habitat modification. The Bioregional Plan for the South-west Marine Region has identified that there are pressures in the area of the fishery from chemical pollutants (from fishing vessels), physical habitat modification, harvesting of living resources, bycatch and oil pollution (from fishing vessels).  However, these pressures have been assessed as being ‘of potential concern’ only. The plans also note that these assessments are conservative in the context of active fisheries management, particularly when fisheries are managed at an ecosystem level, as in the WA West Coast Rock Lobster Managed Fishery.  While noting these concerns, given the low impact harvesting method used in the fishery (pots), impacts to the physical ecosystem are considered low. Therefore, the Department considers that the WA West Coast Rock Lobster Managed Fishery will not have a significant impact on any relevant ecosystem within the next three years given the management measures currently in place, which include restrictions on take of target stock and specific gear restrictions and modifications to minimise bycatch.  The Department considers that the management arrangements that will be employed for the WA West Coast Rock Lobster Managed Fishery, as outlined in Table 1, are likely to be effective. The target species is managed under total allowable catch quotas, which is informed by scientifically determined recommended biological catch limits, in accordance with the *West Coast Rock Lobster Fishery Harvest Strategy and Control Rules 2014-2019*. There are management strategies in place to mitigate the impact of the fishery on protected species and precautionary strategies to avoid overfishing, with statistically robust monitoring programs in place. |
| (5) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have **regard** to:   1. 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 2. whether the legislation applies throughout the State or Territory concerned; and 3. whether, in the opinion of the Minister, the legislation is effective. | The WA West Coast Rock Lobster Managed Fishery will be managed under the WA *West Coast Rock Lobster Managed Fishery Management Plan 2012*, the WA *Fish Resources Management Act 1994* and the WA Fish Resources Management Regulations 1995.  The WA *Fish Resources Management Act 1994* applies throughout WA waters.  After evaluation of the fishery management measures in place for this fishery, summarised in Table 1, the Department considers that the legislation enforcing these measures throughout the fishery 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:   1. the operation is a commercial fishery. | The WA West Coast Rock Lobster Managed Fishery is a commercial fishery. |

|  |  |
| --- | --- |
| **Section 303FR Public consultation** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) Before making a declaration under section 303FN, the Minister must cause to be published on the Internet a notice:   1. setting out the proposal to make the declaration; and 2. setting out sufficient information to enable persons and organisations to consider adequately the merits of the proposal; and 3. inviting persons and organisations to give the Minister, within the period specified in the notice, written comments about the proposal. | The Department considers that the consultation requirements of the EPBC Act for declaring a fishery an approved wildlife trade operation have been met. A public notice, which set out the proposal to declare the WA West Coast Rock Lobster Managed Fishery an approved wildlife trade operation and included the application from the WA Department of Fisheries, was released for public comment which closed on 5 May 2015 with no public comments received. |
| (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. | A public notice, which set out the proposal to declare the WA West Coast Rock Lobster Managed Fishery a wildlife trade operation and included the application from the WA Department of Fisheries was released for public comment on 25 March 2015 and closed on 5 May 2015, a total of 25 business days. |
| (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. | No public comments about the proposal were received. |

|  |  |
| --- | --- |
| **Section 303FT Additional provisions relating to declarations** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) This section applies to a declaration made under section 303FN, 303FO or 303FP. | A declaration for the WA West Coast Rock Lobster Managed 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. | 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 requirements of the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition.*   The wildlife trade operation declaration instrument for the WA West Coast Rock Lobster Managed Fishery specifies the standard conditions applied. |
| (8) A condition may relate to reporting or monitoring. | 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. |  |
| (11) A copy of an instrument under section 303FN,or this section is to be made available for inspection on the Internet. | The instrument for the WA West Coast Rock Lobster Managed Fishery made under section 303FN and the conditions under section 303FT will be gazetted and made available through the Department’s website. |

**Part 16**

|  |  |
| --- | --- |
| **Section 391 Minister must consider precautionary principle in making decisions** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (1) The Minister must take account of the precautionary principle in making a decision under section 303DC and/or section 303FN, to the extent he or she can do so consistently with the other provisions of 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. | The Department has accounted for the precautionary principle in the preparation of its advice. Recognising the potential risks to biodiversity from the operation of the WA West Coast Rock Lobster Managed Fishery, the WA Department of Fisheries has implemented precautionary management measures which reduce the risks of adverse impacts, for example through total allowable catch restrictions and gear restrictions. The fishery’s management plan and subsidiary documents set out performance indicators and trigger points against which the performance of the fishery is evaluated regularly. Performance against these indicators is published annually in WA’s State of the fisheries reports. |

**Part 12**

|  |  |
| --- | --- |
| **Section 176 Bioregional Plans** | **The Department’s assessment of the WA West Coast Rock Lobster Managed Fishery** |
| (5) Subject to this Act, the Minister must have regard to a bioregional plan in making any decision under this Act to which the plan is relevant. | The North-west and South-west Marine Bioregional Plans have been considered in the preparation of advice in relation to decisions under sections 303DC and 303FN.Extraction of living resources, bycatch, physical habitat modification and pollution from oil and chemicals have been identified as pressures operating within the marine bioregional planning areas in which the fishery operates.  In 2013, the Ecological Risk Assessment for the WA West Coast Rock Lobster Fishery considered all identified potential ecological threats to and from the fishery, including the pressures identified in the Marine Bioregional Plans. Under the management arrangements in place, including annually reviewed total allowable catch limits and gear restrictions to mitigate bycatch, and considering the harvesting method, each of the threats were assessed as ‘low’ to ‘negligible’. |

###### The Department of the Environment’s final conditions and recommendations to the Western Australian (WA) Department of Fisheries for the WA West Coast Rock Lobster Managed Fishery

The material submitted by the WA Department of Fisheries demonstrates that the management arrangements for the WA West Coast Rock Lobster Managed Fishery continue to meet most of the requirements of the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition.*

**Stock Status and Recovery**

The Department considers that overall the management regime for the WA West Coast Rock Lobster Managed Fishery aims to ensure that fishing is conducted in a manner that does not lead to over-fishing and the target species are not currently overfished.

Management measures in place in the fishery include:

* quota limits to restrict total allowable catch of target stocks to scientifically determined levels
* minimum size limits
* recreational gear and bag limits
* annual reviews of the performance of the fishery against indicators and performance measures.

**Ecosystem Impacts**

Taking into account the management measures described above and additional measures in place to reduce bycatch and mitigate against interactions with protected species (refer to Table 1), the Department considers that the management regime for the WA West Coast Rock Lobster Managed Fishery provides for fishing operations to be managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.

While acknowledging the progress made by the WA Department of Fisheries to address the outstanding risks associated with this fishery (refer to Table 2), the Department considers that the ongoing risk of entanglements with migrating humpback whales must continue to be actively managed to ensure that impacts are minimised.

The key challenge for this fishery therefore will be:

* ensuring that mitigation strategies to minimise whale entanglements remain effective, and
* ongoing research to improve understanding of whale migration patterns and sites of whale entanglements as these relate to fishing effort in the fishery.

The Department considers that, until it can be demonstrated that these issues have been adequately addressed, declaration of the harvest operations of the WA West Coast Rock Lobster Managed Fishery as an approved wildlife trade operation for three years, until 25 May 2018, is appropriate. The Department considers that the declaration should be subject to the conditions listed in Table 4. To contain and minimise the risks in the longer term the recommendations outlined in Table 4 have been made.

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

###### Table 4: Western Australian (WA) West Coast Rock Lobster Managed Fishery Assessment – Summary of Issues, Conditions and Recommendations – May 2015

| **Issue** | | **Part 13A Conditions** |
| --- | --- | --- |
| General Management  Export decisions relate to the arrangements in force at the time of the decision. To ensure that these decisions remain valid and export approval continues uninterrupted, the Department of the Environment 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. This includes operational and legislated amendments that may affect sustainability of the target species or negatively impact on byproduct, bycatch, protected species or the ecosystem. | | **Condition 1**  Operation of the fishery will be carried out in accordance withthemanagement regimeunder the WA *Fish Resources Management Act 1994* and the WA *Fish Resources Management Regulations 1995*.  **Condition 2**  The WA Department of Fisheries to inform the Department of the Environment of any intended material changes to the WA West Coast Rock Lobster Managed Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made. |
| Annual Reporting  It is important that reports be produced and presented to the Department annually in order for the performance of the fishery and progress in implementing the conditions and recommendations in this report and other managerial commitments to be monitored and assessed throughout the life of the declaration. 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, impacts of the fishery on the ecosystem in which it operates and progress in implementing the Department’s conditions and recommendations. Electronic copies of the guidelines are available from the Department’s website at <http://www.environment.gov.au/resource/guidelines-ecologically-sustainable-management-fisheries>  The Department acknowledges that the WA Department of Fisheries reports annually on the performance of WA fisheries in the publicly available *State of the fisheries* reports. | | **Condition 3**  The WA Department of Fisheries, in its annual *Status of the fisheries and aquatic resources of Western Australia* report, to report on the fishery against performance measures that relate to its sustainability. |
| **Issue** | | **Part 13 Condition** | | |
| * Interactions with migrating whales   Populations of baleen whales have been increasing in WA waters since the cessation of commercial whaling in the mid 1980s. This has coincided with an increase of entanglements of humpback whales with fishing gear, as these whales pass through fishing grounds during annual winter migrations between Antarctica and waters offshore of the Kimberley region. Entanglement of baleen whales with fishing gear occurs in a number of other fisheries around the world and scientists consider that interactions between baleen whales and fisheries are likely to continue for the foreseeable future.  Prior to 2011, there were generally less than four whales annually entangled in fishing gear confirmed from the WA West Coast Rock Lobster Fishery. However, in 2011 quota management arrangements were introduced into the fishery, which included the phased removal of winter seasonal closures, allowing fishers to have lobster pots in the water all year round by 2013. Following the introduction of this change in management arrangements, there were seven whale entanglements confirmed with rock lobster gear in 2011, thirteen in 2012 and eighteen in 2013.  In collaboration with the fishing industry and other relevant stakeholders, the WA Department of Fisheries developed a suite of mitigation measures to reduce the risk of whale entanglements in rock lobster gear. These measures were adopted voluntarily by industry in 2013 and then refined and enforced by amendment to the fishery’s management plan in 2014. Encouragingly, there were only six entanglements in 2014, significantly less than in 2013 although still higher than pre-2011 levels. A further review of the mitigation measures was conducted in early 2015, with subsequent refinements to mitigation measures enforced by amendment to the fishery’s management plan on 1 May 2015.  In addition to enforcing direct operational measures, the WA Department of Fisheries has conducted and facilitated research to improve understanding of whale migration pathways and the circumstances of whale entanglements, as well trialling alternative gear configurations to minimise entanglement risk.  While acknowledging that further refinements to management arrangements may be required, the Department considers that the mitigation actions developed to date should continue. The efficacy of these measures should be reviewed annually and refined if necessary. If whale entanglements should increase towards or beyond the entanglement rates in 2012 and 2013, further mitigation measures should be developed and implemented. | | **Condition A**  The WA Department of Fisheries to:   1. maintain management measures clearly directed toward minimising the impact of fishing activity on migrating whales      1. continue to monitor and annually review the efficacy of management measures to avoid entanglement of whales, and 2. implement further mitigation measures to minimise entanglements, should whale entanglement rates increase. | | |

| **Issue** | **Recommendation** |
| --- | --- |
| Research into whale migration patterns and fishing effort  Baleen whale migrations are known to occur off the west coast of WA during May to August (northern migration from Antarctica to calving grounds offshore of the Kimberley region) and September to November (return migration to Antarctic waters to feed). Whales on the southwards migration are often observed in shallower, coastal waters during the return migration to provide greater protection for calves migrating with their mothers. However, there is limited information on inter-annual variation in whale migration patterns along the WA coast.  Due to the uncertainties regarding the pathways of whale migration patterns and entanglement behaviours, the Department considers it would be helpful for the WA Department of Fisheries to continue investigating whale migration patterns relative to fishing effort to improve understanding of circumstances when entanglements occur. This may allow better prediction of the likelihood of interactions and possible entanglements in the future, to better direct management effort. | **Recommendation 1**  The WA Department of Fisheries to continue with research projects to improve understanding of whale migration patterns and sites of whale entanglements as these relate to fishing effort in the fishery. |

# References

de Lestang S, Rossbach M, Baudains G and Trinnie F (2014). West Coast Rock Lobster Fishery Status Report. In: *Status Reports of the Fisheries and Aquatic Resources of Western Australia 2013/14: The State of the Fisheries*. Department of Fisheries, Western Australia.

Department of the Environment (2012*) Marine bioregional plan for the North-west Marine Region*

Department of the Environment (2012*) Marine bioregional plan for the South-west Marine Region*

Groom CJ and Coughran DK (2012). Entanglements of baleen whales off the coast of Western Australia between 1982 and 2010: patterns of occurrence, outcomes and management responses. *Pacific Conservation Biology* 18(3):203-214.

Moore MJ, Bogomolni A, Bowman R, Hamilton PK, Harry CT, Knowlton AR, Landry S, Rotstein, DS and Touhey K (2006). *Fatally entangled right whales can die extremely slowly*. Proceedings of OCEANS 2006 conference, 18-21 September 2006, Boston MA. DOI: <http://dx.doi.org/10.1109/OCEANS.2006.306792>

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

1. ‘Protected species’ means all species listed under Part 13 of the EPBC Act, including whales and other cetaceans and listed threatened, listed marine and listed migratory species. [↑](#footnote-ref-1)
2. Convention on International Trade in Endangered Species of Wild Fauna and Flora [↑](#footnote-ref-2)