

Sustainable Fisheries Strategy

2017–2027

Fin Fish (Stout Whiting) Trawl Fishery Scoping Study

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Summary

Feature	Details
Species targeted	Stout whiting (<i>Sillago robusta</i>)
Fisheries symbols	Trawl symbol—T4
Legislation	<i>Fisheries Act 1994; Fisheries (General) Regulation 2019; Fisheries (Commercial Fisheries) Regulation 2019; Fisheries Declaration 2019; Fisheries Quota Declaration 2019.</i>
Working group	No
Harvest Strategy	No
Gear	Commercial—Otter trawl and Danish seine net Recreational—Line fishing <i>A full description of the types of apparatus permitted is outlined in Appendix 1.</i>
Main management methods	The following management measures are in place for the Fin Fish Trawl Fishery <ul style="list-style-type: none"> • Fishing area: offshore waters (>2m depth) from the southern Queensland border to the northern tip of Fraser Island, non-inclusive of bays, inlets and passages (<i>i.e.</i> Moreton Bay, Pumicestone passage, Hervey Bay <i>etc.</i>) • Spatial and temporal closures; • Gear and vessel restrictions including net length, mesh size and <i>Vessel Tracking</i>. • Mandatory use of a turtle excluder device (TED) when using an otter trawl. <i>A full description of the types of gear permitted is outlined in Appendix 1, and a map of the T4 fishing area is provided in Fig. 1.</i>
Quota	Stout whiting—1106t TAC under a ITQ system (2017) Yellowtail scad—100t TAC (2017) Goatfish—100t TAC (2017)
Fishing Season	All year
Commercial Fishery licences	T4—5 (2017) Number of active licences—2 (2017)
Total annual harvest by sectors	Commercial: 1041t Charter: Negligible (Department of Employment Economic Development and Innovation, 2011; Department of Agriculture and Fisheries, 2019a) Recreational: Negligible (Roelofs & Hall, 2018; Department of Agriculture and Fisheries, 2019a) Harvest by Aboriginal peoples and Torres Strait Island peoples: Negligible (Department of Employment Economic Development and Innovation, 2011; Roelofs & Hall, 2018)
GVP	\$2.1 million GVP (Department of Agriculture and Fisheries, 2018)
Stock Status	SAFS reports stout whiting as 'sustainable' (Roelofs & Hall, 2018)
EPBC Act Accreditation	Part 13: Accredited Part 13A: Declared and approved wildlife trade operation (expires 14 February 2020)

1 Overview

1.1 Commercial Fishery

The *Fin Fish (Stout Whiting) Trawl Fishery* (FFTF) along with the *East Coast Otter Trawl Fishery* (ECOTF), *Moreton Bay Trawl Fishery*, and the *River and Inshore Beam Trawl Fishery* (RIBTF), is managed within Queensland's East Coast Trawl Fishery (ECTF). The FFTF is one of the smaller trawl fisheries operating on the Queensland east coast and it has an estimated Gross Value of Production (GVP) of \$2.1 million. This is in contrast to the ECOTF which has an estimated GVP of \$74 million (based on 2017 estimates).

Operators in the FFTF target stout whiting (*Sillago robusta*), which make up the bulk of the retained catch (>98%, 2015–17). While the regulations permit the retention of specific fin fish species, squid, octopus, cuttlefish, and bugs, only a moderate amount of byproduct is retained in this fishery; typically <5% of the total catch weight. The FFTF does however interact with a range of bycatch species including those classified as a *Species of Conservation Interest* (SOCI).

1.2 Non-commercial Fishing

The *Statewide Recreational Fishing Survey 2013–14* estimated that Queensland had an annual recreational fishing population of more than 640,000, with the sector registering a combined 12-month estimate of 2.5 million fishing days (Webley *et al.*, 2015). Recreational fishing activities tend to target fin fish species such as yellowfin bream, whiting, tailor, flathead, trevally and barramundi (among others) (Webley *et al.*, 2015).

The recreational whiting catch (*Sillago ciliata*, *S. analis* and *S. sihama*) is significant, with an estimated 997 000 individual fish being harvested by this sector—*Statewide Recreational Fishing Survey 2013-14* (high confidence) (Webley *et al.*, 2015; Department of Agriculture and Fisheries, 2019a). A large proportion of these will be sand whiting (McGilvray & Hall, 2018) with stout whiting only making a minor contribution to the total catch (Fisheries Research and Development Corporation, 2003; Department of Employment Economic Development and Innovation, 2011; Roelofs & Hall, 2018).

In addition to the recreational and charter fishing sectors, species retained in the FFTF will be harvested by Aboriginal peoples and Torres Strait Islander peoples. Catch and effort in this fishing sector remains the least understood. However, DAF anticipates that this sector has comparatively low levels of effort with fishing activities aligning closely with the recreational fishing sector. Similarly, retention rates in the commercial charter fishery will be low to negligible.

2 Legislation & Advisory Bodies

The FFTF is managed in accordance with the broader objectives of the *Fisheries Act 1994* and the relevant subordinate legislation *e.g. Fisheries (Commercial Fisheries) Regulation 2019*; *Fisheries Declaration 2019*; and *Fisheries Quota Declaration 2019*.

A Trawl Fishery Working Group (FWG) has been established as part of the broader *Queensland Sustainable Fisheries Strategy* (the Strategy) and includes stakeholders from the scientific community, management agencies, conservation groups and the commercial fishing sector. The

primary focus of the Trawl FWG (at present) remains on the operational aspects and management of the much larger ECOTF.

3 Key Management Controls

The FFTF is managed through a complex series of input controls that includes (among others): limited licencing; gear restrictions (e.g. gear type, vessel size, net length, mesh size), mandatory use of a Turtle Excluder Device (TED) in all otter trawl operations and spatial/temporal closures (Appendix 1). The take of key target species are managed through a Total Allowable Commercial Catch (TACC) limit and in-possession limits are applied to most byproduct species (Fig. 1; Appendix 2). Unlike the ECOTF, licence holders in the FFTF are not required to hold effort units to fish.

Since 1997, the commercial stout whiting catch has been managed through the use of biennial assessments and the setting of a TACC limit. These assessments examine standardised catch rates and take into consideration survival indicators, logbook data and length-age frequency data (Wortmann & O'Neill, 2016). These assessments provide insight into how the fishery is performing against key historical indicators and help to reduce the risk of over-exploitation. For the past 10 years, the total catch of stout whiting has not met the annual TACC limit.

In addition to stout whiting, yellowtail scad and goatfish are managed under separate TACC limits. These limits are currently set at 100 tonnes, however the fishery only retains a small amount of byproduct each year (3.3t of yellowtail scad and 0.5t of goatfish, 2015–17 average; Appendix 3). Most other byproduct species are managed under output controls, including in-possession limits for threadfin bream, octopus, squid and cuttlefish, and size and body condition (reproductive or carapace damage) regulations for bugs (Appendix 4).

When compared to teleost-based fisheries, the FFTF has a much smaller recreational component. This is due to a prohibition on the use of otter trawls or Danish seine nets for non-commercial purposes. If recreational fishers want to target and/or retain stout whiting, they must do so using a hook and line apparatus (only).

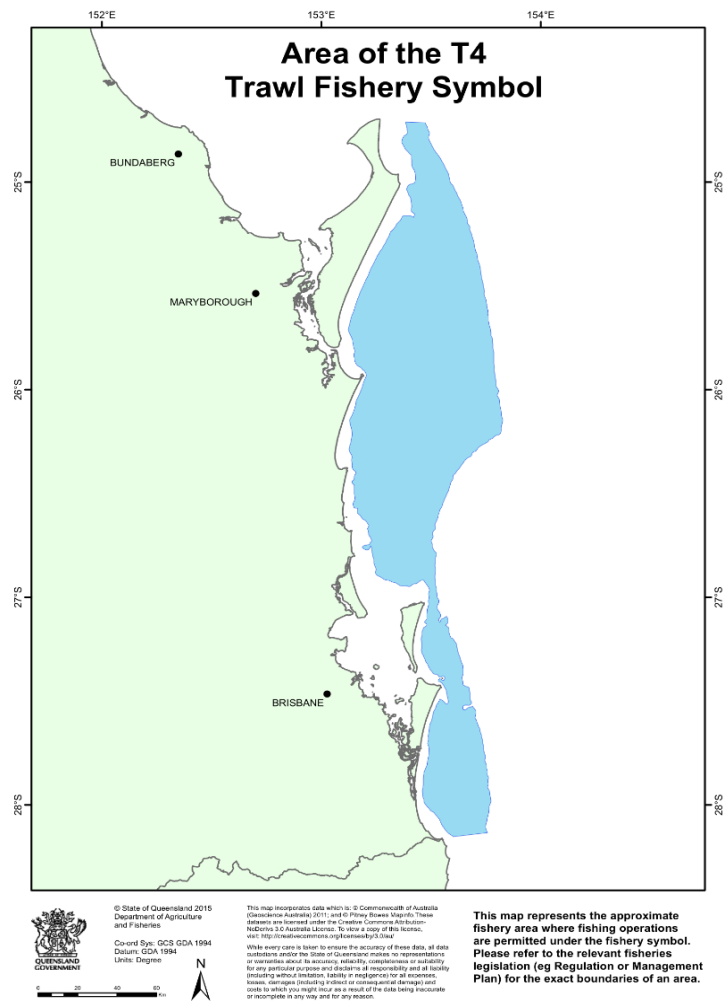


Figure 1—Map of the fishing area for the T4 fishery symbol

Key management arrangements for the recreational sector include spatial closures and gear restrictions. No size restrictions apply to stout whiting; although a general possession limit of 20 fish is applied to all species without a prescribed possession (Department of Agriculture and Fisheries, 2019b). With that said, the majority of the recreational effort is targeted at alternate whiting species, namely sand whiting (*Sillago ciliata*), goldline whiting (*S. analis*), trumpeter/winter whiting (*S. maculate*) and northern whiting (*S. sihama*).

A more detailed account of the gear restrictions applied to the FFTF is contained within Appendix 1, and species-specific output controls in Appendix 4. Refer to the *Fisheries Act 1994* and the subordinate legislation for a full account of the rules governing the use of the T4 fishing symbol (available at: <https://www.legislation.qld.gov.au/>).

4 Assessment History

To date, the FFTF has not been subject to a fisheries-specific ERA. While an ERA have been completed for trawl fishing activities in southern Queensland and within the Great Barrier Reef Marine Park (Pears *et al.*, 2012; Jacobsen *et al.*, 2018), these studies focused specifically on the ECOTF and the RIBTF.

The FFTF has been assessed by the Department of Environment and Energy for the Wildlife Trade Operations (WTO) approval process (Department of Environment and Energy, 2017). A number of species targeted by trawl have also been provided with an indicative sustainability assessment as part of the Queensland stock status and *National Status of Australian Fish Stocks* (SAFS) process. Not all of these assessments will be applicable to the FFTF; although stout whiting have been assessed as sustainably fished on the Queensland east coast (Roelofs & Hall, 2018).

A full list of SAFS assessments for target and byproduct species within the FFTF can be found in Appendix 4 and more detailed information on the SAFS assessments can be found at <http://fish.gov.au/>.

5 Licence & Fishery Symbols

Access to Queensland's commercial fisheries is managed using fishery symbols. These symbols define what gear can be used in each fishery (e.g. N = Net, L = line, T = trawl) and the area of operation. While operators can have multiple fishery symbols attached to their licence (e.g. N1, N2 and L1 or a L1 and T1), they can only use one fishery symbol at a time. The notable exceptions to this are a) the crab (C1) fishery symbol that can be used in conjunction with a line (L) and net (N) fishery symbol; and b) fishing symbols related to quota, such as those used in the *Coral Reef Fin Fish Fishery* (CRFFF). In each fishery, the total number of symbols represents the number of fishers that could potentially access the fishery at any one time. This differs from data on the number of 'active' licences, which represents the number of operators that have used their symbol to access the fishery over a 12 month period.

Commercial fishers wanting to access the FFTF are required to hold a T4 fishing symbol. This symbol restricts access to a specific region along the Queensland east coast (Fig. 1; Appendix 1) and permits access to the annual stout whiting TACC. Unlike most other Queensland trawl and net fisheries, the FFTF has not been subject to a latent effort removal process or licence buybacks associated with Marine Park zoning changes (e.g. Moreton Bay Marine Park expansion, introduction of net-free zones *etc.*) (Department of Agriculture Fisheries and Forestry, 2012; Department of Agriculture and

Fisheries, 2016a; b). As a consequence, the total number of T4 symbols has remained relatively consistent since its introduction in 1995 (Table 1).

Prior to the introduction of the *Fisheries (East Coast Trawl) Management Plan* (the Plan)¹ all operators in the ECOTF could retain stout whiting as byproduct. With the introduction of the Plan, stout whiting was removed from the permitted species list; restricting their retention to T4 operations. The significance of this change is reflected in the pre-2001 fishing data where the number of boats retaining stout whiting far exceeded the number of T4 symbols (Department of Agriculture and Fisheries, 2018). While stout whiting can only be retained in FFTF, they are still caught as bycatch in trawl fisheries operating on the Queensland east coast (Courtney *et al.*, 2007).

Table 1. Overview of the total number of T4 fishing symbols, number of active licences, effort (days fished) and catch (tonnes) for the whole FFTF. *Prior to 2002, ECOTF operators could retain stout whiting as a permitted species. This data was included to provide a more holistic account of catch and effort levels during this period.

Year	Whole of fishery			
	Licensing		Effort (days fished)	Catch (tonnes)
	No. of T4 symbols	No. of active licences		
1995	5	6*	756*	1980*
1996	5	6*	884*	2023*
1997	5	21*	1,449*	1995*
1998	5	55*	1,972*	1514*
1999	5	88*	2,790*	1231*
2000 ²	5	43*	956*	476*
2001	5	6*	392*	839*
2002	5	5	408	798
2003	5	2	60	243
2004	5	5	293	961
2005	5	5	302	1046
2006	5	5	326	905
2007	5	3	311	930
2008	5	3	277	721
2009	5	3	327	1159
2010	5	3	374	1170
2011	5	4	332	664
2012	5	2	273	784
2013	5	2	266	704
2014	5	2	260	581
2015	5	2	271	787
2016	5	2	297	776
2017	5	2	264	1028

¹ Stout whiting were removed from the permitted species list with the introduction of the *Fisheries (East Coast Trawl) Management Plan 1999 (the Plan)*. Smaller volumes of stout whiting continued to be harvested after the introduction of the Plan as the fishery transitioned to the new arrangements. In May 2019, the Plan was consolidated into the *Fisheries (Commercial Fisheries) Regulation 2019* and sections moved to declarations as part of the *Queensland Sustainable Fisheries Strategy 2017–2027*.

Without management intervention, the number of fishing symbols available for use in the FFTF is expected to remain at or around 2017 levels (Table 1). The primary reason for this is that Queensland operates under a limited licencing policy that prevents new licences being issued for the fishery. While this does not prevent the re-activation of underutilised licences, it will help prevent licence numbers expanding into the future.

Reporting systems used by the Department of Agriculture and Fisheries will classify a licence as 'active' when the operator has reported catch and effort from a fishery. This will be done irrespective of the days fished, the frequency of the fishing events or the amount of catch that is reported. As a consequence, data on the number of 'active' licences may include operators that have fished infrequently, have small catch quantities or undertake very limited fishing events. In the FFTF, this will be more of an issue in the pre-2001 period as the data will include ECOTF operators who retained small amounts of stout whiting. This in turn has the potential to over-estimate the number of operators that were consistently targeting or retaining stout whiting during this period.

As the FFTF has a limited number of fishing symbols, information on the number of licences accessing the fishery in the post-2001 period provides an accurate reflection of participation rates. While participation rates have fluctuated through time, 2004 to 2006 (inclusive) was the last time that all T4 symbols were operational (Table 1).

6 Catch & Effort

6.1 Effort

At a whole of fishery level, effort is best examined after 2001 as stout whiting can only be retained by T4 operators during this period (Table 1; Fig. 2a–c). From this point on, effort in the FFTF is relatively consistent apart from a sudden drop in 2003 (from $n = 408$ days to $n = 60$ days) (Table 1; Fig. 2a–c). This decline can be attributed to low export demand for stout whiting and it is matched in the data by a drop in number of active licences (from $n = 5$ to $n = 2$) and total catch (789t to 243 t) (Table 1; Fig. 2a–c). Annual effort in the FFTF has since stabilised at 260 to 374 days (Table 1; Fig. 2a–c).

Most of the effort in the FFTF is concentrated in the southern portion of the T4 fishing area *i.e.* offshore waters adjacent to the Gold coast and south Stradbroke Island. A second hotspot lies off the coast between Bribie and Fraser Island. As the fishery targets a single species, it is likely that these high effort areas are on the continental shelf in bare-sandy marine habitats preferred by stout whiting.

Up until 2006, T4 operations could only target schools of fish using the otter trawl apparatus (Table 2; Fig. 2a–c). Since then, operators have gained permission to target key stocks using either an otter trawl or a Danish seine net. Since its inclusion as a permitted apparatus, Danish seine nets have accounted for 20 – 55% of the annual effort (average 40%, 2007 – 2017) (Table 1 – 2; Fig. 2a–c).

6.2 Catch

Total catch is highly variable with the annual reported catch ranging from 243 to 1170t over the post-2001 period (Table 1; Fig. 2b). While the fishery operates under a TACC, total catch does not appear to be significantly influenced by this limit. When compared to the prescribed limits, T4 operators have caught between 30 and 96% of the available quota (2002–17) (Table 1; Fig. 2b).

Whole of fishery catch trends are similar to that observed in the effort data, although effort levels appear to be more stable (Table 1; Fig. 2b). Catch by gear type is again highly variable with the

annual Danish seine net catch ranging from 203–668t and the annual otter trawl catch ranging from 53–789t (Table 2; Fig. 2c). Proportionately, the percentage of the total catch attributed to fishing with a Danish seine net has steadily increased with the apparatus responsible for the majority (61–91%) of catch retained in the fishery since 2014.

Table 2. Overview of effort (days fished) and catch (tonnes) for the whole FFTF by fishing method / gear type. Includes effort and catch of stout whiting from the ECOTF when the species was permitted to be retained in this fishery.

Year	Fin Fish Trawl Fishery				East Coast Otter Trawl Fishery		TACC
	Fish trawl ²		Danish seine		Otter trawl		
	Effort	Catch	Effort	Catch	Effort	Catch	
1995	116	333	-	-	640	1647	-
1996	0	0	-	-	884	2023	-
1997	191	359	-	-	1258	1637	-
1998	117	298	-	-	1854	1215	1400
1999	27	62	-	-	2747	1169	1400
2000	304	417	-	-	646	59	1000
2001	391	839	-	-	1	<1	1000
2002	408	798	-	-	-	-	1000
2003	60	243	-	-	-	-	800
2004	293	961	-	-	-	-	1000
2005	302	1046	-	-	-	-	1150
2006	320	894	6	11	-	-	1200
2007	197	592	114	338	-	-	1250
2008	158	230	119	491	-	-	1350
2009	233	683	94	476	-	-	1450
2010	299	789	75	381	-	-	1500
2011	256	461	77	203	-	-	1500
2012	174	446	99	338	-	-	1400
2013	169	484	97	220	-	-	1350
2014	71	53	189	528	-	-	1150
2015	121	163	150	624	-	-	1150
2016	150	302	147	474	-	-	1090
2017	161	359	103	668	-	-	1106

² 'Fish trawl' refers to catch and effort recorded by operators using otter trawl gear in the FFTF under the T4 fishing endorsement. Although the same type of gear was used, catch and effort recorded by ECOTF operators differs in that this fishery primarily targets prawns.

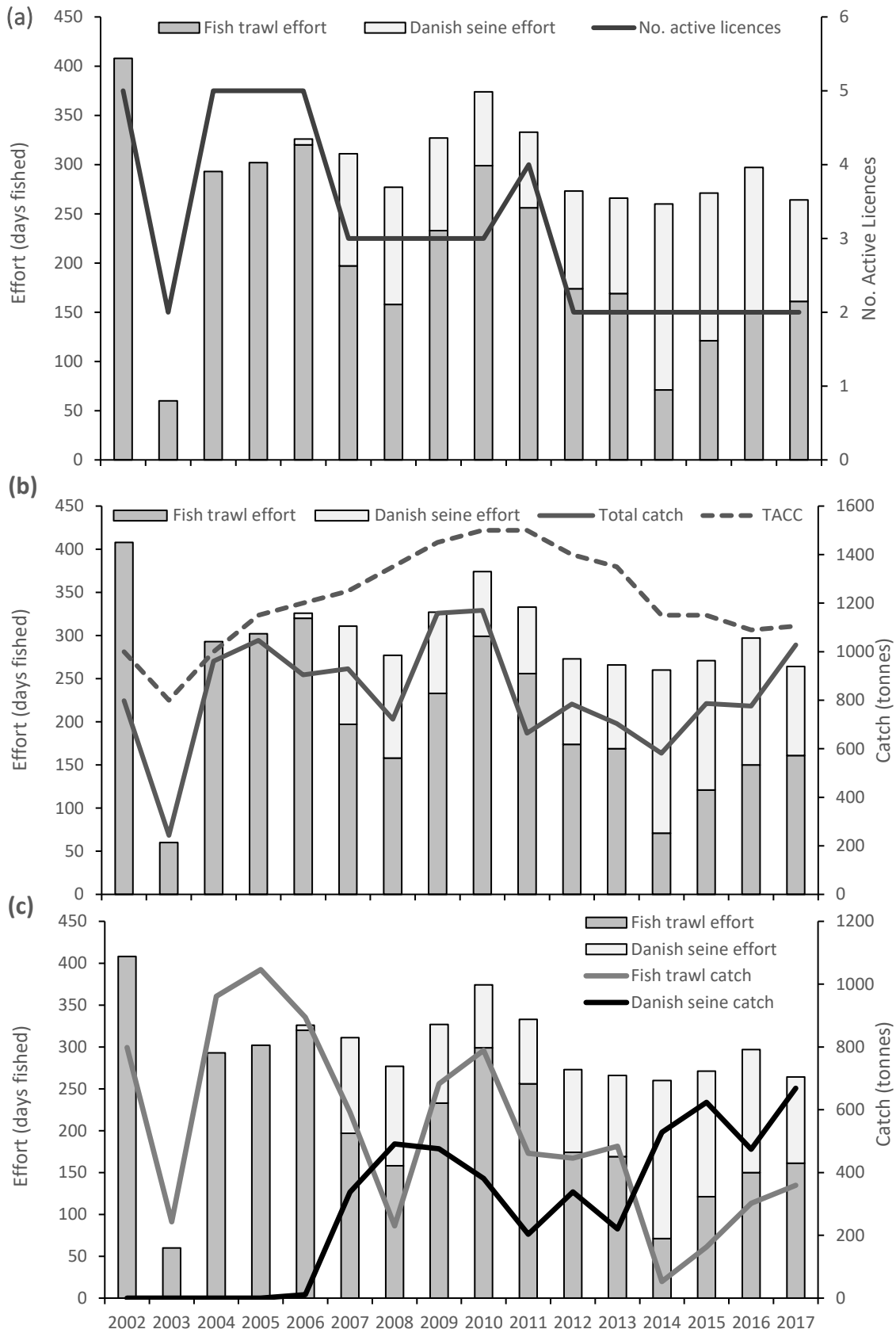


Figure 2—Number of active licences, effort and catch for the FTF including a) number of active licences and effort by gear type, b) effort by gear type, total catch and TACC, and c) effort and catch by gear type.

6.3 Target & Byproduct Species

Under the *Fisheries (Commercial Fisheries) Regulation 2019*, T4 operators are permitted to retain two *prescribed whiting* species (stout whiting, red spot whiting) and any of the following species if caught incidentally: Balmain bugs, cuttlefish, goatfish, Moreton Bay bugs, octopus, squid, threadfin bream and yellowtail scad. Of these species, the two prescribed whiting, goatfish and yellowtail scad managed under separate TACC limits. As goatfish and yellowtail scad are byproduct, TACC limits for these species are set at a lower level. Management of the remaining byproduct species is largely based on in possession limits (e.g. 200kg maximum limit for threadfin bream; 260kg maximum limit for squid) and size/sex restrictions.

Operators in the FFTF primarily target stout whiting (*Sillago robusta*) in offshore waters at depths of 10–70m. Adults feed on polychaetes and live in sandy-bottom habitats generally void of structure (*i.e.* reefs) (McGrouther, 2014). Stout whiting are fast growing species, reaching maturity at 14–18cm FL (2–3 years old) and growing to a maximum size of 23cm (O'Neill *et al.*, 2002; Industry and Investment NSW, 2010). This species forms biological stocks on the east and west coasts of Australia; the east of which extends from southern Queensland to northern New South Wales. Stout whiting are harvested predominantly by Queensland's FFTF, but a small proportion are harvested by New South Wales' Ocean Trawl Fishery (Roelofs & Hall, 2018). The yearly quota in Queensland is based on an annual assessment of the east coast stout whiting stock, which is based on standardised catch rates and age frequencies of recently harvested fish (Wortmann & O'Neill, 2016).

When compared to target species, the retention of permitted species or byproduct occurs with more regularity in the ECOTF. In the FFTF, the non-target species component frequently makes up less than 5% of the total catch (since 2002) (Appendix 3). The most notable byproduct species are yellowtail scad and goatfish, although combined they only make up on average 2% of the total FFTF catch (2002–17 data) (Appendix 3).

6.4 Bycatch

The FFTF interacts with a range of non-target bycatch including fin fish, crabs, prawns, sharks and rays (Roswell & Davies, 2011). Fisheries Observer Program (FOP) data from 2009–10 revealed that over half of the catch weight was retained (51–61% for otter trawl and 49–76% for Danish seine) with bycatch making up 39–49% of the otter trawl catch and 24–51% of the Danish seine catch. This report also compared bycatch compositions and found that while species diversity was higher in the otter trawl catch, larger animals³ were more prominent in the Danish seine catch (Wortmann & O'Neill, 2016).

Although the FFTF has a relatively high proportion bycatch compared to other fishing methods, the impact of the fishery on non-target species has been reduced though time. Actions include the requirement for otter trawl operators to use a TED, and the introduction of more ecologically sustainable fishing methods e.g. permitting the use of Danish seine nets (Department of Employment Economic Development and Innovation, 2011). In the case of the Danish seine nets, post-release mortality is understood to be lower due to the short haul times, slower haul speed, and higher species selectivity (Department of Employment Economic Development and Innovation, 2011). Still, both fishing methods interact with relatively large amount of bycatch (by both weight and species diversity).

³ Referred to as 'monsters' in this report, this category included animals that were unusually large and rarely caught (Wortmann & O'Neill, 2016)

6.5 Species of Conservation Concern (SOCC)

A SOCI interaction is classified as any physical contact an individual has with a protected species and includes being caught on or in fishing gear and collisions (e.g. boat strike). Most SOCI are listed as vulnerable, threatened or endangered under the *Nature Conservation Act 1992* and the *Environment Protection and Biodiversity Conservation Act 1999* and or protected under Queensland fisheries legislation.

The only SOCI recorded to interact with the FFTF are sea snakes ($n = 53$, 2010–13), most of which were released alive (89%). Fisheries observer reports for 545 otter trawl and Danish seine shots similarly recorded interactions with sea snakes ($n = 12$), in addition to pipehorses ($n = 13$). While most are not classified as SOCI, the FFTF interacts with a diverse range of sharks and rays. The eastern shovelnose ray far outnumbered any other elasmobranch species caught in this fishery ($n = 3075$), followed by bluespotted maskrays ($n = 275$), common stingarees ($n = 241$), guitarfishes ($n = 216$) and weasel sharks ($n = 103$) (FOP data). Discard mortality rates of these varied markedly between fishing areas, gear types, and species, ranging from 3–85% (Roswell & Davies, 2011).

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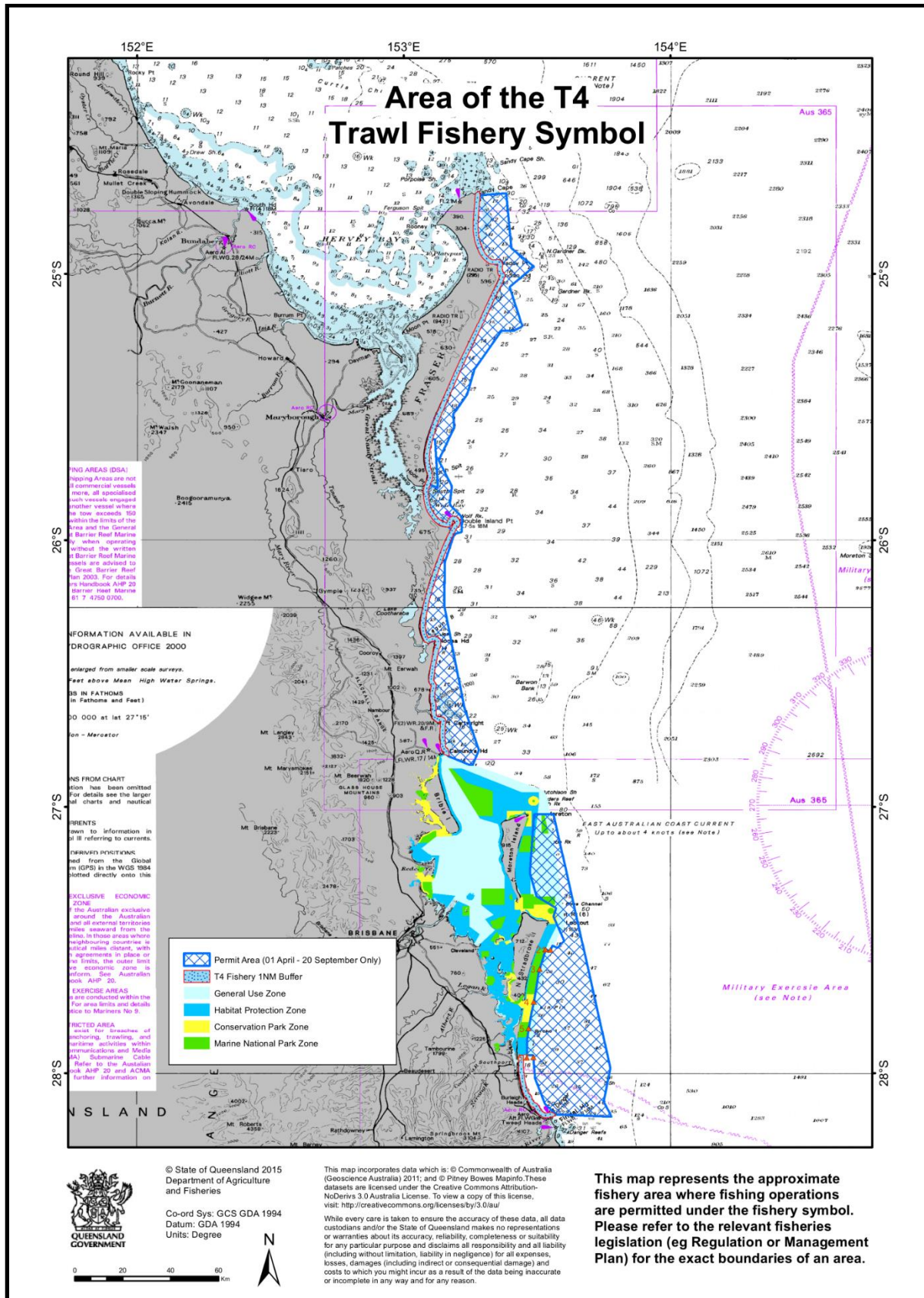
8 Appendix

- APPENDIX 1—Fin Fish Trawl Fishery gear and fishing area defined in the *Fisheries (Commercial Fisheries) Regulation 2019*.
- APPENDIX 2—Permit Area (1st April – 20th September) for the Fin Fish Trawl Fishery.
- APPENDIX 3—Retained catch (tonnes) by individual species in the Fin Fish Trawl Fishery.
- APPENDIX 4—Principle and permitted species assessed as part of the *National Status of Australian Fish Stocks (SAFS)* and product retention regulations for the Fin Fish Trawl Fishery.

APPENDIX 1—Fin Fish Trawl Fishery gear and fishing area regulations according to *Fisheries (Commercial Fisheries) Regulation 2019*.

T4 Fishery Symbol		
Area	The fishery area consists of the area of all tidal waters within the following boundary— <ol style="list-style-type: none"> a) from latitude 28°09.24' south, longitude 153°34.2' east, in a north-easterly direction to latitude 28°03.96' south, longitude 153°46.32' east; b) then along the 50 fathom depth contour to east of Sandy Cape, Fraser Island; c) then west to the 20 fathom depth contour; d) then along the 20 fathom depth contour to latitude 28°09.24' south, longitude 153°34.2' east. 	
Permitted gear	Danish seine net	
	Otter trawl net	
	Net must not be longer than 88m	
	Mesh size at least 38mm	
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>For a seine net—</p> <ol style="list-style-type: none"> a) each of the 2 haul ropes attached to the net must not be longer than 2,500m; and b) the end of the haul rope that is first deployed when the net is deployed must be marked with a floating buoy that is clearly visible on the surface of the water; and c) the net must not be used from a boat longer than 25m. <p><i>Note—</i> A seine net described in subsection (7) is commonly known as a Danish seine net.</p> </td> <td style="width: 50%; vertical-align: top;"> <p>(4) For an otter trawl net—</p> <ol style="list-style-type: none"> a) each of its sweeps must not be longer than 128m; and b) the net must not be used from a boat longer than 20m; and c) the net must be used with a TED that complies with schedule 2, part 6 of the <i>Fisheries (Commercial Fisheries) Regulation 2019</i>. <p>(5) For subsection (4)(a), an otter trawl net's sweeps includes a chain, rope, shackle, wire or other fitting used to attach otter boards or sleds to the net.</p> <p>(6) However, if 2 or more fittings mentioned in subsection (5) are joined to make a single fitting, the single fitting is 1 sweep.</p> </td> </tr> </table>	<p>For a seine net—</p> <ol style="list-style-type: none"> a) each of the 2 haul ropes attached to the net must not be longer than 2,500m; and b) the end of the haul rope that is first deployed when the net is deployed must be marked with a floating buoy that is clearly visible on the surface of the water; and c) the net must not be used from a boat longer than 25m. <p><i>Note—</i> A seine net described in subsection (7) is commonly known as a Danish seine net.</p>
<p>For a seine net—</p> <ol style="list-style-type: none"> a) each of the 2 haul ropes attached to the net must not be longer than 2,500m; and b) the end of the haul rope that is first deployed when the net is deployed must be marked with a floating buoy that is clearly visible on the surface of the water; and c) the net must not be used from a boat longer than 25m. <p><i>Note—</i> A seine net described in subsection (7) is commonly known as a Danish seine net.</p>	<p>(4) For an otter trawl net—</p> <ol style="list-style-type: none"> a) each of its sweeps must not be longer than 128m; and b) the net must not be used from a boat longer than 20m; and c) the net must be used with a TED that complies with schedule 2, part 6 of the <i>Fisheries (Commercial Fisheries) Regulation 2019</i>. <p>(5) For subsection (4)(a), an otter trawl net's sweeps includes a chain, rope, shackle, wire or other fitting used to attach otter boards or sleds to the net.</p> <p>(6) However, if 2 or more fittings mentioned in subsection (5) are joined to make a single fitting, the single fitting is 1 sweep.</p>	
VMS equipment must be installed, maintained and used		

APPENDIX 2—Permit Area (1st April – 20th September) for the Fin Fish Trawl Fishery.



APPENDIX 3—Retained catch (tonnes) by individual species in the Fin Fish Trawl Fishery.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bugs—Balmain	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	<1
Bugs—Moreton Bay	0	0	0	<1	2	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1
Bugs—unspecified	<1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Butterflybream—unspecified	1	<1	<1	2	2	<1	<1	<1	1	<1	0	<1	<1	1	13	4
Crab—blue swimmer*	0	0	0	0	0	0	0	<1	0	0	0	0	0	0	0	0
Crab—unspecified*	0	0	0	0	<1	0	0	0	0	0	0	0	0	0	0	0
Cuttlefish	2	2	3	1	4	2	1	1	1	<1	1	1	1	1	1	1
Goat fish	20	2	18	11	9	3	3	9	4	2	0	2	0	0	<1	1
Octopus—unspecified	2	<1	<1	<1	2	1	<1	<1	1	1	<1	<1	<1	<1	1	<1
Prawn—king*	0	0	0	0	0	0	0	0	0	0	0	<1	0	0	0	0
Prawn—unspecified*	<1	<1	0	<1	<1	<1	0	<1	0	0	0	0	0	0	0	0
Scallop—saucer*	0	0	0	0	0	0	0	0	0	0	<1	0	0	0	0	0
Shark—unspecified*	0	0	0	<1	0	0	0	0	<1	0	0	0	0	0	0	0
Squid—unspecified	<1	<1	0	2	4	3	2	3	3	3	3	1	<1	<1	1	1
Whiptail—false (threadfin bream)	2	0	0	0	0	0	0	0	0	0	0	<1	0	0	0	0
Whiting—stout	798	243	961	1046	905	930	721	1159	1170	664	784	704	581	787	776	1028
Yellowtail Scad	44	5	28	20	22	17	12	25	16	12	2	3	<1	<1	0	7
Grand total	869	253	1012	1083	953	956	740	1197	1197	683	791	713	583	790	792	1041

*Small amounts of catch (<200kgs a year) include species that cannot be retained in the FFTF. This could be due to a) operators recording catch from a different fishery in the incorrect logbook, or b) illegally retaining non-permitted species caught in the FFTF.

APPENDIX 4—Principle and permitted species assessed as part of the *National Status of Australian Fish Stocks (SAFS)* and product retention regulations for the Fin Fish Trawl Fishery.

Species	Size/condition regulations	In-possession limits / quota	SAFS Stock name	2018 SAFS status
Bugs—Balmain	Prohibition on retention of ovigerous females Prohibition on removal of eggs from females Prohibition of carapace damage & bug meat in possession	None	Queensland east coast	Sustainable
Smooth bug <i>I. chacei</i>	≥10.5cm carapace width			
Deepwater bug <i>I. alticreatus</i>	≥7.5cm carapace width			
Shovel-nosed lobster <i>I. brucei</i>	≥7.5cm carapace width			
Bugs—Moreton bay <i>Thenus australiensis</i> , <i>T. parindicus</i>	Prohibition of carapace damage & bug meat in possession ≥7.5cm carapace width	None	Queensland ECOTF	Sustainable
Cuttlefish— <i>Sepia spp.</i>	None	52 x 5kg boxes	Undefined	Not assessed
Goatfish	None	ITQ 100t*	Undefined	Not assessed
Octopus—unspecified	None	20 x 5kg boxes	Undefined	Not assessed
Squid—unspecified	None	52 x 5kg boxes	Undefined	Not assessed
Stout whiting	None	ITQ 1106t*	Eastern Australia	Sustainable
Threadfin bream	None	10 x 20kg boxes ⁴	Undefined	Not assessed
Yellowtail scad	None	ITQ 100t*	Eastern Australia	Sustainable

* As of 2018

⁴ Permits can be issued to operators allowing them to retain greater amounts of threadfin bream.