Australian Government

Department of the Environment and Water Resources

Assessment of the

Western Rock Lobster Fishery

August 2007

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ISBN: 978 0 642 55355 3

Disclaimer

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

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Table 1: Summary of the Western Rock Lobster Fishery (WRLF)

Publicly available information relevant to the fishery	• *West Coast Rock Lobster Limited Entry Fishery Notice 1993* (the Management Plan); • *Fish Resources Management Act 1994*; • *Western Rock Lobster Fishery Ecological Risk Assessment 2005 Report* (WRLF ERA); • *Western Rock Lobster Environmental Management System July 2002-2006* (EMS); • *Western Rock Lobster Fishery - ESD Report Series No. 4*; • *State of the Fisheries Report* (SOFR) *2005/06;* • *Marine Stewardship Council Assessment: The Western Australia Rock Lobster Fishery*, December 2006 (MSC WRLF report); • Department of Fisheries, Western Australia (DFWA) *Application to Environment Australia on the Western Rock Lobster Fishery*, October 2001; • DFWA *Application to the Environment and Water Resources on the Western Rock Lobster Fishery*, June 2007 (2007 WRLF submission); and • Department of Environment and Water Resources (DEW – formerly the Department of Environment and Heritage) *Assessment of the Western Rock Lobster Fishery,* August 2002.
Area	The area of the WRLF includes waters off the west coast of Western Australia between North West Cape (Exmouth Gulf) and Cape Leeuwin. The fishery is managed by the Western Australian (WA) government under an Offshore Constitutional Settlement arrangement that cedes management responsibility to the State to the outer edge of the Australian fishing zone.
Fishery status	The *State of the Fisheries Report 2005/06* reports that the western rock lobster stock remains close to maximum sustainable yield. The harvest rate in Zone A has decreased slightly while there has been a significant increase in harvest rate in Zone B.
Target Species	The fishery targets western rock lobster (*Panulirus cygnus*) under a total allowable effort system and associated input and output management arrangements. Information on the biology of western rock lobster can be found in DFWA's *Application to Environment Australia on the Western Rock Lobster Fishery*, October 2001 and DEW's 2002 assessment of the fishery at http://www.environment.gov.au/coasts/fisheries/wa/rocklob/index.html
Byproduct Species	Byproduct taken in the fishery includes octopus, snow crab, champagne crab and giant crab.
Gear	Baited pots – dimensions including neck sizes and escape gaps are specified in regulations. The use of sea lion excluder devices (SLEDs) are mandatory for identified zones of the fishery area.

Season	Season is open from 15 November to 30 June, with the Abrolhos Islands zone open from 15 March to 30 June. A 3 year sustainability package implemented in the 2005/06 season includes additional seasonal closures to reduce effective fishing effort. Details are provided in the 2007 WRLF submission.
Commercial harvest [2005/06]	10,326 tonnes (t).
Value of commercial harvest [2004/05]	An estimated $289 million.
Take by other sectors	The Windy Harbour/Augusta sector of the WA South Coast Crustacean Fishery takes a small amount of western rock lobster. The average catch for the sector over ten years 1994/1995 to 2003/04 was 16.3 tonnes. A 2004/05 recreational survey estimated 379 t of rock lobster was caught by recreational fishers. This equates to around 3% of the total rock lobster catches taken recreationally. A recreational licence entitles the holder to use two pots and/or dive for rock lobster and keep up to 8 lobsters per day. Recreationally caught lobsters must be tail clipped. Illegal catch data is also collected with estimates derived from compliance data undertaken annually. Compliance information suggests that current illegal take is minimal (<1%). Factory inspections of commercially captured western rock lobster in the 2004/05 season estimated the total illegal catch consigned was 25,500 – 32,400 kgs.
Commercial licences issued	610 licenses 69,178 pot entitlements
Management arrangements	The fishery is managed under the *West Coast Rock Lobster Limited Entry Notice 1993* and the WA *Fish Resources Management Act 1994*. Management of the fishery is based primarily on input controls with some output controls. These controls include: <u>Input controls</u> • limited entry; • maximum number of pot entitlements for fishery; • zonal management (Zones A, B and C); • restrictions on pots (size, configuration and escape gaps); • spatial and seasonal restrictions; and • restriction on pots being pulled only during specific daylight hours <u>Output controls</u> • minimum legal size of rock lobster is 77 mm carapace length (CL) from 15 November to 31 January, and 76 mm CL from 1 February to 30 June; • maximum size of 115 mm for lobsters landed south of 30ºS and 105 mm for landed north of 30ºS; and • prohibition on the harvest of setose females or those carrying eggs or tarspot.

Export	Exported mainly to Japan, Taiwan, Hong Kong, China, USA and Europe.
Bycatch	Fishery independent monitoring indicates bycatch is minimal. Bycatch species include moray eels (captured in pots) and manta rays (entangled in pot lines). The mandatory use of escape gaps on pots is thought to mitigate bycatch.
Interaction with Protected Species	Known interactions with sea lions, whales and turtles. The 2005 WRLF ERA and subsequent EMS provide a risk ranking of low for these species except for sea lions. In 2005/06 there were no sea lion captures reported compared to the historical rate of three sea lions per season. In the 2005/06 season at least 6 entanglements of humpback whales occurred which is above the historic range of 0-4 entanglements per year.
Ecosystem Impacts	Due to the harvesting method used in the fishery (traps), impacts to the physical ecosystem are considered to be low. In 2001 a voluntary *Code of Practice for Using and Handling Bait, Bait Packaging and Rubbish* was developed for the fishery which provides best practice techniques in the use of bait handling and storage and bait packaging disposal. Additionally there are various research initiatives underway which include a project to assess the effects of rock lobster fishing in deep water ecosystems and ongoing research comparing shallow water fished and unfished areas in Jurien Bay.

Table 2: Progress in implementation of recommendations made in initial assessment of the WRLF.

Recommendation	Progress	Recommended Action
1. The WRLF submission contains a number of detailed and explicit management triggers, decision rules and performance measures which are not included in the management plan. DFWA and the Rock Lobster Industry Advisory Committee (RLIAC) should formally incorporate these into the management regime and decision making process with clear timelines for implementation. These measures must ensure the total effort in the fishery from all sectors is controlled and within sustainable limits. Serious consideration should be given to a cap on total effort including both the recreational and commercial sectors.	DFWA advise that the *West Coast Rock Lobster Limited Entry Fishery Notice 1993* (the Management Plan) legislates the rules of operation for the fishery but does not include management triggers or performance indicators. The draft *West Coast Rock Lobster Fishery Decision Rules Framework* contains performance measures and triggers for the fishery. The draft Framework is currently being reviewed for adequacy and is expected to be finalised in 2008. The WA government has recently introduced Integrated Fisheries Management (IFM) to address the issue of how fish resources can be shared between users (recreational, commercial and customary). An IFM Allocation Report for the WRL Resource was released for public consultation which closed in April 2007 and it is anticipated that the IFM management arrangements will be implemented by 2010.	DEW notes that general timeframes have been provided for when a review of the performance measures will be undertaken however no defined timeframe has been established for a management response should a trigger be outside the agreed reference range. A clear timeframe for responding to a breach in a performance measure is required to ensure that prompt management action is taken to address any threats to sustainability. This has been addressed in **Recommendation 3.**
2. DFWA should undertake contingency planning to deal with breaches in the existing management triggers. In the event that a review is triggered by a breach of the performance measures and that review establishes that the management regime is under-performing, the management plan	The *West Coast Rock Lobster Fishery Decision Rules Framework 2006* contains decision rules for the biological and socio-economic measures/indicators for the fishery. The Framework provides defined management responses to deviations in the performance of the fishery.	DEW considers that the development of the Decision Rules Framework since the last assessment of the fishery addresses this recommendation. DEW notes that the Framework is under review which indicates the ongoing analysis of the decision rules to improve management responses. DFWA has also demonstrated the ability to respond to sustainability concerns in both the 1990s

should require that action must be taken to return the fishery to a stage where it will satisfy the management objectives.	In the 2004/05 season two separate sustainability packages were introduced, one for Zones A and B (northern) and one for Zone C (southern). The new management initiatives were introduced to address sustainability concerns regarding the level of breeding stock, mainly in the northern coastal region of the fishery. Further details are provided in the SOFR 2005/06 (page 18).	reduction in effort and the 2005 management initiatives. As mentioned above, defined timeframes for management responses to underperformance or breaches in performance indicators is required. [**Recommendation 3**]
3. The compliance and enforcement strategy should continue to be periodically reviewed to ensure emerging compliance risks are identified and addressed. WADF should conduct an annual assessment of the risks to ensure that the current compliance and enforcement regime is as effective for the recreational as for the commercial sector.	DFWA advise that the fishery has a comprehensive compliance program including at sea inspections of licences, catch and fishing gear, land inspections of catch and fishing processing factories and retail outlets. Statistics on compliance activities are collected and analysed by a research scientist and information is reported in the annual SOFR. A joint DFWA and rock lobster industry compliance risk assessment workshop is undertaken every two years. Following the risk assessment, a compliance strategy is developed to address the high priority risks.	None. DEW considers the ongoing compliance program and annual data collection and publication of the compliance activities results for the commercial fishery and recreational sector meets this recommendation. DEW is satisfied that DFWA is committed to undertaking the compliance risk assessment workshops and developing ongoing compliance strategies to address current and emerging risks.
4. Recognising that consideration of issues relating to the impact of the fishery on the marine environment is currently undertaken as an implicit part of the development of the advice of the Rock Lobster Industry Advisory Committee (RLIAC), consideration should be given to including an explicit requirement to consider such impacts in the terms of reference for	DFWA advise that the *Fish Resources Management Act 1994* is currently being amended to include an ecological expert on the RLIAC. Two Scientific Reference Groups (SRG) have been established to provide advice to RLIAC on how to ensure the WRLF is managed consistently with ecosystem based fisheries management principles. The WRL Ecosystem Effects of Fishing SRG (Eco SRG)was established in 2003	None. DEW considers that the membership of an ecological expert on the RLIAC and the development of the SRGs meet this recommendation. DEW notes that the 2006 MSC WRLF report indicates that the Eco SRG could be operating more effectively and this needs to be addressed to ensure better function of this advisory group. DEW expects DFWA to address this issue as part of the MSC accreditation requirement.

the Committee.	to provide scientific advice on primarily on the effects of rock lobster fishing on the marine environment. The Sea Lion SRG was established in 2005 to develop the best strategy to mitigate the incidental mortality of sea lions in WRLF pots. RLIAC has also been involved in the development of the WRLF Ecological Risk Assessment (ERA) and WRLF EMS.	
5. DFWA should continue active encouragement of broad public notification of the potential to input into the environmental impact assessment processes. Furthermore DFWA should ensure the external peer review of the existing stock assessment process is maintained.	Regular communication about the WRLF occurs with stakeholders and community through a variety of mechanisms as outlined in the 2007 WRLF submission. As part of the MSC certification, the WRLF stock assessment process has to be periodically independently reviewed. In 2006 an independent expert was contracted to review the 2004/05 WRLF stock assessment. The final report is expected to be given to RLIAC for consideration by July 2007 and then made available to the public. A stock assessment review workshop including four independent stock assessment experts is scheduled for July 2007.	None. DEW is satisfied that management of the fishery involves ongoing communication and consultation with industry and community stakeholders. The fishery is also required as part of the MSC certification to undertake independent reviews of the stock assessment process. DEW notes that the latest MSC certification also includes additional conditions to publish results that describe the probability of the stock remaining above agreed reference levels; publish an annual report on bycatch and incidental interaction and mortalities on non-target species; and provide opportunity for better representation from stakeholders including the conservation community.
6. DFWA should continue to monitor the situation with respect to the harvest of immature animals to ensure any reductions in egg production or puerulus settlement	Settlement of pueruli and early stage post pueruli is monitored at a number of long-term monitoring sites across the distribution of the fishery. Research is focused on assessing stock sustainability and for forecasting future catch	DEW acknowledges that the fishery continues to monitor the puerulus settlement to determine stock sustainability and forecasting future catch levels. Additionally there have been demonstrated management responses to

are detected in a timely manner, and develop a management response for implementation in the event that a major issue develops.	levels. This is done by using the fishery-independent monitoring of the puerulus settlement and breeding stock levels. Changes in recruitment are monitored by fishery-independent and fishery-dependent breeding stock surveys, by estimating egg production per pot lift each season to provide an estimate of egg production. The 1980 estimated egg production level is now the agreed biological reference point. Trends in stock indices and puerulus settlement annual indices are published in SOFR. These indices are used as triggers and indicators in the Fishery's Decision Rules Framework.	concerns of sustainability in the fishery, particularly the recent implementation of the 3 year sustainability package to reduce effective fishing effort. However, DEW notes the concerns identified in the MSC assessment report which indicates that there is some uncertainty about the robustness of some of the indices derived from the monitoring with inconsistent trends between data series and issues with the inability of models to fit the data. Therefore DEW has included **Recommendation 4** to address this issue.
7. DFWA should continue to implement annual estimation of recreational and indigenous harvest of lobsters which is factored into management, including ongoing improvement of data collection and analysis.	Annual estimates of recreational catch are collected primarily through phone/diary and mail surveys. DWFA advise that inconsistencies between the mail and phone surveys have been identified and revised with a data conversion factor. Both surveys will continue in the next 3 to 4 years to assess the correction factor. Recreational catch estimates are published annually in the SOFR. DFWA report that indigenous rock lobster fishers have recreational licences and as such, are included in catch estimates. Customary catch estimates are unknown but considered inconsequential.	None. Annual estimates or recreational catch and illegal take are collected, reported and taken into account in stock assessment models. DEW is confident that DFWA will continue ongoing monitoring and make necessary improvements to data collection and analysis when necessary.

8. Research into changes in fishing efficiency should be undertaken on a five yearly basis, and contingency plans and management strategies be developed to compensate for potential increases.	Information on gear and equipment is collected annually. DFWA advise that a considerable amount of research has been undertaken to improve the understanding of fishing efficiencies in the fishery over recent years, however no details of these projects were provided. A depletion technique was applied to the fishery in 2006 which indicated exploitation has increased in the Zones A and B to about 75% in last 10 years primarily due to increases in fishing efficiency. There has been a decline in the egg production index over the last few years and increasing fishing efficiency has been a key factor in the decline. In response to this and despite these declines were above the trigger limit, a 3 year sustainability package was introduced in 2005 which included a 15% effort reduction in the northern coastal region (Zone B), a 5% effort reduction in the southern zone (Zone C) and a small effort reduction in the Abroholos islands region (Zone A). Further details of the effort reduction measures detailed in the 2007 WRLF submission (pg 11). The package will be assessed in 2007/08 taking into account further efficiency increases.	None. DEW considers that the development of the Decision Rules Framework and the recent management response to the sustainability concerns in the fishery demonstrates an adaptive management regime which is able to monitor and respond to deviations in the WRLF performance. DEW is confident that WADF will continue to monitor fishing efficiency and performance and respond appropriately.
9. Monitoring should be undertaken to evaluate whether the impact of the fishery on octopus is increasing, and if so the impacts that harvest is having on the stock and ecosystem.	The catch rate of octopus is monitored annually through statutory catch data, logbook data and independent observer coverage and reported in the annual SOFR. The 2005/06 SOFR states that the catch rate of octopus was reported as 0.029	None. DFWA annually monitor the take of octopus in WRLF and it is reported as a performance indicator in the SOFR. The WRLF ESD report and EMS provides for general management targets and actions to achieve the

A management response should be developed by DFWA as a contingency.	octopus per lift which is within the historical reference range. DFWA advise that catch of octopus by the WRLF was recently reviewed as part of the review of the WRLF ERA 2005 Report, which will be publicly available in the coming months.	objective of minimising the risk of overfishing octopus populations as bycatch from rock lobster fishing. DEW expects DFWA to respond appropriately should an increase occur in the future.
10. The retention of deep sea crabs in the western rock lobster fishery should be actively managed by DFWA to ensure the sustainability of the developing deep sea crab fishery.	DFWA report that WRLF catch of deep sea crabs has been small and restricted to short period of the year when lobster fishers are targeting migrating white lobsters. A possession limit of 12 deep sea crabs has been approved by the Minister and although the management plan has yet to be amended, industry has taken on the catch limits anyway. Catch of deep sea crabs is monitored through fishery independent data.	None. DEW considers the introduction of a possession limit for deep sea crabs demonstrates the active management to ensure the sustainability of deep sea crabs in WA. The submission indicates that industry has already voluntarily taken on the catch limit, however DEW encourages DFWA to finalise the amendments to the legislated Management Plan so the catch limit will be enforceable.
11. DFWA should undertake to develop appropriate triggers for endangered, threatened, protected or bycatch species and appropriate management strategies should the levels or sensitivity of interactions are shown to be greater than currently estimated. To facilitate this process it is important that: • DFWA continue the recording of byproduct and bycatch taken by the fishery (using both fishery dependent and fishery	The fishery has performance indicators and measures for catch of octopus, interactions with sea lions, turtles and whales and dolphins. The SOFR reports against these performance measures annually. WRL fishers are required to record all retained catch as part of the statutory monthly catch and effort returns (CAES data). Interactions with protected species have been recorded over the last 5 seasons via a voluntary logbook program. Around 35-40% of the fleet complete the voluntary log book.	The WRLF has ongoing programs to monitor byproduct and bycatch and DFWA advise that they are able to validate information. As such DEW does not consider that an ongoing recommendation to analyse whether byproduct and bycatch from fishery dependent and independent methods is effective is required. However, an ongoing recommendation in relation to protected species monitoring has been included as **Recommendation 5.**

independent methods). DFWA analyse whether byproduct and bycatch recording by the fishery dependent methods are an effective mechanism for obtaining these data; • DFWA continue the ongoing monitoring of sea lion and cetacean interactions. In the event that these interactions significantly increase, WADF should implement appropriate mitigation measures in a timely fashion.	A fishery independent observer program collects data on bottom type, byproduct, bycatch and protected species interactions. The WRLF known interactions with sea lions has led to the mandatory implementation of SLEDs in recreational and commercial pots in 2006. SLEDs are required in prescribed SLED zones which have identified as high interaction areas. Ongoing monitoring of the compliance and efficacy of SLEDs is planned. In terms of cetacean interactions the fishery has historically had occasional reports of entanglements with pot ropes, particularly humpbacks. The WRLF now has a closed season over 30 June to 15 November to mitigate interactions during the migration north. However DFWA report that in the 2005/06 season there at least 6 entanglements with humpback whales occurred which is above the historic rate of 0-4 entanglements per annum. In early 2007 a Code of Practice for Reducing Whale Entanglements was developed with the aim of minimising the fishery's interactions with whales.	
12. DFWA should assess options for system-based management objectives and associated biological reference, target and limit levels, and implement system-based performance measures in the fishery. This should include a	A Fisheries Research Development Corporation (FRDC) research project is underway to investigate the reproductive biology issues relevant to managing WRL broodstock. The project was expected to be completed in June 2007. Initial results indicate that large breeding lobsters to do not produce more robust and	DEW considers that DFWA is addressing this recommendation through various ongoing research projects. DEW recommends DFWA consider the results from these research projects and make appropriate changes to management arrangements when required. This recommendation has been incorporated within

determination of the appropriate levels of protection for larger lobsters. DFWA therefore are encouraged to undertake the proposed additional work on the issue of the role of large western rock lobsters in the system, including work on the catchability of larger lobsters.	healthy offspring. Another FRDC funded project that is currently underway is assessing the effects of rock lobster fishing in deep water (40-100) where larger lobsters reside. Biological reference points have been established in terms of egg production with the 1980 estimated egg production level as the agreed minimum target egg production level.	**Recommendation 6.** In relation to the egg production reference points, DEW has noted the concerns around the inconsistencies between fishery dependent and fishery independent indices of spawning stock abundance and the inability of models to fit these data. A recommendation to address this has been covered in **Recommendation 4**.
13. DFWA should examine mechanisms for monitoring ecosystem impacts of the fishery, including the appropriateness of reference areas that would allow comparison of fished and unfished areas.	DFWA advise that the WRLF is unlikely to cause significant trophic cascade effects as the protected sub-legal sized lobsters and breeding stock components form a relatively constant proportion o the biomass (>80%). Research to examine the effects of WRL fishing on the deep-water ecosystems is expected to be available in 2008. A current CSIRO research project is comparing shallow water fished and unfished areas in Jurien Bay. Additionally a number of research organisations are researching trophic dynamics within Jurien Bay Marine Park of which WRL are a key component. A workshop is scheduled for August 2007 to review the results of the deepwater ecology research and develop a new ecological research project which is anticipated to examining fished and unfished areas using research closures.	DEW considers the ecological research being undertaken important for the ongoing sustainable management of the fishery. As such a recommendation has been incorporated into **Recommendation 6** to ensure the outcomes of these projects are considered in the management arrangements for the fishery.

14. DFWA should establish an environmental management plan for the fishery that deals with effective waste management in the fishery and minimises the impacts of gear loss.	DFWA advise that the legislated design of rock lobster pots, the material they are made of and the strict control of replacement pots mitigates ghost fishing. In 2001 a Voluntary Code of Conduct for Using and Handling Bait, Bait Packaging and Rubbish was developed to formalise a detailed industry standard to handling bait and onboard rubbish. DFWA advise that due to moderate risk rating of bait bands impacting adult dusky whale shark, a zero tolerance of bait bands is being considered. As a small number of WRL fishers utilise/camp at Abrolhos Islands a draft Abrolhos Islands Waste Management Strategy has been developed to address a number of waste management practices. This Strategy is expected to be formally adopted this year. A Northern Agricultural Catchments council project is underway as part of the Waste Management Strategy to address issues at the Abrolhos Islands. The project is focusing on incineration, domestic and commercial waste disposal and education programs.	None. While DFWA has not developed an environmental management plan as such, DEW considers the management regime for the WRLF has a proven ability to identify risks and implement actions to respond to those risks. The EMS for the fishery also identifies objectives and actions to minimise adverse effects of the fishery on non-target species and the broader ecosystem. DEW notes that the EMS will need to be reviewed and updated once the ERA review is completed. This has been addressed as part of **Recommendation 6**. The introduction of the code of conduct for bait use is also a progressive step towards educating WRL fishers of best practice procedures.

Table 3: The DEW assessment of the WRLF against the requirements of the EPBC Act related to decisions made under Parts 13 and 13A

Part 13

(*Listed threatened species*)

Section 208A Minister may accredit plans, regimes or policies	**DEW assessment of the WRLF**
Minister may, by instrument in writing, accredit for the purposes of this Division: (c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory;	The management regime for WRLF, as managed under the *West Coast Rock Lobster Limited Entry Fishery Notice 1993* in force under the WA *Fish Resources Management Act 1994* was accredited under Part 13 in August 2002. The management arrangements for the WRLF have not significantly changed since this accreditation was granted and reported interactions with a listed threatened species with the fishery are low. As such DEW considers that the existing Part 13 accreditation remains valid.

(*Listed migratory species*)

Section 222A Minister may accredit plans, regimes or policies	**DEW assessment of the WRLF**
Minister may, by instrument in writing, accredit for the purposes of this Division: (c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory;	The management regime for WRLF, as managed under the *West Coast Rock Lobster Limited Entry Fishery Notice 1993* in force under the WA *Fish Resources Management Act 1994* was accredited under Part 13 in August 2002. The management arrangements for the WRLF have not significantly changed since this accreditation was granted. Humpback and Southern Right whales becoming entangled in rock lobster pot ropes have been reported in the fishery. While a small number of interactions are reported annually, there have been no related mortalities. Additionally the WRLF has responded with additional management arrangements to help mitigate these interactions. Therefore, DEW considers the current operation of the WRLF is not likely to adversely affect the survival or recovery in nature of any listed migratory species As such DEW considers that the existing Part 13 accreditation remains valid.

(*Cetaceans*)

Section 245 Minister may accredit plans, regimes or policies	**DEW assessment of the WRLF**
Minister may, by instrument in writing, accredit for the purposes of this Division: (c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory;	The management regime for WRLF, as managed under the *West Coast Rock Lobster Limited Entry Fishery Notice 1993* in force under the WA *Fish Resources Management Act 1994* was accredited under Part 13 in August 2002. The management arrangements for the WRLF have not significantly changed since this accreditation was granted. The WRLF ERA identified the potential for fishing gear interactions with whales and the risk was assessed as low. Ongoing monitoring of these interactions occurs and additional management responses have been implemented in the fishery. As such DEW considers that the existing Part 13 accreditation remains valid.

(*Listed marine species*)

Section 265 Minister may accredit plans, regimes or policies	**DEW assessment of the WRLF**
Minister may, by instrument in writing, accredit for the purposes of this Division: (c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory;	The management regime for WRLF, as managed under the *West Coast Rock Lobster Limited Entry Fishery Notice 1993* in force under the WA *Fish Resources Management Act 1994* was accredited under Part 13 in August 2002. The management arrangements for the WRLF have not significantly changed since this accreditation was granted. Currently, evidence suggests that the WRLF has minimal interactions with listed marine species. Therefore, DEW considers the current operation of the WRLF is not likely to adversely affect the conservation status of a listed marine species or a population of that species and the current Part 13 accreditation remains valid.

Part 13A

Section 303DC Minister may amend list	**DEW assessment of the WRLF**
Minister may, by instrument published in the Gazette, amend the list referred to in section 303DB (list of exempt native specimens) by: (a) including items in the list;	In September 2002 product from the WRLF was included on the list of exempt native specimens (LENS) for 5 years. An amendment to the LENS is now required to include product from the WRLF until 4 September 2007. The LENS amending instrument will be published in the Gazette.
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 WRLF has been carried out under Part 10 of the EPBC Act.
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 (LENS). The objects of Part 13A, which are set out below 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. DEW considers that the amendment of the LENS to include product taken in the WRLF would be consistent with the provisions 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 Table 1); ▪ the operation of the WRLF is unlikely to be unsustainable and threaten biodiversity within the next 5 years; and ▪ the EPBC Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.

Before amending the list referred to in section 303DB (list of exempt native specimens), the Minister: (a) must consult such other Minister or Ministers as the Minister considers appropriate; and (b) must consult such other Minister or Ministers of each State and self-governing Territory as the Minster considers appropriate; and (c) may consult such other persons and organisations as the Minister considers appropriate.	The letter to the Hon Jon Ford MLC, WA Minister for Fisheries, advises him of the intention to declare the fishery exempt from the export provisions of the EPBC Act for an additional 5 years.

Section 303FR Public consultation	**DEW assessment of the WRLF**
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.	Under the EPBC Act, a decision to amend the LENS does not require a public consultation period. However, a public notice, which set out the proposal to grant export approval to the WRLF and included information provided about the fishery, was released for public comment which closed on 3 August 2007. No public comments were received.
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 grant export approval to the WRLF and included the submission for the WRLF was released for a 20 day public comment period that expired on 3 August 2007.
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 were received.

Section 391 Minister must consider precautionary principle in making decisions	**DEW assessment of the WRLF**
The Minister must take account of the precautionary principle in making a decision under section 303DC and/or section 303FN, to the	The Minister for the Environment and Water Resources or Delegate of the Minister must consider the precautionary principle when making a

extent he or she can do so consistently with the other provisions of this Act.	decision to include specimens on the LENS.
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.	

Objects of Part 13A

(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.

Final Recommendations to DFWA for the WRLF

The material submitted by DFWA indicates that the WRLF operates in accordance with the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries*. DEW considers that the fishery is well managed and unlikely to have an unacceptable or unsustainable impact on the environment in the short to mid term. Overall, DEW recognises that the effort control, zonal management, gear restrictions, legal size limits, and protection of berried female lobsters are conservative and suggest that the fishery is being managed in an ecologically sustainable way. DEW also notes MSC certification has been renewed for the WRLF for a further 5 years.

In making its assessment, DEW considers that the range of management measures are sufficient to ensure that the fishery is conducted in a manner that does not lead to over-fishing and that stocks are not currently overfished. Taking into account the ongoing monitoring of fishing by both fishery independent and fishery dependent programs, the comprehensive suite of input and output controls and the wide range of reviewable management objectives, strategies and performance indicators outlined for the fishery, DEW considers that fishing operations are managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem. Additionally, management of the fishery has a history of reacting appropriately to threats to sustainability and DEW is confident that DFWA will continue to provide this high quality management.

DEW is satisfied that the fishery will not be detrimental to the survival or conservation status of the taxon to which it relates in the short term. Similarly, it is not likely to threaten any relevant ecosystem in the short term. To contain and minimise the risks in the longer term the recommendations listed below have been made. DEW believes that product taken in the fishery should be exempt from the export controls of Part 13A of the EPBC Act, with that exemption to be reviewed in 5 years.

DEW considers that the operation of the fishery does not, or is not likely to, adversely affect the survival in nature of a listed threatened species or population of that species, or the conservation status of a listed migratory species, cetacean or listed marine species or a population of any of those species. DEW also considers that under the management plan operators are required to take all reasonable steps to avoid the killing or injuring of protected species, and the level of interaction under current fishing operations is low. For these reasons, the management arrangements were accredited under Part 13 of the EPBC Act in August 2002. Since there have been no changes to the management arrangements since the initial assessment of the fishery, DEW considers that the existing Part 13 accreditation remains valid.

Recommendations are provided below with a brief explanation of the related issue/intent. Unless a specific time frame is provided in the recommendation each recommendation must be addressed before the end of the life of the declaration.

Table 4: WRLF Assessment– Summary of Issues and Recommendations August, 2007

	Issue	Recommendation
1	General Management Export decisions relate to the arrangements in force at the time of the decision. In order to ensure that these decisions remain valid, DEW 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. As such DEW recommends that DFWA continue to advise of any material changes to the management of the fishery.	*1. DFWA to advise DEW of any intended material change to the WRLF legislated management plan and/or arrangements that could affect the criteria on which EPBCAct decisions are based.*
2	Annual Reporting It is important that reports be produced and presented to DEW annually in order for the performance of the fishery and progress in implementing the recommendations in this report and other managerial commitments to be monitored and assessed throughout the life of the declaration (5 years). Annual reports should include a description of any changes to the fishery or management arrangements in place, recent catch data for all sectors of the fishery, status of target stock, interactions with protected species, impacts of the fishery on the ecosystem in which it operates, progress in implementing DEW recommendations and research and monitoring outcomes. DEW acknowledges that DFWA reports annually on WA fisheries performance in the State of the Fisheries Reports. Reference to relevant information in these reports can be included as part of the annual reporting to DEW on this fishery.	*2. DFWA to continue to produce and present reports to DEW annually. Reports to include:* *i. Information sufficient to allow assessment of the progress of DFWA in implementing the recommendations made in the Assessment of the WRLF 2007; and* *ii. A description of the fishery, management arrangements in place, recent catch data for all sectors of the fishery, status of target stock including performance of the fishery against objectives, performance indicators and measures, interactions with protected species, impacts of the fishery on the ecosystem in which it operates and*

		research and monitoring outcomes. *Information should only be provided on those aspects which are relevant to the fishery and that articulate 'changes' since the last annual report.*
3	<u>Monitoring performance measures/indicators and response timeframe</u> The Decision Rules Framework outlines management responses to primarily biological indicators which will be reviewed annually. Additionally the WRLF ESD report outlines management objectives, measures and indicators for the WRLF and includes details on strategies available should a performance indicator be triggered. DEW notes that general timeframes have been given for when a review of these measures is likely to occur however no defined timeframe is given following the trigger of a performance indicator. As such, a clear timeframe for responding to a breach in a performance measure is required to ensure that a prompt management action is taken to address any threats to sustainability.	*3. DFWA to continue to monitor performance measures and indicators for the WRLF. Within 3 months of becoming aware that a performance measure has not been met, DFWA to develop potential management responses and timeframes for implementation.*
4	<u>Inconsistencies in time series and data not fitting models</u> DEW notes the concerns identified in the MSC assessment report which indicates that there is some uncertainty about the robustness of some of the indices derived from the monitoring in the fishery, with inconsistent trends between data series and issues with the inability of models to fit the data. As the management of the fishery is dependent on accurate estimates and analysis of trends, DEW recommends DFWA examine the inconsistencies identified as part of the MSC assessment and resolve these issues where necessary in a timely manner.	*4. DFWA to examine the data and models used to monitor the ongoing performance of the WRLF and resolve issues where necessary.*

5	<u>Protected species interactions</u> DEW acknowledges that progress has been made since the last assessment to mitigate incidental interactions with threatened, endangered and protected (TEP) species. This includes the mandatory use of SLEDs in defined zones, seasonal closures that may reduce interactions with whales, and the development of a *Code of Practice for Reducing Whale Entanglements* for the fishery. In the 2007 WRLF submission DFWA has advised that the level of compliance and efficacy of SLEDS will continue to be monitored. Additionally it is reported that in the 2005/06 season at least 6 humpback whale entanglements occurred which is above the historic rate and that interactions are likely to increase as the populations of humpbacks recover. DEW considers that the ongoing monitoring of interactions with TEP species is critical to identify potential changes in the quantity and/or composition of interactions over time. The ongoing monitoring of interactions is particularly relevant as the WRLF continues to assess the effectiveness of the SLEDs in the defined SLED zones and interactions outside those zones, and to monitor the potential increase in whale interactions. As such DEW recommends DFWA continue to actively monitor interactions and develop mitigation measures if interactions increase.	*5. DFWA to continue to actively monitor interactions with threatened, endangered, and protected species, particularly sea lions and whales, and develop appropriate mitigation measures if the number or rate of interactions increase.*
6	<u>Fishery reviews and research</u> The WRLF is investing in various reviews and research projects including, but not limited to: – the independent review of the WRLF 2004/05 stock assessment process; – the review of the ERA 2005 Report; – research on the reproductive biology issues of WRL; – research on the effects of WRL fishing in deep water; and – research comparing shallow water fished and unfished areas in Jurien Bay.	*6. DFWA to take account of the outcomes of the WRLF independent stock assessment reviews, the ERA review and other relevant fishery research projects and make changes to management arrangements where required. DFWA to ensure that the WRLF EMS is updated following the completion of the ERA review.*

	DEW considers these reviews and research projects important to the ongoing management of the fishery and as such, recommends that DFWA take account of the outcomes of these initiatives and make management changes where required. DEW also notes that the WRL EMS is due to be updated once the review of the WRLF ERA is finalised. DEW expects DFWA to undertaken the review of the EMS following the completion of ERA.	

References

DFWA (2007). *Application to the Environment and Water Resources on the Western Rock Lobster Fishery Against the Guidelines for the Ecologically Sustainable Management of Fisheries*. Perth Australia

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Acronyms

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DEW	Department of the Environment and Water Resources
DFWA	Department of Fisheries, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EMS	Environmental Management Strategy
ERA	Ecological Risk Assessment
LENS	List of Exempt Native Specimens
MSC	Marine Stewardship Council
RLIAC	Rock Lobster Industry Advisory Committee
SRG	Scientific Reference Group
WA	Western Australia
WRL	Western Rock Lobster
WRLF	Western Rock Lobster Fishery