



Application for subsequent Wildlife Trade Operation – Western Australian West Coast Purse Seine Managed Fishery (WCPSMF)

The former Department of the Environment and Water Resources (DEWR; now Department of Climate Change, Energy, the Environment and Water: DCCEEW) sets out the requirements for Wildlife Trade Operation (WTO) reassessment in the *Guidelines for the ecologically sustainable management of fisheries – 2007* (the Guidelines). Preparation of this application for a subsequent WTO for the West Coast Purse Seine Managed Fishery (WCPSMF) was informed by the Guidelines.

DCCEEW has produced a table to determine the level of change in a fishery that is not captured in annual reports provided to DCCEEW. This table is used to guide the level of information required for subsequent assessments, noting the substantial level of detail provided in initial assessments. The completed table below shows how the Western Australian West Coast Purse Seine Managed Fishery sits against these criteria.

Level of change, not reported in annual reports, since previous fishery assessment

Issue	Area of Interest	Yes	No
Fishery	Has there been any change to management arrangements, and/or fishing practices?		✓
External Influences	Has there been any change to an environmental issue/influence outside of the fishery management agency's control?		✓
Interaction with protected species	Has there been any change in the nature, scale, intensity of impact and/or management response?		✓
Ecosystem impact (e.g. – habitat, food chains etc.)	Has there been any change in nature, scale, or intensity of impact and/or subsequent management response?		✓
Target stock status	Has there been any change in the target stock status? e.g. Increase or decrease in number of overfished or uncertain stocks, limit reference points of performance indicators have been triggered.		✓
By-product/bycatch stock status	Has there been any change in the by-product and/or bycatch stock status? e.g. performance indicators triggered or risk assessment outcomes show risk levels have changed.		✓

In line with the Guidelines, the above responses trigger a submission requirement of “*standard level*” of information.

Performance against conditions

Each of the conditions from the 2019 certification of the MAFMF as a Wildlife Trade Operation are reported on below.

Condition 1: Operation of the fishery will be carried out in accordance with the management regime under the Fish Resources Management Act 1994 (Western Australia)

The WCPSMF has and will continue to operate in accordance with the *West Coast Purse Seine Management Plan 1989*.

Condition 2: The Western Australian Department of Primary Industries and Regional Development, to inform the Department of the Environment and Energy, of any intended material changes to the West Coast Purse Seine Managed Fishery and Development Zones management arrangements that may affect the assessment, against which Environment Protection and Biodiversity Conservation Act 1999 decisions are made.

There have been no material changes to the fishery's management plan or arrangements that could affect the criteria on which the EPBC Act decisions are based.

Condition 3: The Western Australian Department of Primary Industries and Regional Development to produce and present reports to the Department of the Environment and Energy annually as per Appendix B of the 'Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition'.

DPIRD produces Status Reports of the Fisheries and Aquatic Resources of Western Australia (SRFAR) annually. SRFAR reports for the years 2006/07-2019/20 can be found at <http://www.fish.wa.gov.au/About-Us/Publications/Pages/State-of-the-Fisheries-report.aspx>. In the 2020/21 report relevant information is available on pages 62-66.

Condition 4: The Western Australian Department of Primary Industries and Regional Development is to work towards developing (with the view to implementing) a formal harvest strategy for the West Coast Purse Seine Managed Fishery and Development Zones, detailing predictable and transparent management arrangements, ensuring the future ecological sustainability of the marine resources.

The WCPSMF is currently managed under a constant catch harvest strategy approach, with catches limited to notional Total Allowable Commercial Catches (TACCs).

A notional combined TACC, covering both the Perth metropolitan fishery and the Southern Development Zone, is set for Australian sardine and separately for other small pelagic species. For the annual licensing period (1 April 31 March) the notional TACC is 2,328 t for Australian sardine and 672 t for other small pelagic species and Perth herring combined. For the Northern Development Zone the notional TAC is 2,700 t for scaly mackerel. Reaching or exceeding the notional TACCs will trigger a management response.

DPIRD has recently published the [Ecological Risk Assessment for the State-wide Small Pelagic Scalefish Resource](#) (Blazeski et al., 2021). Additionally, scaly mackerel catch sampling commenced in late 2021 as part of WestPort program. The ERA and data collected through the scaly mackerel sampling program will assist in the formulation of a formal harvest strategy.

Progress against previous EPBC Conditions

Progress against previous EPBC conditions can be reviewed at

<https://www.awe.gov.au/environment/marine/fisheries/wa/purse-seine>

Additional fishery information

GENERAL INFORMATION	
Area of the fishery	All Western Australian waters between 31° south latitude (near Lancelin) and 33° south latitude (near Cape Bouvard) and on the landward side of the 200 nautical mile Australian Fishing Zone limit, but excluding those waters within the boundaries of the Marmion Marine Park Reserve No. 1 bordered in red on Department of Land Administration Miscellaneous Plan numbered 1597 (See Figure 1)
Gear used	<p>Purse seine net – defined as a fishing net designed to surround a shoal of fish which has a cork or float line and which has a series of rings attached to the lead or ground line through which is passed a purse line, which when hauled, closes the bottom of the net.</p> <p>Lampara nets are also permitted to be used in the WCPSMF. Like purse seine nets, Lampara nets are designed to surround a shoal of fish and have a cork or float line and a bottom lead line, which when hauled, closes together to trap the encircled fish.</p>
Information	<p>Information on species retained by the WCPSMF and links to management information is here:</p> <ul style="list-style-type: none"> • Management Plan – West Coast Purse Seine Management Plan 1989 • Status Reports of the Fisheries and Aquatic Resources of Western Australia 2020-21
MANAGEMENT ARRANGEMENTS	

Legislation	<p>The WCPSMF is managed by the Department of Primary Industries and Regional Development (DPIRD) under the following legislation:</p> <ul style="list-style-type: none"> • <i>Fish Resources Management Act 1994</i> (FRMA, will be replaced by the <i>Aquatic Resources Management Act</i> once enacted); • <i>Fish Resources Management Regulations 1995</i> (FRMR); • <i>West Coast Purse Seine Managed Fishery Management Plan 1989</i> • Prohibition on Fishing (Purse Seining) Order • Instrument of Exemption issued under Sections 43 and 7(2)(e) respectively of the FRMA. <p>Fishers must also comply with the requirements of (but not limited to):</p> <ul style="list-style-type: none"> • The Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act); • <i>Marine Safety (Domestic Commercial Vessel) National Law Act 2012</i>; • <i>Western Australian Marine Act 1982</i>; • <i>Western Australian Wildlife Conservation Act 1950</i>; and • <i>Western Australian Conservation and Land Management Act 1984</i>.
Regulations, exemptions or licence designation	<ul style="list-style-type: none"> • Licence: West Coast Purse Seine Managed Fishery Licence (WCPS MFL) • <u><i>Prohibition on Fishing (Purse Seining) Order No. 7 of 2017</i></u>, The general purse seining prohibition (Subclause 3 (2)) does not apply to WCPSMF Licence Holders. Subclause 3(1) prohibits fishing for salmon, herring, mulloway or pink snapper by means of purse seining or a purse seine net. • An Instrument of Exemption issued under Sections 43 and 7(2)(e) respectively of the <i>Fish Resources Management Act 1994</i>, allows fishing in the South and North Purse Seine Development Zones (PSDZ). • In the PSDZ, six licences (three licences in each Zone) are permitted to use power hauled purse seine nets to catch the six species identified in the WCPSMF Management Plan. One of the three licences is not permitted to take Australian sardines within the Southern PSDZ and no Australian sardines can be taken by any licences within the Northern PSDZ.
Management plan	<u><i>West Coast Purse Seine Management Plan 1989</i></u>
Other management documents	Nil.
FISHERY STATUS	
Annual report	Page 62-66 of the <u><i>Status Reports of the Fisheries and Aquatic Resources of Western Australia 2020-21</i></u> (SRFAR).

	<p>Previous years: http://www.fish.wa.gov.au/About-Us/Publications/Pages/State-of-the-Fisheries-report.aspx</p>
Stock assessment	<p>Risk assessments for key species were completed in 2021 as part of the Ecological Risk Assessment for the State-wide Small Pelagic Scalefish Resource process and can be found at Appendix C and Appendix D of the document.</p> <ul style="list-style-type: none"> • Appendix C: Scaly mackerel (<i>Sardinella lemuru</i>) The species has a high biological resilience and low vulnerability to fishing pressure, consistent with a low estimate of fishing mortality during the mid-1990s, a period of historically significant catch. Catch and effort has been much lower over the last decade, suggesting the current level of spawning stock depletion from fishing is likely to be minor. The current risk level is estimated to be <u>Low</u>, with current management measures maintaining the stock at an acceptable level. • Appendix D: Australian sardine (<i>Sardinops sagax</i>) Due to continually very low exploitation rates relative to the last spawning biomass estimate in the mid-2000s, coupled with the species' inherent resilience and low vulnerability to fishing pressure, the current risk level is estimated to be <u>Low</u>, with current management measures maintaining the stock at an acceptable level.
Ecological risk assessment	<p>DPIRD has recently published the Ecological Risk Assessment for the State-wide Small Pelagic Scalefish Resource (Blazeski et al., 2021).</p> <p>The ERA considers the potential ecological impacts of the West Coast Purse Seine Fishery (WCPSF), South Coast Purse Seine Fishery (SCPSF), Purse Seine Development Zones (PSDZ) and the recreational fishers who catch small pelagic scalefish. The assessment focussed on evaluating the impact of each fishing sector/method on all retained and bycatch species, endangered, threatened and protected (ETP) species, habitats and the broader environment.</p>
SPECIES	

<p>Target species</p>	<p>The WCPSMF is a multi-species fishery which has the capacity to target scaly mackerel (tropical sardine, <i>Sardinella lemuru</i>), Australian sardine (pilchard, <i>Sardinops sagax</i>), Australian anchovy (<i>Engraulis australis</i>), yellowtail scad (<i>Trachurus novaezelandiae</i>) and maray (<i>Etrumeus jacksoniensis</i>). Licensees are also entitled to take Perth herring (<i>Nematalosa vlaminghi</i>), but they have not reported catching this species since 1997.</p> <p>Scaly mackerel and Australian sardine are the indicator species for the Fishery and dominate the catch. The total combined catch of the five west coast small pelagic scalefish species taken by the WCPSMF and developmental licensees in 2020/21 was 504 t, of which 73% was scaly mackerel and 23% Australian sardine.</p>
<p>Byproduct species (retained)</p>	<p>WCPSMF primarily targets scaly mackerel (tropical sardine, <i>Sardinella lemuru</i>) and Australian sardine (pilchard, <i>Sardinops sagax</i>), however also retains other small pelagic species such as Australian anchovy (<i>Engraulis australis</i>), yellowtail scad (<i>Trachurus novaezelandiae</i>) and maray (<i>Etrumeus jacksoniensis</i>) if encountered. Licensees are also entitled to take Perth herring (<i>Nematalosa vlaminghi</i>), but they have not reported catching this species since 1997.</p>
<p>Bycatch species (non-retained)</p>	<p>WCPSMF is permitted to retain 6 small pelagic fish species. Occasionally these species may be released if fish are not the desired size or schools are of mixed species composition.</p> <p>Small quantities of other fish species and small stingrays and sharks are sometimes taken as bycatch, but this occurs infrequently and the majority are released from the net unharmed. This is done by manually lowering the cork or lead line, by manually drawing the net upward to roll it over the cork line or by bringing individuals on board for immediate release, usually alive and unharmed.</p> <p>An ecological risk assessment (ERA) in 2021, assessed the impact of the WCPSMF, South Coast Purse Seine Managed Fishery (SCPSMF) and PSDZ activities on stocks of bycatch species as being <u>negligible risk</u> (Blazeski et al. 2021).</p>
<p>Protected species</p>	<p>In WA commercial fishers are required (since 2005/06) to report any interactions with TEPS species in their statutory fishing returns that are lodged with the Department. The Department publishes a summary of all fishery-TEPS interactions annually.</p> <p>WCPSMF and development zone interactions are rare and usually result in the animal being released unharmed. No interactions were recorded by fishers in 2020/21.</p> <p>The risk to protected species from WCPSMF, SCPSMF and PSDZ was assessed as <u>negligible</u> (long nosed fur seal, Australian sea lion, syngnathids and other ETP species) and <u>low</u> (dolphins) in the 2021 ERA (Blazeski et al. 2021).</p>



Figure 1. Boundaries of the Western Australian West Coast Purse Seine Managed Fishery and the Northern and Southern Development Zones (source: WA DPIRD).

Contact

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