



**Australian Government**

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**Department of the Environment and Water Resources**

Assessment of the  
**Queensland Finfish (Stout Whiting) Trawl Fishery**

November 2007

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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 Queensland Finfish (Stout Whiting) Trawl Fishery (QFTF)**

<p><b>Publicly available information relevant to the fishery</b></p>	<ul style="list-style-type: none"> <li>• Queensland (QLD) <i>Fisheries Act 1994</i></li> <li>• QLD <i>Fisheries Regulation 1995</i></li> <li>• Annual Status Report – Queensland Finfish (Stout Whiting) Trawl Fishery 2007 (Department of Primary Industries and Fisheries (DPI&amp;F))</li> <li>• Annual Status Report 2006 – Finfish (Stout Whiting) Trawl Fishery, July 2006 (DPI&amp;F)</li> <li>• Annual Status Report 2005 – Finfish (Stout Whiting) Trawl Fishery , January 2006 (DPI&amp;F)</li> <li>• Fisheries Long Term Monitoring Program Summary of stout whiting (<i>Sillago robusta</i>) survey results: 1991 – 2006 (DPI&amp;F)</li> <li>• Fisheries Long Term Monitoring Program Stout Whiting Report: 1991–2004 (DPI&amp;F)</li> <li>• Queensland Finfish Trawl Fishery — Statement of Management Arrangements (DPI&amp;F)</li> <li>• Assessment of the Queensland Finfish (Stout Whiting) Trawl Fishery, November 2004 (Department of the Environment and Heritage)</li> <li>• Ecological Assessment of the Queensland Finfish (Stout Whiting) Trawl Fishery, December 2003 (DPI&amp;F)</li> </ul>
<p><b>Area</b></p>	<p>The QFTF encompasses the area between the 36–90 metre depth contours and extends from Caloundra in the south to Sandy Cape, the northern tip of Fraser Island. The majority of the fishery is in Commonwealth waters, however the entire fishery is managed by QLD under an Offshore Constitutional Settlement agreement between the Australian Government and the Government of Queensland.</p>
<p><b>Fishery status</b></p>	<p>The 1991 to 2002 fisheries assessment report estimated the B/K ratio (exploitable biomass to exploitable component of virgin carrying capacity) for stout whiting was at 0.19 in 2002. A B/K ratio of less than 0.2 is generally accepted as indicating a species at a high risk of over-exploitation. DPI&amp;F acknowledges the species was overfished in the late 1990s leading up to this assessment. However:</p> <ul style="list-style-type: none"> <li>• a significant reduction in the number of licences/operators (currently 5 licences)</li> <li>• several years of low harvest due to low market prices; and</li> <li>• a Total Allowable Catch Table (TACT) which utilises computer population modelling and historical and emerging stock assessment data to set conservative annual Total Allowable Catches (TACs)</li> </ul> <p>has reduced the harvest to sustainable levels and allowed a modest recovery in stout whiting stocks. The 2005–2007 Annual Status Reports have all reported small increases in stock size.</p>

<b>Target Species</b>	<p>The target species is stout whiting (<i>Sillago robusta</i>).</p> <p>Red spot whiting (<i>Sillago flindersi</i>), a “sister” species with very similar ecology, biology and habitat preferences, is also a permitted species. However the primary range of red spot whiting is in waters of northern New South Wales (NSW); consequently it is reported to comprise only a very small proportion of the whiting catch (~ 1%) in the southern end of the QFTF fishing ground.</p> <p>Information on the biology of stout whiting can be found in the then Department of the Environment and Heritage’s initial assessment of the fishery at: <a href="http://www.environment.gov.au/coasts/fisheries/qld/stout-whiting/report.html">http://www.environment.gov.au/coasts/fisheries/qld/stout-whiting/report.html</a>.</p>
<b>By-product Species</b>	<p>Species permitted to be retained in limited quantities as saleable by-product include:</p> <p><u>finfish</u>  pinkies (<i>Nemipterus spp.</i>, 2006 limit of 41 “5 kg boxes”)  goatfish* (2006 limit of 20 t)  yellowtail scad† (2006 limit of 20 t)</p> <p><u>crustaceans</u>  Balmain bugs (no limit in 2006)  Moreton Bay bugs (no limit in 2006)</p> <p><u>cephalopods</u>  squid (various species) (2006 limit of 52 “5 kg boxes”)  cuttlefish (2006 limit of 52 “5 kg boxes”)</p> <p>In-possession limits are intended to ensure that these species are not actively targeted. In 2006 yellowtail scad was the most heavily-harvested of the permitted byproduct species (22 t). This catch was slightly above the permitted limit of 20 t.</p>
<b>Gear</b>	<p>Otter trawling with a single otter trawl net has been the permitted fishing method.</p> <p>Gear restrictions consist of a maximum combined headrope/footrope length of 88 m, mesh size 38–60 mm and maximum sweep length of 128 m. Vessels are restricted to a maximum length of 20 m. The use of Turtle Excluder Devices (TEDs) on all trawl gear is now mandatory in the QFTF.</p> <p>Recently the use of Danish seines has also been approved, with a single net with two long haul warps (~ 2.5 km) and a mesh size of 38–60 mm. The Danish seine method offers the advantages of shorter haul times and slower haul speeds, which reduces bycatch and disturbance of the sea bed and associated ecological impacts.</p>
<b>Season</b>	<p>A mandatory closure applies for the months of January, February and March. Operators in the QFTF also observe a voluntary closure from</p>

\* Only two vessels operating in the QFTF are permitted to take goatfish, of which the entire catch must be sold to Sea World and/or UnderWater World.

† Only two vessels operating in the QFTF are permitted to take yellow tail scad, of which the entire catch must be sold to Sea World and/or UnderWater World.

	20 September to 1 November, mirroring a mandatory closure in the East Coast Otter Trawl Fishery (ECOTF).
<b>Commercial harvest</b>	<p>In 2006, 936 t of stout whiting were landed (i.e. caught and retained) and a further 37 t were caught and discarded. The TAC for 2006 was 1,200 t.</p> <p>Catch of permitted by-product species in 2006 were:</p> <p>Pinkies — 1.7 t</p> <p>Balmain bugs — 1.8 t</p> <p>Cuttlefish — 4.4 t</p> <p>Goatfish — 9.4 t</p> <p>Octopus — 2.2 t</p> <p>Yellowtail scad — 21.8 t</p> <p>Squid — 2.4 t</p> <p>Moreton Bay bugs — 0.1 t</p> <p>Since the 2004 Department of the Environment and Water Resources (DEW) assessment, fishing effort has declined slightly while catch has varied, with catches of 957 t, 1130 t and 957 t in 2004, 2005 and 2006 respectively.</p>
<b>Value of commercial harvest</b>	Gross Value Product (GVP) in 2006 was estimated to be A\$2.15–2.30 million.
<b>Take by other sectors</b>	<p>Due to their small size and relatively deep water habitats as adults, stout whiting are generally not caught by recreational fishermen or Indigenous people. Harvest by recreational and Indigenous sectors is therefore considered negligible.</p> <p>Stout whiting also form part of the bycatch in the ECOTF and NSW Ocean Prawn Trawl Fishery (OPTF). Information on bycatch of stout whiting in these fisheries is being incorporated into stock assessments.</p>
<b>Commercial licences issued</b>	There are 5 T4 licences and 3 operators in the fishery.
<b>Management arrangements</b>	<p>The fishery is managed under the Queensland <i>Fisheries Regulation 1995</i> and the Queensland <i>Fisheries Act 1994</i>. General Fisheries Permits are issued to allow take of permitted by-product species. A General Fisheries Permit has also been issued under the <i>Fisheries Regulation 1995</i> to allow one operator to use of a Danish seine net for 2006 and 2007.</p> <p><u>Input controls</u></p> <ul style="list-style-type: none"> <li>• Limited entry — 5 licences</li> <li>• Vessel size limit of 20 metres</li> <li>• One formal and one voluntary seasonal closure.</li> <li>• Net length</li> <li>• Sweep length</li> <li>• Mesh size</li> </ul>

	<p><u>Output controls</u></p> <ul style="list-style-type: none"> <li>• Annual TAC set by the TACT based on stock assessments and population modelling.</li> <li>• In-possession limits on permitted by-product species</li> <li>• Delineated fishing area</li> </ul> <p>A Vessel Monitoring System (VMS) is used in all vessels in the QFTF.</p>
<b>Export</b>	<p>Stout whiting are sold to Asian countries. A portion is re-exported to Australian markets.</p>
<b>Bycatch</b>	<p>Data from several research trials conducted in the QFTF using fish trawl gear (Butcher, 1992) was used to estimate a bycatch to target species weight ratio of 3.3:1 (Robins and Courtney, 1998).</p> <p>Danish Seine appears to have significantly reduced bycatch compared to Fish Trawl however a complete assessment of this apparatus is yet to be completed.</p> <p>Beyond the use of a TED and the minimum mesh size of the net the use of Bycatch Reduction Devices (BRDs) is not seen as practical given the species being targeted.</p> <p>At times large quantities of permitted species are also discarded. Little is known on survival rates of discarded stout whiting, however the universal use of hoppers is believed to have improved survival rates to some extent.</p>
<b>Interaction with Protected Species</b>	<p>The fishery has recorded interactions with pipefish and sea snakes. Interactions are recorded in a Species of Conservation Interest (SOI) logbook. 110 pipefish were caught and discarded in 2006. Sea snakes however are only captured in low numbers. In 2006 DPI&amp;F observers noted 4 interactions with sea snakes.</p> <p>There have been no reported interactions with turtles in the QFTF. TEDs are mandatory on trawl nets in the QFTF as turtles are likely to traverse the fishery area travelling to inshore waters.</p>
<b>Ecosystem Impacts</b>	<p>Available information indicates that the fishery operates over sandy substrates that contains no large sessile benthic organisms. Given this, it is unlikely that the operation of the fishery has significant impact on the sea floor.</p> <p>The most significant ecosystem impact of this fishery remains the bycatch discussed above.</p>

**Table 2: Progress in implementation of recommendations made in initial assessment of the QFTF**

Conditions	Progress	Recommended Action
<p>1. Operation of the fishery will be carried out in accordance with the QFTF management regime in force under the <i>Fisheries Act 1994</i> and the <i>Fisheries Regulation 1995</i>.</p>	<p>The fishery has operated in accordance with the legislated management regime over the course of the current export approval.</p>	<p>This condition has been met and will continue to apply under the new Wildlife Trade Operation (WTO) declaration for this fishery for the next three years (<b>WTO Condition 1</b>).</p>
<p>2. Reports to be produced and presented to DEW annually, and to include:</p> <ul style="list-style-type: none"> <li>• information sufficient to allow assessment of the progress of DPI&amp;F in implementing the recommendations made in the <i>Assessment of the Queensland Finfish (Stout Whiting) Trawl Fishery 2004</i> and commitments made in the <i>Ecological Assessment of the Queensland Finfish (Stout Whiting) Trawl Fishery</i></li> <li>• A description of the status of the fishery and catch and effort information</li> <li>• A statement of the performance of the fishery against objectives, performance indicators and measures once developed</li> <li>• Research undertaken or completed relevant to the fishery.</li> </ul>	<p>Annual status reports for the QFTF were prepared in 2005, 2006 and 2007. These reports are publicly available from the DPI&amp;F website. The reports contain information on progress in implementing recommendations, catch and effort trends and research undertaken or completed relevant to the fishery. DPI&amp;F has developed a Performance Measurement System (PMS) for the QFTF that includes performance measures and reference points for the target species, bycatch species and ecosystem impacts. DPI&amp;F will report on the performance of the QFTF against the performance measures in the annual status reports.</p>	<p>DEW considers that this condition has been met and notes that, as part of the new WTO declaration for this fishery, this condition remains in force for a further three years (<b>WTO Condition 3</b>).</p>

<p>3. DPI&amp;F will inform the DEW of any intended amendments to the QFTF management regime that may affect the sustainability of the target species or negatively impact on byproduct, bycatch, protected species or the ecosystem.</p>	<p>DPI&amp;F informed DEW of all management changes occurring in 2004 to present, including changes to TAC, introduction of TACT and issuing a permit for use of Danish seine.</p>	<p>This condition has been met and will continue to apply under the new WTO declaration for this fishery for the next three years (<b>WTO Condition 2</b>).</p>
<p><b>Recommendations</b></p>	<p><b>Progress</b></p>	<p><b>Recommended Action</b></p>
<p>1. DPI&amp;F will inform the DEW of any intended amendments to the QFTF management regime that may affect the sustainability of the target species or negatively impact on byproduct, bycatch, protected species or the ecosystem.</p>	<p>As above.</p>	<p>As above.</p>
<p>2. By December 2006, DPI&amp;F to develop fishery specific objectives linked to performance indicators and performance measures for target, by-product, by-catch, protected species and impacts on the ecosystem.</p>	<p>A PMS was approved and put in place in April 2007. The PMS includes objectives, performance indicators and performance measures for target, by-product, bycatch, protected species and impacts on the ecosystem.</p> <p>Briefly summarised, the performance measure for the target species is a TAC reduction of more than 100 t. The performance measure for permitted species by-product is 10% greater than the highest historical catch recorded for the years 2002 to 2005. The performance measures for bycatch is that annual catch of 10 indicator species does not increase or decrease by [more than] 10% from the 2006 level over a 3 year period. The performance measure of protected species has a similar basis. The</p>	<p>DEW considers that this recommendation has been met.</p>

	performance measures for ecosystem impacts are a more than 25% change in the relative abundance of the top 10 bycatch species over a 3 year period, more than a 25% increase of high yielding fishery area trawled, and a [more than] 10% decrease in total number of species recorded in by-catch monitoring over a 3 year period.	
3. DPI&F to monitor the status of the fishery in relation to the performance measures, once developed. Within 3 months of becoming aware of a performance measure not being met, DPI&F to finalise a clear timetable for the implementation of appropriate management responses.	Monitoring has been carried out against the PMS in 2007. The PMS requires DPI&F to respond with appropriate management responses within 3 months of becoming aware that a review has been triggered, with a clear timetable for implementation of these management responses.	DEW considers this recommendation has been met, given the PMS requires DPI&F to continue monitoring performance of the QFTF and act on any triggered performance measures.
4. DPI&F to formalise and make publicly available all of the management arrangements for the QFTF, including the process for setting the TAC, the use of vessel monitoring systems, spatial and/or temporal closures and any fishery specific objectives, performance indicators and performance measures developed for the QFTF.	A Statement of Management Arrangements has been completed and it is available on DPI&F's website. While the majority of key management arrangements are formalised, the Statement of Management Arrangements describes the TAC as voluntary.	DEW considers this recommendation has largely been met. DEW recommends that DPI&F revise the description of the TAC in the Statement of Management Arrangements to better describe its binding status ( <b>Recommendation 1</b> ).
5. From 2005 DPI&F to report publicly on the status of the fishery on an annual basis including explicit reporting against each performance measure, once developed.	Annual Status Reports produced since 2005 have reported against these measures.	DEW considers that this recommendation has been met and notes that annual reporting remains a condition on the new export approval ( <b>Condition 3</b> ).
6. DPI&F to continue to cooperate with New South Wales (NSW) to pursue complementary management and	DPI&F advise that catch data from NSW is being received, and will be utilised in the next quantitative stock assessment in 2011.	DEW considers that this recommendation has been met and notes DPI&F's commitment to utilise ongoing catch data from NSW, and

research of shared stocks for all target and by-product species in the QFTF which may be affected by cross-jurisdictional issues.		incorporate NSW catch data in the 2011 stock assessment.
7. DPI&F to develop and implement a robust system to validate catch and effort logbook data and the accuracy of the SOCI logbook data, once the SOCI logbook is implemented.	DPI&F advise that validation of logbook catch and effort data and reporting of interactions with protected species is scheduled to be completed by September 2007, using independent data collected by the Fisheries Observer Program (FOP) as well as from weighbridge landing dockets.	DEW considers that this recommendation has been met and notes DPI&F's commitment to continue catch logbook and SOCI logbook monitoring and validation.
8. By the end of 2006, DPI&F to develop and implement a system sufficient to identify changes in the composition and quantity of bycatch in the QFTF over time.	DPI&F advise that that bycatch monitoring in the QFTF is being addressed in parallel with the ECOTF through the FOP.	DEW considers that this recommendation has been met and notes DPI&F's commitment to continue with a bycatch monitoring system in the QFTF.
9. DPI&F to conduct a risk assessment of by-catch captured in the QFTF. Appropriate management responses will be developed to reduce risks to species or groups identified as high-risk.	DPI&F have provided a draft risk assessment of bycatch, which they advise should be finalised in late 2007 or early 2008.	DEW considers that this recommendation has largely been met and will review the bycatch risk assessment when it is finalised. DEW expects that DPI&F will introduce appropriate management responses to reduce the risk to species or groups identified as high-risk.
10. DPI&F to pursue a reduction in the amount of bycatch taken in the QFTF and continue to support the investigation of methods for increasing the survivability of by-catch species. Any effective and appropriate methods identified should be implemented within 18 months of identification.	TEDs are now mandatory in the fishery, and Danish Seine is being trialed as an alternative fishing apparatus with initial assessment showing a significantly reduced take of bycatch.	DEW considers this recommendation has <b>not</b> been met. No research and little direct action has been directed into the reduction of bycatch in this fishery, particularly of pinkies ( <i>Nemipterus spp.</i> ).  DEW considers further commitment, research and action are needed on this recommendation ( <b>Recommendation 3</b> ).  DEW notes that the use of Danish seine may

		reduce bycatch levels in the QFTF. This issue will be reviewed in detail in the next assessment in 2010, when data on the quantity and composition of bycatch from Danish seine are available.
11. DPI&F to promote research into the impact of the fishery on protected species and implement measures to reduce protected species interactions.	DPI&F advises that information is collected through SOCI logbooks, and research is being undertaken into the vulnerability of sea snakes to trawl fisheries, and associated rates of survival after capture.	DEW considers that this recommendation has been met. Results from log-books and sea snake research projects will be published in annual reports as they become available.
12. The spatial management system in the ECOTF is to be reviewed by DPI&F. Should this review identify any ECOTF areas that overlap with the QFTF for closure, DPI&F to consider also closing those areas to the QFTF.	DPI&F advises that a review of trawl closures has been undertaken in consultation with industry. A number of proposed closures that will apply to the QFTF will be included in an upcoming Regulatory Impact Statement.	DEW considers that the implementation of this recommendation is ongoing.

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

**Part 13**

Section 208A Minister may accredit plans, regimes or policies	DEW assessment of the QFTF
<p>Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <ul style="list-style-type: none"> <li>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:               <ul style="list-style-type: none"> <li>i. made by a State or self-governing Territory; and</li> <li>ii. in force under a law of the State or self-governing Territory;</li> </ul> </li> </ul> <p>if the Minister is <b>satisfied</b> that:</p> <ul style="list-style-type: none"> <li>(f) 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</li> <li>(g) 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.</li> </ul>	<p>The QFTF is managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 1995</i>.</p> <p>The management regime was accredited in November 2004. DPI&amp;F have advised DEW of minor amendments to the management regime for the QFTF since accreditation. DEW agreed that the amendments did not significantly affect the sustainability of the fishery and that a new Part 13 declaration was not required at that time.</p> <p>Currently, SOCI logbook and observer data suggests that the QFTF has minimal interactions with listed threatened species. Reported interactions with the main listed threatened species encountered in this fishery, marine turtles, have been dramatically reduced and minimised by the mandatory use of TEDs. Therefore, DEW considers the current operation of the fishery is not likely to adversely affect the survival or recovery in nature of any threatened species.</p>

Section 222A Minister may accredit plans, regimes or policies	DEW assessment of the QFTF
<p>Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <ul style="list-style-type: none"> <li>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: <ul style="list-style-type: none"> <li>i. made by a State or self-governing Territory; and</li> <li>ii. in force under a law of the State or self-governing Territory;</li> </ul> </li> </ul> <p>if the Minister is <b>satisfied</b> that:</p> <ul style="list-style-type: none"> <li>(f) 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</li> <li>(g) 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.</li> </ul>	<p>The QFTF is managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 1995</i>.</p> <p>The management regime was accredited in November 2004. DPI&amp;F have advised DEW of minor amendments to the management regime for the QFTF since accreditation. DEW agreed that the amendments did not significantly affect the sustainability of the fishery and that a new Part 13 declaration was not required at that time.</p> <p>Information provided by DPI&amp;F indicates that there have been no interactions with migratory species in the QFTF. Therefore, DEW considers the current operation of the fishery is not likely to adversely affect the conservation status of any listed migratory species or a population of that species.</p>
Section 245 Minister may accredit plans, regimes or policies	DEW assessment of the QFTF
<p>Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <ul style="list-style-type: none"> <li>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: <ul style="list-style-type: none"> <li>i. made by a State or self-governing Territory; and</li> <li>ii. in force under a law of the State or self-governing Territory;</li> </ul> </li> </ul>	<p>The QFTF is managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 1995</i>.</p>

<p>if the Minister is <b>satisfied</b> that:</p> <p>(f) the plan, regime or policy requires persons engaged in fishing under the plan to take all reasonable steps to ensure that cetaceans are not killed or injured as a result of the fishing; and</p> <p>(g) 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.</p>	<p>The management regime was accredited in November 2004. DPI&amp;F have advised DEW of minor amendments to the management regime for the QFTF since accreditation. DEW agreed that the amendments did not significantly affect the sustainability of the fishery and that a new Part 13 declaration was not required at that time.</p> <p>Information provided by DPI&amp;F indicates that there have been no interactions with cetacean species in the QFTF. Therefore, DEW considers the current operation of the fishery is not likely to adversely affect the conservation status of any listed cetacean species or a population of that species.</p>
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<b>Section 265 Minister may accredit plans, regimes or policies</b>	<b>DEW assessment of the QFTF</b>
<p>Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <ol style="list-style-type: none"> <li>i. made by a State or self-governing Territory; and</li> <li>ii. in force under a law of the State or self-governing Territory;</li> </ol> <p>if the Minister is <b>satisfied</b> that:</p> <p>(f) the plan 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</p> <p>(g) the fishery to which the plan, regime or policy relates does</p>	<p>The QFTF is managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 1995</i>.</p> <p>The management regime was accredited in November 2004. DPI&amp;F have advised DEW of minor amendments to the management regime for the QFTF since accreditation. DEW agreed that the amendments did not significantly affect the sustainability of the fishery and that a new Part 13 declaration was not required at that time.</p> <p>Reported interactions are with pipefish (syngnathids) and sea snakes.</p>

<p>not, or is not likely to, adversely affect the conservation status of a listed marine species or a population of that species.</p>	<p>Currently SOCI logbook and observer data suggests that the QFTF has minimal interactions with these listed marine species. Therefore, DEW considers the current operation of the fishery is not likely to adversely affect the survival or recovery in nature of any marine species.</p>
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**Part 13A**

<p><b>Section 303DC Minister may amend list</b></p>	<p><b>DEW assessment of the QFTF</b></p>
<p>The Minister may, by instrument in published in the Gazette, amend the list referred to in section 303DB (list of exempt native specimens) by: including items in the list;</p>	<p>No amendment to the List of Exempt Native Specimens (LENS) is required. The QFTF WTO is already included on the LENS.</p>

<p><b>Section 303FN Approved Wildlife Trade Operation</b></p>	<p><b>DEW assessment of the QFTF</b></p>
<p>The Minister may, by instrument published in the <i>Gazette</i>, declare that a specified wildlife trade operation is an <i>approved wildlife trade operation</i> for the purposes of this section.</p>	
<p>The Minister must not declare an operation as an approved wildlife trade operation unless the Minister is <b>satisfied</b> that:</p> <p>(a) the operation is consistent with the objects of Part 13A of the Act; and</p>	<p>The QFTF is consistent with objects of Part 13A (listed after this table) as:</p> <ul style="list-style-type: none"> <li>• the fishery will not harvest any CITES listed species</li> <li>• there are minimal interactions with listed threatened and marine species, and no known interactions with cetaceans</li> <li>• there are management arrangements in place to ensure that the resource is being managed in an ecologically sustainable way (see Table 1)</li> <li>• the operation of the QFTF is unlikely to be unsustainable and threaten biodiversity within the next 3 years; and</li> </ul>

<p>(b) the operation will not be detrimental to:</p> <ol style="list-style-type: none"> <li>i. the survival of a taxon to which the operation relates; or</li> <li>ii. the conservation status of a taxon to which the operation relates; and</li> </ol> <p>(ba) the operation will not be likely to threaten any relevant ecosystem including (but not limited to) any habitat or biodiversity; and</p> <p>(c) if the operation relates to the taking of live specimens that belong to a taxon specified in the regulations – the conditions that, under the regulations, are applicable to the welfare of the specimens are likely to be complied with; and</p> <p>(d) such other conditions (if any) as are specified in the regulations have been, or are likely to be, satisfied.</p>	<ul style="list-style-type: none"> <li>• the EPBC Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.</li> </ul> <p>DEW considers that the QFTF will not be detrimental to the survival or conservation status of a taxon to which it relates within the next 3 years, given the management measures currently in place, which include limited entry, annual stock assessments and annual TACs set under the TACT, relatively low limits on permitted by-product species to prevent intentional targeting, seasonal closures, gear restrictions, vessel restrictions, SOCI logbooks, mandatory use of TEDs and ongoing observer coverage.</p> <p>DEW considers that the QFTF will not threaten any relevant ecosystem within the next 3 years, given the management measures currently in place, which include limited entry, annual stock assessments and annual TACs set under the TACT, relatively low limits on permitted by-product species to prevent intentional targeting, seasonal closures, gear restrictions, vessel restrictions, SOCI logbooks, mandatory use of TEDs and ongoing observer coverage.</p> <p>The EPBC Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.</p> <p>No other conditions are specified in relation to commercial fisheries in the EPBC Regulations 2000.</p>
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<p>In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have <b>regard</b> to:</p> <ul style="list-style-type: none"> <li>(a) the significance of the impact of the operation on an ecosystem (for example, an impact on habitat or biodiversity); and</li> <li>(b) the effectiveness of the management arrangements for the operation (including monitoring procedures).</li> </ul>	<p>DEW considers that the QFTF will not threaten any relevant ecosystem within the next 3 years, given the management measures currently in place, which include limited entry, annual stock assessments and annual TACs set under the TACT, relatively low limits on permitted by-product species to prevent intentional targeting, seasonal closures, gear restrictions, vessel restrictions, SOCI logbooks, mandatory use of TEDs and ongoing observer coverage.</p> <p>The management arrangements that will be employed for the QFTF are likely to be effective. Management arrangements for the QFTF are summarised in the publicly available Statement of Management Arrangements. Management arrangements include limited entry, annual stock assessments and annual TACs set under the TACT, relatively low limits on permitted by-product species to prevent intentional targeting, seasonal closures, gear restrictions, vessel restrictions, SOCI logbooks, mandatory use of TEDs and ongoing observer coverage. The performance of the QFTF is also reviewed annually, against a series of objectives, performance measures and reference points for target, by-product, bycatch and protected species.</p>
<p>In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have <b>regard</b> to:</p> <ul style="list-style-type: none"> <li>(a) whether legislation relating to the protection, conservation or management of the specimens to which the operation relates is in force in the State or Territory concerned; and</li> <li>(b) whether the legislation applies throughout the State or Territory concerned; and</li> </ul>	<p>The QFTF is managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 1995</i>.</p> <p>The Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 1995</i> apply throughout QLD waters.</p>

<p>(c) whether, in the opinion of the Minister, the legislation is effective.</p>	<p>The management arrangements that will be employed for the QFTF are likely to be effective. Management arrangements include limited entry, annual stock assessments and annual TACs set under the TACT, relatively low limits on permitted by-product species to prevent intentional targeting, seasonal closures, gear restrictions, vessel restrictions, SOCI logbooks, mandatory use of TEDs and ongoing observer coverage. The performance of the QFTF is also reviewed annually, against a series of objectives, performance measures and reference points for target, by-product, bycatch and protected species.</p>
<p>For the purposes of section 303FN, an operation is a wildlife trade operation if, and only if, the operation is an operation for the taking of specimens and:</p> <p>(d) the operation is a commercial fishery.</p>	<p>The QFTF is a commercial fishery.</p>
<p>In deciding whether to declare that a commercial fishery is an approved wildlife trade operation for the purposes of this section, 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.</p>	<p>No assessment of the QFTF has been carried out under Part 10 of the EPBC Act.</p>
<p>The above does not limit the matters that may be taken into account in deciding whether to declare that a fishery is an approved wildlife trade operation for the purposes of this section.</p>	

<b>Section 303FR Public consultation</b>	<b>DEW assessment of the QFTF</b>
<p>Before making a declaration under section 303FN, the Minister must cause to be published on the Internet a notice:</p> <ul style="list-style-type: none"> <li>(a) setting out the proposal to make the declaration; and</li> <li>(b) setting out sufficient information to enable persons and organisations to consider adequately the merits of the proposal; and</li> <li>(c) inviting persons and organisations to give the Minister, within the period specified in the notice, written comments about the proposal.</li> </ul>	<p>DEW considers that consultation requirements of the EPBC Act for declaring a WTO have been met. A public notice, which set out the proposal to declare the QFTF a WTO and included the annual reports for the fishery, was released for public comment on 7 September 2007.</p>
<p>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.</p>	<p>A public notice, which set out the proposal to declare the QFTF a WTO and included the annual report for the fishery was released for public comment on 7 September 2007 and closed on 9 October 2007, a total of 23 business days.</p>
<p>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.</p>	<p>No public comments were received.</p>

<b>Section 303FT Additional provisions relating to declarations</b>	<b>DEW assessment of the QFTF</b>
<p>This section applies to a declaration made under section 303FN, 303FO or 303FP.</p>	<p>A declaration for the QFTF will be made under section 303FN.</p>
<p>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:</p> <ul style="list-style-type: none"> <li>(a) during a particular period; or</li> <li>(b) while certain circumstances exist; or</li> <li>(c) while a certain condition is complied with.</li> </ul>	<p>The standard conditions applied to commercial fishery WTOs include:</p> <ul style="list-style-type: none"> <li>• operation in accordance with the management regime; and</li> <li>• notifying DEW of changes to the management regime; and</li> <li>• annual reporting.</li> </ul> <p>It is recommended the standard conditions are applied to the QFTF WTO declaration.</p>

In such a case, the instrument of declaration is to specify the period, circumstances or condition.	The WTO instrument for the QFTF specifies the conditions applied.
A condition may relate to reporting or monitoring.	One of the standard conditions relates to reporting.
The Minister must, by instrument published in the <i>Gazette</i> , revoke a declaration if he or she is satisfied that a condition of the declaration has been contravened.	
A copy of an instrument under section 303FN, 303FO or 303FP or this section is to be made available for inspection on the Internet.	The instrument for the QFTF made under sections 303FN and 303FT will be gazetted and made available on the DEW website.

<b>Section 391 Minister must consider precautionary principle in making decisions</b>	<b>DEW assessment of the QFTF</b>
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.	You must consider the precautionary principle when making a 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 DPI&F for the QFTF

The material submitted by DPI&F demonstrates that the management arrangements for the QFTF meet most of the requirements of the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries*. DEW recognises that the QFTF's management arrangements, which include limited entry, annual stock assessments and annual TACs set under the TACT, relatively low limits on permitted by-product species to prevent intentional targeting, seasonal closures, gear restrictions, vessel restrictions, SOCI logbooks, mandatory use of TEDs and ongoing observer coverage, render it somewhat robust to fishing. As such, DEW considers that overall the management regime aims to ensure that fishing is conducted in a manner that does not lead to over-fishing and for fishing operations to be managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.

While the fishery is relatively well managed, DEW has identified a number of risks and uncertainties that must be managed to ensure that impacts are minimised:

- Concerns over the enforceability of the TAC, given its description as 'voluntary' in the Statement of Management Arrangements;
- Ensuring that sufficient protection is provided during the peak spawning period of stout whiting; and
- A relatively high level of bycatch, particularly in regard to pinkies or threadfin bream species (*Nemipterus spp.*), whose high level of capture and discard is of concern.

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. The key challenge for this fishery will be reducing bycatch and discards of permitted species. DEW considers that, until it can be demonstrated that this issue has been adequately dealt with, a 3 year Wildlife Trade Operation declaration is appropriate.

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.

The management arrangements were accredited under Part 13 of the EPBC Act in November 2004. DPI&F have advised DEW of minor amendments to the management regime for the QFTF since accreditation, however DEW agreed that the amendments did not significantly affect the sustainability of the fishery and considers that the existing Part 13 accreditation remains valid.

Unless a specific time frame is provided in the recommendation each recommendation must be addressed within the life of the declaration (3 years). Note that a standard condition of a WTO is an annual reporting requirement, the details of which are provided at the end of the recommendations.

**Table 4: QFTF Assessment — Summary of Issues and Recommendations, November 2007**

	<b>Issue</b>	<b>DEW Wildlife Trade Operation Condition</b>
<b>1</b>	<p><u>General Management</u> 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.</p>	<p><b>Condition 1:</b> Operation of the fishery will be carried out in accordance with the Queensland <i>Fisheries Regulation 1995</i> and the Queensland <i>Fisheries Act 1994</i>.</p> <p><b>Condition 2:</b> DPI&amp;F to inform DEW of any intended amendments to the management arrangements that may affect the criteria on which EPBC Act decisions are based.</p>
<b>2</b>	<p><u>Annual Reporting</u> 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 (3 years). Annual reports should include a description of the fishery, 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.</p>	<p><b>Condition 3:</b> DPI&amp;F to continue to produce and present reports to DEW annually as per Appendix B of the <i>Guidelines for the Ecologically Sustainable Management of Fisheries — 2<sup>nd</sup> Edition</i>.</p>
	<b>Issue</b>	<b>DEW Recommendation</b>
<b>1</b>	<p>DEW notes that most of the key management arrangements for the QFTF are formalised and enforceable, with the exception of the TAC. In the <i>Queensland Fin Fish Trawl — Statement of Management Arrangements</i> the TAC is described as a voluntary management arrangement.</p>	<p><b>Recommendation 1:</b> DPI&amp;F to review the description of the TAC in the <i>Queensland Finfish Trawl Fishery — Statement of Management Arrangements</i>. DPI&amp;F to consider making the annual TAC enforceable.</p>

	<b>Issue</b>	<b>DEW Recommendation</b>
	<p>DEW recommends that the description of the TAC be revised to better emphasise the binding (albeit non-legislative) nature of the TAC and ensure it is enforceable.</p> <p>DEW expects that if the TAC is exceeded, DPI&amp;F will take appropriate management action.</p>	
<b>2</b>	<p>The current system of seasonal closures consists of a mandatory closure for the months of January, February and March, and a voluntary seasonal closure from 20 September–1 November. The mandatory closure of January, February and March was initially implemented for the purpose of protecting the peak spawning period for stout whiting. However, the timing for the mandatory closure was decided when biological data was lacking. The gonado-somatic index in O’Sullivan <i>et al.</i>, 2005<sup>‡</sup> indicates the spawning peak for stout whiting is actually in the months of September and October, with an absolute peak in mid-October. Therefore the mandatory closure does not fulfil its initial function, although DPI&amp;F suggests it offers some protection to juvenile (young-of-the-year) stout whiting.</p> <p>DEW understands that the voluntary seasonal closure is currently a voluntary “sit-out” period mirroring a mandatory closure in the ECOTF and is aimed at reducing conflict between QFTF and ECOTF operators. However the voluntary seasonal closure inadvertently provides protection to the stout whiting spawning peak. DPI&amp;F have advised that the voluntary nature of the closure is being reviewed in an upcoming Regulatory Impact Statement.</p>	<b>Recommendation 2:</b> DPI&F to review the current closures in the QFTF to ensure that protection is provided during the peak spawning period of stout whiting.
<b>3</b>	Reduction of bycatch should be pursued, particularly in regard to pinkies or threadfin bream species ( <i>Nemipterus spp.</i> ), whose high level of capture and	<b>Recommendation 3:</b> DPI&F to pursue a reduction in the amount of bycatch taken in the QFTF. Industry

<sup>‡</sup> O’Sullivan *et al.*, 2005. Fisheries Long Term Monitoring Program — Stout Whiting (*Sillago robusta*) Report: 1991–2004

	<b>Issue</b>	<b>DEW Recommendation</b>
	discard is of concern. Pinkies have been assessed as a mix of “Moderate Risk” and “Probable High Risk” (Zeller, pers. comm.; Kerrigan <i>et al.</i> , 2004 <sup>§</sup> ) in regards to bycatch impacts, and were reported to have a high post-capture mortality in Kerrigan <i>et al.</i> , 2004. DEW recommends that DPI&F pursue a reduction in the amount of bycatch taken in the QFTF and actively encourage the update of any effective and appropriate bycatch mitigation measures identified.	will be encouraged to immediately adopt any effective and appropriate methods of bycatch reduction.

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<sup>§</sup> Kerrigan *et al.*, 2004. Review of the Sustainability of Fishing Effort in the Queensland East Coast Trawl Fishery

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## Acronyms

BRDs	Bycatch Reduction Devices
DEH	Australian Government Department of the Environment and Heritage (now DEW)
DEW	Australian Government Department of the Environment and Water Resources
DPI&F	Queensland Department of Primary Industries and Fisheries
ECOTF	East Coast Otter Trawl Fishery
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
FOP	Fisheries Observer Program
GVP	Gross Value Product
m	metre
mm	millimetre
NSW	New South Wales
OPTF	NSW Ocean Prawn Trawl Fishery
PMS	Performance Measurement System
QLD	Queensland
QFTF	Queensland Finfish (Stout Whiting) Trawl Fishery
SOCI	Species of Conservation Interest
t	Tonnes
TAC	Total Allowable Catch
TACT	Total Allowable Catch Table
TEDs	Turtle Excluder Devices
VMS	Vessel Monitoring System
WTO	Wildlife Trade Operation