



**2018 Annual Report to the Department of the  
Environment and Energy for fishery approvals under  
the *Environment Protection and Biodiversity  
Conservation Act 1999***

December 2018

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## Contents

Introduction .....	2
Blue Swimmer Crab Fishery .....	4
Commercial Crayfish and Rocklobster Fishery.....	9
Coral Reef Fin Fish Fishery (includes Deep Water Fin Fish Fishery) .....	10
Coral Fishery .....	13
East Coast Inshore Fin Fish Fishery .....	15
East Coast Otter Trawl Fishery .....	22
East Coast Pearl Fishery .....	27
East Coast Spanish Mackerel Fishery.....	28
East Coast Trochus Fishery .....	29
Eel Fishery.....	30
Fin Fish (Stout Whiting) Trawl Fishery .....	31
Gulf of Carpentaria Developmental Fin Fish Trawl Fishery .....	34
Gulf of Carpentaria Inshore Fin Fish Fishery.....	37
Gulf of Carpentaria Line Fishery .....	43
Marine Aquarium Fish Fishery .....	45
Mud Crab Fishery .....	47
River and Inshore Beam Trawl Fishery .....	52
Sea Cucumber Fishery (East Coast).....	54
Spanner Crab Fishery.....	55

# 2018 Annual Report to the Department of the Environment and Energy

## Introduction

This report is produced for the Department of the Environment and Energy (DOEE) to meet the annual reporting requirement associated with all current Queensland fishery approvals under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Specifically, *Condition 3* (for approved Wildlife Trade Operations) or *Recommendation 3* (for exempt fisheries) states “Queensland DAF to produce and present reports to the Department of the Environment annually as per Appendix B of the Guidelines for the Ecologically Sustainable Management of Fisheries”. Nineteen Queensland fisheries are currently accredited under the EPBC Act (Table 1).

This multi-fishery report ensures the regular delivery of information on Queensland’s fisheries. Separate and more comprehensive submissions will be provided as required for fishery reassessments under the EPBC Act.

Fishery	Current approval expires	WTO or LENS
Blue Swimmer Crab Fishery	31/05/2019	WTO
Commercial Crayfish and Rock lobster Fishery	28/08/2025	LENS
Coral Fishery	18/06/2021	WTO
Coral Reef Fin Fish Fishery	06/03/2020	WTO
East Coast Inshore Fin Fish Fishery	10/12/2021	WTO
East Coast Otter Trawl Fishery	13/11/2020	WTO
East Coast Pearl Fishery	28/08/2025	LENS
East Coast Spanish Mackerel Fishery	28/08/2025	LENS
East Coast Trochus Fishery	28/08/2025	LENS
Eel Fishery	28/08/2025	LENS
Fin Fish (Stout Whiting) Trawl Fishery	14/02/2020	WTO
Gulf of Carpentaria Developmental Fin Fish Trawl Fishery	22/11/2019	WTO
Gulf of Carpentaria Inshore Fin Fish Fishery	14/12/2018	WTO
Gulf of Carpentaria Line Fishery	22/11/2019	WTO
Marine Aquarium Fish Fishery	26/03/2021	WTO
Mud Crab Fishery	31/05/2019	WTO
River and Inshore Beam Trawl Fishery	11/02/2022	WTO
Sea Cucumber Fishery (East Coast)	28/08/2025	LENS
Spanner Crab Fishery	28/08/2025	LENS

Table 1. Current Queensland fisheries approved under the EPBC Act, and their expiry dates.

## Management

Detailed changes to management arrangements in 2018 are reported in fishery-specific sections of this report.

More generally, *Queensland Sustainable Fisheries Strategy: 2017–2027* (the Strategy) sets out the government’s reform agenda for the next ten years. This Strategy sets out clear targets to be achieved by 2020 and 2027 and a range of actions to deliver on the vision and targets. There are 33 actions across ten reform areas.

<https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

Key actions include: additional monitoring and research (including new technologies); setting clear sustainable limits for each of our fish stocks; working groups and a Sustainable Fisheries Expert Panel to engage stakeholders; establishing harvest strategies for all fisheries which set clear

targets for fishery performance, triggers for action, and clear decision rules for the actions that will be taken; piloting regionally based fisheries management; satellite tracking on all commercial fishing vessels; and helping facilitate industry led structural adjustment to reduce the number of fishing licences and improve sustainability and profitability.

In the first 12 months of implementing the Strategy, a number of key actions and reform targets have been achieved or are on track for delivery by 2027. A progress report on the first year of implementation has been released and can be found at

[https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0003/1400826/Sustainable-Fisheries-Strategy-progress-report.PDF](https://www.daf.qld.gov.au/_data/assets/pdf_file/0003/1400826/Sustainable-Fisheries-Strategy-progress-report.PDF). Further information regarding the Strategy is also available at

<https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable>

This Annual Report does not formally report performance of each fishery relative to the fishery-specific Performance Measurement Systems (PMS), partly because of their need to be substantially reviewed. Instead, Queensland DAF intends to develop harvest strategies for each fishery that will include decision rules and reference points to monitor fishery performance.

## Catch data

Annual commercial catch statistics for each fishery (2017 calendar year or 2017/18 financial year) are contained in the *Queensland Fisheries Summary* report. Updated data will be available on the Queensland DAF website during 2018: <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting>

## Compliance

Queensland DAF reports publically on fishery compliance statistics. This report is updated quarterly and provides compliance rates for each quarter and year to date. For the latest data, see the following link <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting>

## Status of target stocks

In 2018, Queensland DAF took place in the national Status of Australian Fish Stocks (SAFS) process. In total, the stock status of 53 key fish species, comprising of 79 individual stocks or management units found in Queensland waters were assessed. The process included a stock status workshop assessing 12 key species and their stocks. The workshop assessed stock status using the national assessment framework that produced the 2012, 2014, 2016 and 2018 *Status of Australian Fish Stocks* (SAFS) reports ([www.fish.gov.au](http://www.fish.gov.au)). These assessments follow a weight-of-evidence approach where an expert panel determines the status of each stock. Species may have single or multiple stocks found wholly within Queensland while others may extend into other jurisdictions' waters.

The 2018 workshop was attended by Queensland DAF staff including scientists from Agri-science Queensland, as well as managers, policy and assessment staff from Fisheries Queensland. In addition, external agencies including Great Barrier Reef Marine Park Authority, South Australian Fisheries and Northern Territory Fisheries were represented. Outcomes of the 2018 workshop will be incorporated into the final SAFS report due to be released by the Fisheries Research and Development Corporation (FRDC) in December 2018.

In addition to this report, up-to-date commercial catch data for individual species can be obtained from ([www.qfish.fisheries.qld.gov.au](http://www.qfish.fisheries.qld.gov.au)) and information about the fishery-dependent and fishery-independent biological monitoring programs can be found at [www.daf.qld.gov.au](http://www.daf.qld.gov.au).

## Interactions with protected species

Information about reported interactions with Species Of Conservation Interest (SOCI) during 2017 for all fisheries is available in the following link: <https://data.qld.gov.au/dataset/total-number-of-species-of-conservation-interest-interactions-with-released-conditions/resource/4ad21384-35fe-4ee5-8013-0099d4aa9e65>.

## Blue Swimmer Crab Fishery

Blue swimmer crabs (*Portunus armatus*), also known as sand crabs, are found in coastal and estuarine waters along the entire Queensland coast but are fished mainly in the southern part of Queensland. They are an important species for both recreational and commercial fishers. The blue swimmer crab is widely distributed around the Australian coastline and is targeted and harvested in all Australian states and territories except for Victoria and Tasmania.

The Blue Swimmer Crab Fishery (BSCF) area covers the majority of Queensland tidal waters, except closed waters.

### Management

The BSCF is managed under the *Fisheries Act 1994* and the *Fisheries Regulation 2008*.

### Management changes in 2018

There were no management changes in the Blue Swimmer Crab Fishery (BSCF) in 2018.

### Research & monitoring

A stock assessment of blue swimmer crab was completed in 2015. A copy of this report was sent to the Department of the Environment in June 2015 and can be found here:

<https://www.daf.qld.gov.au/fisheries/monitoring-our-fisheries/data-reports/sustainability-reporting/stock-assessment-reports>

Latest monitoring information can be found here: <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/monitoring-reporting/commercial-fisheries>

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
Crab–blue swimmer ( <i>Portunus armatus</i> )	North Eastern Australian	Sustainable	Not Assessed	Sustainable

### Progress in implementing conditions and recommendations

The BSCF was recently reassessed for a Wildlife Trade Operation (WTO). A temporary extension was granted until 31 May 2019. Given the close proximity of reassessment and temporary extension granted, the update against conditions and recommendations provided below is the same as provided in the most recent reassessment (October 2018).

#### Conditions on the Part 13A approved wildlife trade operation declaration for the Queensland Blue Swimmer Crab Fishery

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1. Operation of the Queensland Blue Swimmer Crab Fishery (BSCF) will be carried out in accordance with the management regime in force under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

#### Progress: Ongoing

Operation of the fishery was carried out in accordance with the management arrangements in force under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

2. The Queensland's Department of Agriculture and Fisheries (QDAF) to inform the Department of the Environment of any intended material changes to the BSCF management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

#### Progress: Ongoing

There have been no changes to management arrangements in the Blue Swimmer Crab Fishery (BSCF) in 2018.

3. The Queensland Department of Agriculture and Fisheries (QDAF), to produce and present reports to the Department of the Environment annually as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.

**Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. Queensland DAF, in collaboration with crab fishery stakeholders, to investigate and implement management measures to monitor and manage the distribution of C1 symbols between the respective crab fisheries (Gulf of Carpentaria and Queensland East Coast Mud Crab Fisheries, and the BSCF) to ensure there is minimal risk to the target stock, bycatch, EPBC Act listed threatened, endangered and protected (TEP) species or the broader ecosystem from unsustainable fishing pressure.

**Progress: Ongoing**

*Sustainable Fisheries Strategy*

Queensland's Sustainable Fisheries Strategy 2017-2027 (the Strategy) outlines the government's reform agenda for fisheries management over the next ten years. The strategy identifies 33 actions across ten major areas of reform. Key areas of reform include: Improved monitoring and research, setting sustainable catch limits through harvest strategies, improved stakeholder engagement, undertaking Ecological Risk Assessment's (ERA's) and managing high risks in the relevant harvest strategy, reviewing fishing rules and access, implementing more responsive decision-making and strengthening compliance powers and resourcing. Details of the Strategy are available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable-fisheries-strategy>.

*Crab Fishery Working Group*

A Crab Fishery Working Group (CFWG) was established in 2017 to provide advice to DAF in relation to management of crab fisheries including blue swimmer crabs. The working group includes representatives from the commercial and recreational fishing sectors, the Great Barrier Reef Marine Park Authority (GBRMPA) and Queensland DAF. The working group has met four times to discuss the management reform options and harvest strategy development for the BSCF. Key discussion points from the meetings are outlined in meeting communiqués available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/fishery-working-groups/crab-working-group>

*Expert Panel*

A key action of the Strategy is to improve stakeholder engagement and support evidence-based fisheries management through a sustainable fisheries expert panel.

The Sustainable Fisheries Expert Panel was established and members appointed by the Government in July 2017. Members of the Expert Panel, the role of the panel and communiqués from Expert Panel meetings are available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>.

*Harvest Strategy Guidelines*

The Strategy commits to managing fisheries under a harvest strategy framework. Harvest Strategy guidelines have been developed and can be viewed at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

### Management Reform Proposals

A discussion paper on the management reform options for the crab fisheries was released in March 2018. Submission for public comment closed 20 May 2018. The discussion paper includes proposed changes for the BSCF. More information is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable-fisheries-strategy/fisheries-reforms>.

The proposed reforms for the BSCF include:

- Introduction of an Individual Transferable Quota (ITQ's) system to set a total allowable commercial catch.
- Introduce traceability tags for commercially caught blue swimmer crab to verify ITQ and reduce black marketing.
- Introduction of a recreational possession limit and boat limit for blue swimmer crabs.
- Review blue swimmer crab fishing apparatus to improve interactions between crab apparatus and bycatch and protected species, e.g. escape vents on commercial and recreational apparatus.
- Review blue swimmer crab caught by the trawl fishery.

### Ecological Risk Assessment (ERA)

The Strategy commits to completing ERA's to investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem. The ERA program has commenced and is being delivered in accordance with new ERA Guidelines <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/ecological-risk-assessment-guidelines> Queensland DAF will discuss the draft ERA reports with fishery working groups to ensure appropriate information has been used to assess risk levels. Reports will also be reviewed by the Expert Panel. Risks identified in the ERA process will be discussed with fishery working group to determine whether they can be incorporated into harvest strategies, minimised by other management interventions or require ongoing research to clarify the risks.

5. Queensland DAF to review the BSCF management regime and operations to ensure that indicators for target stocks, bycatch and TEP species are relevant, informative and achieve precautionary management outcomes. The review must consider:
  - a) the relevance, precision and validity of the information collected from the commercial and recreational sectors;
  - b) measures to effectively monitor and respond to triggered performance indicators;
  - c) methods to improve accountability to discourage false data; and
  - d) developing limit reference points.

### **Progress: Ongoing**

As part of the Strategy, Queensland DAF has commenced a process of management reform and harvest strategy development for the BSCF. The harvest strategy will be used to manage the BSCF into the future and includes pre-determined management actions to achieve agreed ecological, economic and/or social management objectives. The harvest strategy will include limit reference points at which clear conditions will be in place to review or change management arrangements in a fishery if necessary. The CFWG and Expert Panel will provide advice on the proposed management reform processes and the harvest strategy for the BSCF. The Strategy outlines the timeframe for developing harvest strategies for all major fisheries by the end of 2020, with a priority to develop the BSCF harvest strategy by the end of 2018. A copy of Queensland's Harvest Strategy Policy is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/harvest-strategy>

The Strategy also includes the roll out of vessel tracking across all commercial and charter boats by 2020. Vessel tracking will commence on all BSCF vessels from 1 January 2019. Further information about vessel tracking is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/vessel-tracking>



Under the Advance Queensland Small Business Innovation Research (SBIR) program, Queensland DAF are currently funding the development of systems that are designed to replace slow and costly manual logbooks with automated real-time monitoring. Systems may include the commercial fishing app or an Elog to record catch data in, or near, real time. As a result, Queensland DAF will receive more accurate information in real time, enhancing the confidence, timeliness and quality of data. More information on the Small Business Innovation Challenge project and partnership with Advance Queensland is available in the recent media statement:

<http://statements.qld.gov.au/Statement/2018/6/6/innovative-companies-to-develop-automated-fisheries-monitoring>.

Queensland DAF continues to complete recreational fishing surveys to provide reliable catch and effort estimates for blue swimmer crabs caught by Queensland's recreational fishing sector. Currently there has been three surveys in 2000 (national survey), 2010 and 2013-14. An updated survey is due for completion in 2019. More information about the most recent survey (2013-14) is available here: <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-our-fisheries/recreational-fisheries/statewide-and-regional-recreational-fishing-survey>.

Queensland DAF continues to monitor the recreational catch of Blue swimmer crabs through Boat Ramp Surveys (BRS). BRS have recently been expended to cover 45 boat ramps throughout Queensland. The BRS complement the state-wide recreational phone surveys to provide regional catch and effort data for recreationally caught blue swimmer crabs, to allow the monitoring of indices of effort and catch rate through time.

#### Recommendations to the Queensland Department of Agriculture and Fisheries on the ecologically sustainable management of the Queensland Blue Swimmer Crab Fishery

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1. Queensland DAF to work with relevant agencies and crab fishery stakeholders to further assess and actively promote the use of escape vents in the commercial and recreational crab fishing sectors.

#### **Progress: Ongoing**

##### Ecological Risk Assessments

The Strategy commits to completing ERA's to investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem. The ERA program has commenced and is being delivered in accordance with new ERA Guidelines. Queensland DAF will discuss the draft ERA reports with fishery working groups to ensure appropriate information has been used to assess risk levels. Reports will also be reviewed by the Expert Panel. Risks identified in the ERA process will be discussed with fishery working groups to determine whether they can be incorporated into harvest strategies, minimised by other management interventions or require ongoing research to clarify the risks. Completing an ERA for the BSCF will review and investigate the impacts of fishing activities on species (target and non-target) and the broader marine ecosystem. Queensland DAF will continue to work with the CFWG to identify options for mitigating the risk of interactions with TEP species.

#### Conditions on the Part 13 accreditation's for the Queensland Mud Crab and Blue Swimmer Crab Fisheries

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1. Queensland DAF, in consultation with crab fishery stakeholders and other government agencies to:
  - a) complete a robust evaluation of operational management measures to examine the risk of TEP species entanglements with crab pots; and
  - b) taking into account the evaluation of management arrangements, implement a suite of management measures to minimise the risk of TEP species entanglement with crab pots. Measures could include spatial and seasonal closures and/or potential gear modifications.

#### **Progress: Ongoing**

##### Ecological Risk Assessments

The Strategy commits to completing ERA's to investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem. The ERA program has commenced and is being delivered in accordance with new ERA Guidelines. Queensland DAF will discuss the draft ERA reports with fishery working groups to ensure appropriate information has been used to assess risk levels. Reports will also be reviewed by the Expert Panel. Risks identified in the ERA process will be discussed with fishery working groups to determine whether they can be incorporated into harvest strategies, minimised by other management interventions or require ongoing research to clarify the risks. Completing an ERA for the BSCF will review and investigate the impacts of fishing activities on species (target and non-target) and the broader marine ecosystem. Queensland DAF will continue to work with the CFWG to identify options for mitigating the risk of interactions with TEP species.

2. Queensland DAF to work with crab fishery stakeholders, to:

- c) investigate and improve monitoring and reporting of protected species interactions by fishers in the commercial sector; and
- d) implement a system to independently validate commercial fishery interactions with TEP species.

The Strategy commits to improving monitoring and research in order to ensure that accurate, timely data are available for fisheries management. A Monitoring and Research Plan has been published to identify key data needs and prioritise investment in monitoring and research. The monitoring and research plan is available at <https://publications.qld.gov.au/dataset/queensland-sustainable-fisheries-strategy/resource/fc7da976-661c-43ba-aaaa-9df8c2cb39d3>. A Data Validation Plan has also been published to outline measures being implemented to improve data validation, collection and storage. The data validation plan is available at <https://publications.qld.gov.au/dataset/queensland-sustainable-fisheries-strategy/resource/dfbddda3-f0e4-47a2-ba25-644b999734d8>.

The Strategy includes a commitment to require vessel tracking across all commercial and charter boats by 2020. Vessel tracking will commence on all BSCF vessels from 1 January 2019. Further information about vessel tracking is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/vessel-tracking>.

Under the Advance Queensland Small Business Innovation Research (SBIR) program, Queensland DAF are currently funding the development of systems designed to replace slow and costly manual logbooks with automated real-time monitoring. Systems may include the commercial fishing app or an Elog to record catch data in, or near, real time. As a result, Queensland DAF will receive more accurate information in real time, enhancing the confidence, timeliness and quality of data. More information on the Small Business Innovation Challenge project and partnership with Advance Queensland is available in the recent media statement: <http://statements.qld.gov.au/Statement/2018/6/6/innovative-companies-to-develop-automated-fisheries-monitoring>

## Commercial Crayfish and Rocklobster Fishery

The Crayfish and Rocklobster Fishery (CRF) is a dive-based, hand collection fishery that primarily targets the tropical rocklobster, *Panulirus ornatus*. The commercial fishing area comprises all tidal waters east of longitude 142° 31' 49", south of latitude 10° 41' S and north of latitude 14° S (extension to 16° S available under a general fisheries permit). The fishery also extends out to the 25 nautical mile seabed line along the Gulf of Carpentaria coast, south of latitude 10° 48' S.

### Management

The CRF is managed under the *Fisheries Act 1994*, the Fisheries Regulation 2008, the *Policy relating to individual catch entitlements in the Queensland Tropical Rocklobster Fishery* and complementary management with the Torres Strait Protected Zone Joint Authority.

### Management changes in 2018

There were no updates to the management in 2018

In 2017, Queensland DAF finalised the process of amending all East Coast commercial crayfish and Rocklobster licence holders' conditions to improve the accuracy of unload and transshipment notices. These amendments also add an additional notice to allow product to be retained on board the vessel and returned to sea.

In 2016, Queensland DAF allowed for the use of primary vessels up to 25m (from 20m) to be used in the commercial fishery.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
Tropical rock lobster ( <i>Panulirus ornatus</i> )	North Eastern Australian	Sustainable	Not Assessed	Sustainable

### Progress in implementing conditions and recommendations

The CRF was recently assessed by DOEE in consideration of a ten year LENS as a low risk fishery. On 17 November 2015, Queensland DAF received notification the CRF was approved for a ten year LENS which now expires on the 28<sup>th</sup> August 2025.

## Coral Reef Fin Fish Fishery (includes Deep Water Fin Fish Fishery)

The Coral Reef Fin Fish Fishery (CRFFF) is a predominantly line-only fishery that targets a range of bottom-dwelling reef fish. It consists of a commercial sector (focusing primarily on live coral trout), recreational and charter sectors. The fishery operates predominantly in the Great Barrier Reef Marine Park (GBRMP). Commercial fishing operations generally consist of a number of smaller tender boats (dories) and a larger primary fishing vessel used to hold fish.

The Deep Water Fin Fish Fishery (DWFFF) is a small commercial multi-hook line fishery that operates in Queensland east coast waters east of the 200 m bathometric line. Multi-hook apparatus cannot be used in the GBRMP. The DWFFF is accredited under the CRFFF Wildlife Trade Operation (WTO).

### Management

The CRFFF and DWFFF are managed under the *Fisheries Act 1994* and the *Fisheries Regulation 2008*.

### Management changes in 2018

In April 2015, provisions in the Fisheries (Coral Reef Fin Fish) Management Plan 2003 were consolidated into the Fisheries Regulation 2008 (the Regulation). This change enabled Queensland to repeal the Fisheries (Coral Reef Fin Fish) Management Plan 2003; therefore reducing duplication within the legislation and simplifying provisions governing the take of fish in the CRFFF. The latest version of the Regulation can be downloaded from [www.legislation.qld.gov.au](http://www.legislation.qld.gov.au)

The Fisheries (Coral Reef Fin Fish) Quota Declaration came into effect on 1 July 2016 and has seen the following quota amendments in 2018:

- Coral trout (CT) = 1163 tonnes (increased from 2017/18 quota of 963 t);
- Red Throat Emperor (RTE) = 610.88 tonnes (no change);
- Other coral reef fin fish species (OS) = 955.597 tonnes (no change).

### Research & monitoring

A stock assessment for coral trout has been completed and the report finalised in December 2014. An updated stock assessment for coral trout is underway and is due for completion in early 2019.

In 2017, Fisheries Queensland and James Cook University started monitoring a number of key species in the coral reef fin fish fishery. Monitoring aims to collect representative length, sex and possibly age information from commercial and recreational fisher catch. This information will be collected for use in stock assessments and assessing stock status.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
<b>Snapper–crimson</b> ( <i>Lutjanus erythropterus</i> )	East Coast Queensland	Undefined	Not Assessed	Undefined
<b>Snapper–saddletail</b> ( <i>Lutjanus malabaricus</i> )	East Coast Queensland	Undefined	Not Assessed	Undefined
<b>Snapper–golden</b> ( <i>Lutjanus johnii</i> )	East Coast	Undefined	Not Assessed	Undefined
<b>Coral trout</b> ( <i>Plectropomus</i> and <i>Variola</i> spp.)	CRFFF Management Unit	Sustainable	Not Assessed	Sustainable

<b>Emperor-redthroat</b> ( <i>Lethrinus miniatus</i> )	East Coast Queensland	Sustainable	Not Assessed	Sustainable
<b>Emperor-red</b> ( <i>Lutjanus sebae</i> )	East Coast Queensland	Undefined	Not Assessed	Undefined
<b>Emperor-spangled</b> ( <i>Lethrinus nebulosus</i> )	East Coast Queensland	Not Assessed	Not Assessed	Sustainable
<b>Goldband Snapper</b> ( <i>Pristipomoides multidens</i> )	East Coast Queensland	Undefined	Not Assessed	Undefined
<b>Hapuku</b> ( <i>Polyprion oxygeneios</i> )	Queensland	Not Assessed	Not Assessed	Undefined
<b>John Dory</b> ( <i>Zeus faber</i> )	Eastern Australia	Not Assessed	Not Assessed	Sustainable

### Impacts of the fishery on the ecosystem in which it operates

The impact of the CRFFF and DWFFF on the surrounding ecosystem is considered to be minimal. These impacts are likely to be confined to the target species and teleost species that are caught as bycatch. While difficult to quantify, post release mortality rates for line caught species are much lower than that observed in net-based fisheries.

As part of the Sustainable Fishing Strategy, the CRFFF and DWFFF will have Ecological Risk Assessments (ERA's) completed. ERA's will help to investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem. The ERA program has commenced and is being delivered in accordance with new ERA guidelines.

### Progress in implementing conditions and recommendations

The CRFFF was reassessed in March 2017 and a Wildlife Trade Operation (WTO) was approved until 6<sup>th</sup> March 2020. Progress on the conditions and recommendations attached to the approval are below.

#### Conditions on the Part 13A approved wildlife trade operation declaration for the Coral Reef Fin Fish Fishery (Includes Deep Water Fin Fish Fishery)

1. Operation of the fishery will be carried out in accordance with the management regime under the Queensland *Fisheries Act 1994* and the Fisheries Regulation 2008.

#### **Progress: Ongoing**

Operation of the fishery was carried out in accordance with the management arrangements in force under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulations 2008.

2. The Queensland Department of Agriculture and Fisheries to inform the Department of any intended material changes to the Queensland Coral Reef Fin Fish Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

#### **Progress: Ongoing**

In accordance with agreed decision rules, the annual quota for coral trout was increased from 963t to 1163t. The season quota season commences 1 July 2018.

3. The Queensland Department of Agriculture and Fisheries 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*.

**Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. The Queensland Department of Agriculture and Fisheries to undertake a whole-of-fishery ecological risk assessment, including consideration of retained species, bycatch species, protected species and impacts on the environment.

**Progress: Ongoing**

As part of the Queensland's *Sustainable Fishing Strategy 2017–2027*, Queensland DAF has commenced the process of completing Ecological Risk Assessments (ERA's) to investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem. The ERA program has commenced and is being delivered in accordance with new ERA guidelines <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/ecological-risk-assessment-guidelines> Queensland DAF will discuss the draft ERA reports with CRFFF working group to ensure appropriate information has been used to assess risk levels. Reports will also be reviewed by the Sustainable Fisheries Expert Panel. Risks identified in the ERA process will be discussed with the CRFFF working group to determine whether they can be incorporated into harvest strategies, minimised by other management interventions or require ongoing research to clarify the risks. Completing an ERA for the CRFFF will review and investigate the impacts of fishing activities on species (target and non-target) and the broader marine ecosystem.

Progress towards the vision of the sustainable fisheries strategy will be reviewed in five years to ensure progress towards the targets and actions are being successfully implemented.

5. The Queensland Department of Agriculture and Fisheries to continue to work with the Great Barrier Reef Marine Park Authority and other relevant agencies to develop a vessel monitoring system in the commercial sector of the Coral Reef Fin Fish Fishery.

**Progress: Ongoing**

The Strategy also includes a commitment to require vessel tracking across all commercial and charter boats by 2020. Vessel tracking will commence on all CRFFF and DWFFF vessels from 1 January 2019.

Queensland DAF released a draft policy and guidelines for the implementation of vessel tracking on the 2<sup>nd</sup> January and was open for consultation throughout January and February. Responses from port visits, meetings, letters, surveys and phone calls in relation to the draft policy and guidelines were consolidated and developed into a consultation report available here <https://publications.qld.gov.au/dataset/vessel-tracking/resource/a7aadf39-a3e2-47f7-80fe-33e470911376>. Following this process the final Vessel Tracking Policy and Vessel Tracking Guidelines have been released are available here: Vessel Tracking Policy: <https://publications.qld.gov.au/dataset/vessel-tracking/resource/50f90160-d93c-49a4-83b2-863519ab87c5>; Vessel Tracking Guidelines: <https://publications.qld.gov.au/dataset/vessel-tracking/resource/702f9e15-d3f1-48dd-919d-daea3bd20d76>.

Queensland DAF have been trailing vessel tracking units with information on the results available here <https://publications.qld.gov.au/dataset/vessel-tracking/resource/702f9e15-d3f1-48dd-919d-daea3bd20d76>. Further information about vessel tracking and the available rebate scheme is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/vessel-tracking>

## Coral Fishery

The Queensland Coral Fishery (QCF) is a small scale, quota managed, hand harvest fishery. The QCF commenced as a licenced fishery on 1 July 2006.

Commercial operators in the QCF collect coral from waters along the Queensland east coast between 10°41' S and 24°30' S (not including areas closed through general fisheries closures or marine parks zoning under the Commonwealth *Great Barrier Reef Marine Park Act 1975* and the *Queensland Marine Parks Act 1982*. There are two small collection areas south of 24°30' S however access to these is restricted through licence conditions. The fishery area also comprises two spatially defined high use Coral Collection Areas (CCAs) at Cairns and around the Keppel group of islands. Coral taxa can also be collected recreationally from areas outside of State Marine Parks and the Great Barrier Reef Marine Park (GBRMP).

### Management

The QCF is managed under the *Fisheries Act 1994*; Fisheries Regulation 2008 and the Policy for the Management of the Coral Fishery

### Management changes in 2018

New management arrangements for the fishery commenced on 1 July 2016. The changes included wholesale improvements to the manner in which collectors reported the harvest of CITES listed hard coral species to provide more accuracy, transparency and accountability to the conduct of the fishery.

### Status of target stocks

Target species in the fishery are subject to regular ecological risk assessments (ERA) which determine the level of risk that the actions of the fishery pose on their sustainability. The last ERA was conducted in 2013 and no species were determined to be above low risk. No further management action is required to address this level of risk other than maintaining the current management regime.

### Impacts of the fishery on the ecosystem in which it operates

No unacceptable risks to the ecosystem were identified in the 2013 ERA. The fishing industry has linked its Stewardship Action Plan to ERA outputs to ensure collection practices do not exacerbate risk levels further (follow this [link](#) to the Stewardship Action Plan).

### Progress in implementing conditions and recommendations

The QCF was reassessed in June 2018 and declared an approved wildlife trade operation until 18 June 2021. Progress on the conditions and recommendations attached to the approval are below.

#### Conditions on the Part 13A approved wildlife trade operation declaration for the Queensland Coral Fishery

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1. Operation of the Queensland Coral Fishery will be carried out in accordance with the management regime in force under the *Queensland Fisheries Act 1994*.

#### Progress: Ongoing

Operation of the fishery in 2017 was carried out in accordance with the management arrangements in force under the *Queensland Fisheries Act 1994* and the *Queensland Fisheries Regulation 2008*.

2. The Queensland Department of Agriculture and Fisheries to inform the Department of the Environment and Energy of any intended material changes to the Queensland Coral Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

#### Progress: Ongoing

There have been no changes to management arrangements in the Queensland Coral Fishery (QCF) in 2018.

3. The Queensland Department of Agriculture and Fisheries to produce and present reports to the Department of the Environment annually as per Appendix B of the 'Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition'.

**Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. The Queensland Department of Agriculture and Fisheries to finalise and implement a new harvest strategy by the end of 2020. The harvest strategy should:
  - a) incorporate and replace the existing performance management system for this fishery;
  - b) implement a finer scale spatial management system.

**Progress: Ongoing**

As part of the Queensland *Sustainable Fishing Strategy 2017–2027* (the Strategy), Queensland DAF has commenced a process of management reform and harvest strategy development for the QCF. The harvest strategy will be used to manage the QCF into the future and includes pre-determined management actions to achieve agreed ecological, economic and/or social management objectives. The harvest strategy will include limit reference points at which clear conditions will be in place to review or change management arrangements in a fishery if necessary. The Strategy outlines the timeframe for developing harvest strategies for all major fisheries by the end of 2020. A copy of Queensland's Harvest Strategy Policy is available <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/harvest-strategy> .

In line with the Strategy, Queensland DAF released a discussion paper for all harvest fisheries including the QCF on 12<sup>th</sup> June 2018. The discussion paper outlined proposed changes for the QCF and can be found at <https://publications.qld.gov.au/dataset/sfs-discussion-papers-fisheries-reform/resource/77e8d52d-a1d3-4a5c-942d-35e07cb1895b>. Public comment on the discussion papers closed 9<sup>th</sup> July.

The Marine Aquarium Fish and Queensland Coral Fisheries Working group has been established and met three times to provide advice on the proposed management reform processes and harvest strategy development for the QCF. Meeting communiques are available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/harvest-strategy>

The harvest strategy development and review of management arrangements will ensure the QCF's Performance Management System (PMS) is reviewed, with resource allocation and harvest strategies updated by 2020. Queensland DAF will review the results of the evaluation once finalised and consider options for how best to incorporate them and update the fisheries PMS

5. The Queensland Department of Agriculture and Fisheries to continue annual reviews of the harvest of CITES listed taxa in the Queensland Coral Fishery and to report the results of the review to the Department of the Environment and Energy during the following fishing season. The report should include:
  - a) analysis of harvest and harvest trends by species/species group
  - b) spatial analysis of harvest by species/species group
  - c) updated risk assessments for species/ groups as they become available, and
  - d) any changes to management arrangements for CITES listed species

**Progress: Ongoing**

Queensland DAF continue to provide DoEE with an annual report summarising the harvest of CITES listed taxa. An updated report will be provided to DoEE in 2019.



## East Coast Inshore Fin Fish Fishery

The East Coast Inshore Fin Fish Fishery (ECIFFF) is Queensland's largest and most diverse fishery and comprises commercial, recreational, charter and Indigenous sectors. The commercial sector is Queensland's fourth most valuable commercial fishery (based on estimated GVP), targeting a number of fin fish species, using a variety of different net fishing methods. Some species are also targeted for commercial sale using hook and line apparatus.

### Management

The ECIFFF continues to be managed under the *Fisheries Act 1994* and the Fisheries Regulation 2008.

### Management changes in 2018

A number of new management arrangements were introduced for hammerhead sharks on 1 January 2018. These included the introduction of a TACC and a range of requirements relating to catch reporting and monitoring. These changes were developed in consultation with key stakeholders including industry, the Great Barrier Reef Marine Park Authority and DoEE. A full summary of the changes can be found at <https://www.daf.qld.gov.au/about-us/news-and-updates/fisheries/news/new-rules-commence-for-hammerhead-sharks>

### Research & monitoring

Fishery-dependent biological monitoring is carried out annually to collect length and age data for a range of species in the ECIFFF including Yellowfin bream, Sand whiting, Dusky flathead, Tailor, Sea mullet, Barramundi, Spotted mackerel, Grey mackerel.

In 2014 the Department of Agriculture and Fisheries commissioned a scientific assessment of shark stocks. This assessment was completed by fisheries scientists from Animal Science Queensland and provides MSY estimates for a range of species in the Gulf of Carpentaria and for the east coast of Queensland including the winghead shark (*Eusphyrna blochii*), the scalloped hammerhead (*Sphyrna lewini*) and the great hammerhead (*S. mokarran*). This report concluded that existing levels of the shark harvest in Queensland were below the predicted maximum sustainable levels. However, the report also acknowledged a number of data limitations, particularly with respect to species identifications and the quantity and reliability of the available shark catch data. Additional information on the Queensland shark stock assessment including an independent review of the findings is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting>

To address some of the data limitation Queensland DAF has recently commenced a new shark monitoring program that aims to determine the species composition of the retained shark catch and develop a profile of the non-retained shark catch.

In addition to the above, a number of commercially and recreationally important ECIFFF species have been included as priorities in the current or future stock assessment cycles. Stock assessments for both tailor and barramundi were finalised in 2017 and a stock assessment for bream, whiting and flathead has commenced. Stock assessments for spotted mackerel and sea mullet are also underway. A full overview of the completed stock assessments, including those commissioned for tailor and barramundi is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting>

Stock status continues to be assessed through the Queensland stock status and the National Status of Australian Fish Stocks (SAFS) processes. These processes work on a two year cycle and provide assessments for both SAFS and non-SAFS (Qld stock status) species. Queensland DAF provided DoEE with a detailed overview of the stock status assessment process used in Queensland as part of the previous ECIFFF WTO reassessment process. A summary of the stock status for key species harvested in the ECIFFF is presented below. Many of these species are included in the SAFS process with the latest reports found at [www.fish.gov.au](http://www.fish.gov.au). Further information on the stock status assessment process can be found at <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting>

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
<b>Flathead–dusky</b> ( <i>Platycephalus fuscus</i> )	Queensland (ECIFFF)	Sustainable	Not Assessed	Sustainable
<b>Sea mullet</b> ( <i>Mugil cephalus</i> )	Eastern Australian	Sustainable	Not Assessed	Sustainable
<b>Bream–yellowfin</b> ( <i>Acanthopagrus australis</i> )	Eastern Australian	Sustainable	Not Assessed	Sustainable
<b>Whiting–sand</b> ( <i>Sillago ciliata</i> )	Queensland (ECIFFF)	Sustainable	Not Assessed	Sustainable
<b>Tailor</b> ( <i>Pomatomus saltatrix</i> )	Eastern Australian	Sustainable	Not Assessed	Sustainable
<b>Mackerel–grey</b> ( <i>Scomberomorus semifasciatus</i> )	North east Queensland	Sustainable	Not Assessed	Sustainable
	Central east Queensland	Sustainable	Not Assessed	Sustainable
<b>Barramundi</b> ( <i>Lates calcarifer</i> )	Princess Charlotte Bay	Sustainable	Not Assessed	Sustainable
	North east coast	Undefined	Not Assessed	Sustainable
	Mackay	Sustainable	Not Assessed	Sustainable
	Central east coast	Sustainable	Not Assessed	Sustainable
<b>Black Jewfish</b> ( <i>Protonibea diacanthus</i> )	East Coast	Undefined	Not Assessed	Undefined
<b>Sandbar Shark</b> ( <i>Carcharhinus plumbeus</i> )	East Australian	Undefined	Not Assessed	Undefined
<b>Blacktip Shark</b> ( <i>Carcharhinus tilstoni</i> , <i>C. limbatus</i> , <i>C. sorrah</i> )	East Coast	Undefined	Not Assessed	Undefined
<b>Mulloway</b> ( <i>Argyrosomus japonicus</i> )	Queensland	Undefined	Not Assessed	Undefined
<b>Mangrove Jack</b> ( <i>Lutjanus argentimaculatus</i> )	East Coast Queensland	Not Assessed	Not Assessed	Undefined
<b>Yellowtail Kingfish</b> ( <i>Seriola lalandi</i> )	Eastern Australian	Undefined	Not Assessed	Undefined
<b>Threadfin–Blue</b> ( <i>Eleutheronema tetradactylum</i> )	East Coast	Not assessed	Undefined	Sustainable

<b>Dart</b> ( <i>Trachinotus</i> spp.)	East Coast	Not assessed	Undefined	Not Assessed
<b>Dart–Swallowtail</b> ( <i>Trachinotus copperingi</i> )	East Coast	Not assessed	Undefined	Not Assessed
<b>Garfish</b> (Hemiramphidae)	East Coast	Not assessed	Undefined	Not Assessed
<b>Javelin</b> ( <i>Pomadasys</i> spp.)	East Coast	Not assessed	Undefined	Not Assessed
<b>Threadfin–King</b> ( <i>Polydactylus macrochir</i> )	East Coast	Sustainable	Not Assessed	Sustainable
<b>Mangrove Jack</b> ( <i>Lutjanus argentimaculatus</i> )	East Coast	Not assessed	Transitional-Recovering	Recovering
<b>Queenfish</b> ( <i>Scomberoides</i> spp.)	East Coast	Not assessed	Undefined	Not Assessed
<b>School Mackerel</b> ( <i>Scomberomorus queenslandicus</i> )	South Eastern Coast	Not assessed	Sustainable	Sustainable
	North Eastern Coast	Not Assessed	Not Assessed	Undefined
<b>Spotted Mackerel</b> ( <i>Scomberomorus munroi</i> )	Eastern Australia	Sustainable	Not Assessed	Sustainable
<b>Trevally</b> (Carangidae)	East Coast	Not assessed	Undefined	Not Assessed
<b>Yellowtail Scad</b> ( <i>Trachurus novaezelandiae</i> )	Eastern Australia	Not Assessed	Not Assessed	Sustainable

### Progress in implementing conditions and recommendations

The ECIFFF was recently reassessed in September 2018. A temporary wildlife trade operation was granted until 14 December 2018. Progress on the conditions and recommendations attached to the approval are below.

#### [Conditions on the Part 13A approved wildlife trade operation declaration for the Queensland East Coast Inshore Fin Fish Fishery](#)

1. Operation of the East Coast Inshore Fin Fish Fishery will be carried out in accordance with the management regime in force under the Queensland *Fisheries Act 1994*.

**Progress: Ongoing**

The ECIFFF was managed and continues to be managed in accordance with provisions outlined in the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

2. The Queensland Department of Agriculture and Fisheries to inform the Department of Environment and Energy of any intended material changes to the Queensland East Coast Inshore Fin Fish Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

**Progress: Ongoing**

The ECIFFF received amendments to the management arrangements of hammerhead sharks in effect from 1 January 2018. These changes include:

1. A TACC of 150 tonnes split across the GBR (78 tonnes), Southern East Coast (22 tonnes) and the Gulf of Carpentaria (50 tonnes), A trigger point at 75% TACC was set at which time; a trip limit of 10 hammerhead

sharks for net fishers and 4 for lines fishers applies; and all commercial fishers will be required to land their catch of hammerheads in whole form.

2. Improved reporting for commercial fishers will also be required, including; Data validation measures such as prior and upload reporting through the Automated Integrated Voice Response system; and reporting of discards and species-specific catch information in logbooks. These changes were developed in consultation with key stakeholders including industry, the Great Barrier Reef Marine Park Authority and DoEE.
3. The Queensland Department of Agriculture and Fisheries 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*.

**Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. The Queensland Department of Agriculture and Fisheries to develop a strategy for the harvest of key fish and shark species taken in the Queensland East Coast Inshore Fin Fish Fishery in consultation with relevant experts and stakeholders. The strategy should include decision rules and reference points that trigger management actions to ensure catch limits remain ecologically sustainable. Performance against this strategy to be included in annual reports specified at Condition 3.

**Progress: Ongoing**

Queensland's *Sustainable Fisheries Strategy 2017-2027* (the Strategy) outlines the government's reform agenda for fisheries management over the next ten years. The strategy identifies 33 actions across ten major areas of reform. Key areas of reform include: Improved monitoring and research, setting sustainable catch limits through harvest strategies, improved stakeholder engagement, undertaking Ecological Risk Assessment's (ERA's) and managing high risks in the relevant harvest strategy, reviewing fishing rules and access, implementing more responsive decision-making and strengthening compliance powers and resourcing.

As part of the Strategy Queensland DAF has commenced the reform and harvest strategy development process for priority fisheries, including the ECIFFF. Harvest strategies are a framework of pre-determined management actions for defined species to achieve agreed ecological, economic and/or social management objectives. Harvest strategies will include limit reference points at which clear conditions will be in place to review or change management arrangements in a fishery if necessary. In conjunction with fishery working groups and the expert advisory panel, DAF Queensland will develop harvest strategies for all major fisheries by the end of 2020, with a priority to develop trawl, crab and inshore fisheries by the end of 2018. A copy of *Queensland's Harvest Strategy Policy* is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/harvest-strategy> .

The East Coast Inshore Working Group (ECIWG) and Queensland DAF has now met with the ECIWG four times to discuss the reform and harvest strategy development for the fishery. Key discussion points from the meetings are outline in the meeting communiques which are available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/fishery-working-groups>

Discussion papers on the reform options for priority fisheries were released in March 2018. This includes proposed changes for the ECIFFF. More information is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/fisheries-reforms> The proposed reforms include things like splitting the management of some fisheries into regions, introducing quotas or limits on fishing, improving gear technology, reviewing fish size and possession limits and having temporary and flexible closures for fishing. Implementing the Strategy and reforming our fisheries will deliver meaningful long-term benefits for the marine environment.

In the first 12 months of implementing the Strategy, a number of key actions and reform targets have been achieved, or are on track for delivery by 2027. A progress report on the first year of implementation has been released and can be found at [https://www.daf.qld.gov.au/data/assets/pdf\\_file/0003/1400826/Sustainable-Fisheries-Strategy-progress-report.PDF](https://www.daf.qld.gov.au/data/assets/pdf_file/0003/1400826/Sustainable-Fisheries-Strategy-progress-report.PDF). Further information regarding the Strategy is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

The Queensland Department of Agriculture and Fisheries to continue to develop an improved data collection and validation approach that supports the strategy outlined in condition 4, and facilitates monitoring and management of all target, bycatch and protected species impacted by the fishery.

### **Progress: Ongoing**

The Strategy also includes the roll out of vessel tracking across all commercial and charter boats by 2020. Vessel tracking will commence in the ECIFFF from 1 January 2019. Further information about vessel tracking is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

As part of the Strategy Queensland DAF has commenced the process of completing ERA's to investigate the impact of fishing activities on key species (target and non-target) and the broader marine ecosystem. This is being undertaken in accordance with a new ERA Guideline <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

Fisheries Queensland will be conducting a telephone survey of Queensland's fishers who catch sharks through the course of net fishing operations. The purpose of this survey is to determine the economic and behavioural factors that influence whether sharks are retained or not retained in commercial net fisheries. All net fishers have been sent a letter introducing the phone survey and a project fact sheet about the phone survey. A pilot phase of the phone survey has been completed and the commencement of surveying the broader net fishing community has begun. More information on the phone survey is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/monitoring-reporting/commercial-fisheries/species-specific/monitoring-queenslands-commercial-shark-catch>

In addition to the conservation status of hammerhead sharks, community concerns have been raised about the commercial take of sharks. To address these concerns, improved reporting is being introduced for all Queensland commercial fishers who capture shark species. These reporting requirements include:

- Data validation measures such as priority and unload reporting through the Automated Integrated Voice Response (AIVR) phone reporting system.
- Reporting species-specific catch information in logbooks.
- Reporting of discards of hammerhead shark and other shark.
- A revision to the shark identification guide.

Under the Advance Queensland Small Business Innovation Research (SBIR) program, Queensland DAF are currently funding the development of systems that include location tracking, smart sensors and image recognition of fish and shark species. These systems are designed to replace slow and costly manual logbooks with automated real-time monitoring. As a result, Fisheries Queensland will receive more accurate information in real time, enhancing the confidence, timeliness and quality of data.

DAF is also seeking an affordable automated electronic monitoring system that will record all information required of commercial trawl, net and crab fishing operations (taking into account different sized vessels), and submit this to DAF in or near real time. A solution to this challenge will make it easier for fishers to meet their regulatory requirements, while providing improved data to support robust fishery management decisions which ensure the ecological sustainability of Queensland's fish stocks. The Queensland Government is funding two companies to develop high-tech systems to monitor commercial fishing location, effort and catch. More information on the Small Business

Innovation Challenge project and partnership with Advance Queensland is available in the recent media statement: <http://statements.qld.gov.au/Statement/2018/6/6/innovative-companies-to-develop-automated-fisheries-monitoring>,

5. The Queensland Department of Agriculture and Fisheries to:
  - a. Continue to provide the necessary support for fishers to accurately identify and record sharks at the species level. This may involve further consultation with stakeholders and should include some assessment and monitoring of reporting performance to identify and target improvements where necessary.
  - b. Continue to develop options to ensure shark catch can be readily and reliably identified. This may include introducing a prohibition on the removal of fins and filleting sharks prior to landing.

**Progress: Ongoing**

Queensland DAF has recently updated commercial log books with greater detail to assist in species identification and improved reporting of shark catches. A revised shark identification guide was provided in conjunction with the new logbooks. The Hammerhead working group met in June 2017 to discuss management changes for Hammerhead sharks as a result of the Commonwealth's consideration of the listing of the species under the EPBC Act. The issue of shark processing at sea was discussed with industry who were generally not supportive of changes restricting processing because of logistics at sea. The Hammerhead Working Group has concluded their work and these issues will now be considered by the new fishery-specific working groups. It is likely the ECIWG will discuss further the issues of processing sharks at sea at future meetings.

6. The Queensland Department of Agriculture and Fisheries to:
  - a. Continue to improve understanding of stock status of recreationally and commercially important species which are currently classified as 'undefined'. This should include biological monitoring for these species, and publication of this information, along with catch and effort data, in stock status reports
  - b. Continue to work to validate catch composition of shark species and to review hammerhead shark stock status and management arrangements.

**Progress: Ongoing**

Queensland's sustainable fisheries strategy outlines improved monitoring and research as a fundamental area for reform. Queensland DAF has published a monitoring and research plan to outline standards for improved data collection and guide the identification of data needs, resources and priorities to support the implementation of the strategy. Queensland DAF continues to complete detailed stock assessments of key species and present their findings publicly. A number of stock assessments are currently underway including; spanish mackerel, grey mackerel, school mackerel, spotted mackerel, mullet, bream, whiting and flathead.

Queensland DAF continues to collect biological information on a range of key species through the Monitoring Program. The monitoring program collects biological data from fish taken by recreational and commercial fishers, as well as from fishery independent surveys. Data from the monitoring provides inputs to stock assessment models, informs annual stock status assessments and is used in developing management strategies for all Queensland's fisheries resources. The monitoring program collects data on a number of ECIFFF species including king threadfin which was added to the species list in 2015 in recognition of its importance to the recreational fishing sector. Information on monitoring programs for recreational fisheries can be found at <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/monitoring-reporting/recreational-fishing>

Stock status continues to be assessed through the Queensland stock status and the National Status of Australian Fish Stocks (SAFS) processes. These processes work on a two year cycle and provide assessments for both SAFS and non-SAFS (Qld stock status) species. Queensland DAF provided DoEE with a detailed overview of the stock status assessment process used in Queensland as part of the previous ECIFFF WTO reassessment process.

As part of the strategy, Fisheries Queensland is committed to collecting additional biological information on sharks to address key information gaps to address two objectives:

1. Determine the species composition of the retained shark catch
2. Develop a profile of the non-retained shark catch

Monitoring activities are focusing on net catches in the ECIFFF. Information will be collected on catch composition (eg. blacktip species and hammerhead species), size, sex and potentially age information as well. This will provide valuable additional information to validate other sources of information and inform future stock assessments. DAF is seeking to collaborate with shark experts to assist with implementing these monitoring actions. More information on the shark monitoring program is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/monitoring-reporting/commercial-fisheries/species-specific/monitoring-queenslands-commercial-shark-catch>

7. The Queensland Department of Agriculture and Fisheries to continue work to complete and publish an ecological risk assessment for the Queensland East Coast Inshore Fin Fish Fishery

An Ecological Risk Assessments (ERA) is underway for the ECIFFF and is following the process published in the ERA guidelines available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

## East Coast Otter Trawl Fishery

The East Coast Otter Trawl Fishery (ECOTF) is the largest fishery in Queensland, both in terms of the volume of product caught and the economic value of the product. The ECOTF operates along the Queensland east coast within the area bounded by the Offshore Constitutional Settlement. The fishery mainly uses three or four nets held open with otter boards and towed behind vessels up to 20 metres length. Target species include several large penaeid prawn species, Saucer Scallop, Moreton Bay Bug and squid. A number of other by-product species are retained including cuttlefish, octopus, Red Champagne Lobster and Balmain Bug.

### Management

The ECOTF is managed under the Queensland *Fisheries Act 1994*, Fisheries Regulation 2008 and the Fisheries (East Coast Trawl) Management Plan 2010 (the Trawl Plan).

### Management changes in 2018

There were no management changes to the ECOTF in 2018.

In response to the November 2016 stock assessment finding that the ECOTF Saucer Scallop stock is likely to be recruitment overfished<sup>1</sup>, the Queensland Government made amendments to:

- permanently close all six scallop replenishment areas (SRAs); and
- introduce a scallop spawning closure from 1 May to 31 October each year throughout the East Coast Otter Trawl Fishery<sup>2</sup>.

A December 2016 Trawl Plan amendment took effect in 2017 as follows:

- permanent closure of SRAs from 3 January (the previously scheduled opening date); and
- whole of fishery spawning closure from 1 May to 30 September

SRAs typically contribute 20% of the total ECOTF scallop harvest. Under the Trawl Plan they have been managed as 15 month rotational closures interspersed with a nine month period when they are opened to fishing. Historically catch rates at the onset of an SRA opening are relatively high compared to other times during the year attesting to their value as grow out areas for scallops about to recruit to the fishery. Closure of SRAs is intended to minimise fishing mortality associated with repeated capture and discarding of the immature stock. The spawning closure change is designed to assist and rebuild stock biomass by minimising fishing mortality

### Research & monitoring

The latest ECOTF stock (Saucer Scallop) assessment found that the stock is likely recruitment overfished, requiring urgent management intervention (see Management changes above). The assessment report can be found at <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting/fish-stock-status-reports>. An updated assessment is underway and is due for completion in 2019.

Collaborative research between Queensland DAF and CSIRO has assembled bycatch data from multiple research and monitoring sources and constructed robust catch, effort and area swept metrics with which to gauge management efficacy in reducing bycatch in ECOTF sectors. Find details at <https://www.daf.qld.gov.au/services/news-and-updates/fisheries/news/research-underway-on-Queenslands-east-coast-trawl-fishery>.

The annual trawl surveys were completed in 2018 during the 10<sup>th</sup> and 20<sup>th</sup> October. The fishery independent surveys aim to monitor the recruitment and abundance of saucer scallops, blue swimmer crabs, Moreton bay bugs and document any interactions with species of conservation interest.

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<sup>1</sup> Yang, W-H, Wortmann, J, Robins, JB, Courtney AJ, O'Neill, MF, and Campbell, MJ, 2016, Quantitative assessment of the Queensland saucer scallop (*Amusium balloti*) fishery, The University of Queensland Centre for Applications in Natural Resource Mathematics and the Queensland Department of Agriculture and Fisheries, <http://era.daf.qld.gov.au/5478/>

<sup>2</sup> [Commencement of scallop fishing closures](#)



Quantitative assessment for tiger prawn, endeavour prawn and red spot king prawn stocks was completed in 2015<sup>3</sup>, salient outputs include:

- \* long-term/historical trends in trawl gear descriptions for sectors targeting these stocks;
- \* long-term trends in fishing power change;
- \* standardised indices of relative abundance (catch-per-unit-effort); and
- \* estimates of MSY, MEY, Emsy and Emey for sub-stocks contributing 95% of the tiger prawn catch, 92% of the endeavour prawn catch & 99% of the red spot king catch. Results were considered at the 2016 stock status workshop and will be consulted again during the 2018 stock status determination.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
<b>Prawn–endeavour</b> ( <i>Metapenaeus endeavouri</i> , <i>M. ensis</i> )	East Coast	Sustainable	Not Assessed	Sustainable
<b>Prawn–eastern king</b> ( <i>Melicertus plebejus</i> )	Eastern Australian	Sustainable	Not Assessed	Sustainable
<b>Prawn–banana</b> ( <i>Fenneropenaeus merguensis</i> )	East Coast	Sustainable	Not Assessed	Sustainable
<b>Prawn–school</b> ( <i>Metapenaeus macleayi</i> )	Queensland	Sustainable	Not Assessed	Sustainable
<b>Prawn–tiger</b> (brown and grooved) ( <i>Penaeus esculentus</i> and <i>P. semisulcatus</i> )	East Coast	Sustainable	Not Assessed	Sustainable
<b>Prawn– red spot king</b> ( <i>Melicertus longistylus</i> )	East Coast	Not assessed	Sustainable	Not Assessed
<b>Prawn– western king</b> (blue-legged) ( <i>Melicertus latisulatus</i> )	East Coast	Sustainable	Not Assessed	Sustainable
<b>Prawn– royal red</b> ( <i>Haliporoides sibogae</i> )	Queensland	Not Assessed	Not Assessed	Undefined
<b>Scallop–saucer</b> ( <i>Amusium balloti</i> )	East Coast	Overfished	Overfished	Overfished
<b>Bugs–Balmain</b> ( <i>Ibacus chacei</i> and <i>I. brucei</i> )	East Coast	Sustainable	Not Assessed	Sustainable
<b>Bugs–Moreton Bay</b> ( <i>Thenus australiensis</i> and <i>T. parindicus</i> )	Queensland	Sustainable	Not Assessed	Sustainable

### Impacts of the fishery on the ecosystem

A comprehensive Ecological Risk Assessment (ERA) for the Southern Queensland component of the ECOTF<sup>4</sup> has been completed and released publically. The assessment included all waters fished by otter trawlers between the southern limit of the Great Barrier Reef Marine Park (GBRMP) and the New South Wales (NSW) border, as well as areas of the RIBTF. The assessment focused specifically on the prawn-trawl and tropical saucer scallop fishery, including both targeted and non-targeted species that interact with or have the potential to interact with the ECOTF during

<sup>3</sup> Wang, N, 2015, Application of a weekly delay-difference model to commercial catch and effort data in multi-species fisheries, PhD Thesis, University of Queensland & Queensland Department of Agriculture, and Fisheries, Brisbane.

<sup>4</sup> [https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf).

normal interactions. Results have been considered in recent stock status assessments and review of legislative instruments that apply to the ECOTF. Legislative amendments for mandatory use of bycatch reductions devices and turtle excluder devices are expected to further reduce capture of sea snake, sea turtle and bycatch species in general.

A full copy of the report can be found at

[https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf).

### **Progress in implementing conditions and recommendations**

The ECOTF was reassessed on 26<sup>th</sup> March 2018 and a Wildlife Trade Operation (WTO) was granted until 13<sup>th</sup> November 2020. Progress on the conditions and recommendations attached to the approval are below.

#### Conditions on the Part 13A approved wildlife trade operation declaration for the Queensland East Coast Otter Trawl Fishery

1. Operation of the Queensland East Coast Otter Trawl Fishery will be carried out in accordance with the Queensland Fisheries (East Coast Otter Trawl Fishery) Management Plan 2010 under the Queensland Fisheries Act 1994.

**Progress: Ongoing**

The Queensland East Coast Otter Trawl Fishery (ECOTF) was managed and continues to be managed in accordance with provisions outlined in the Queensland *Fisheries Act 1994*, Fisheries Regulation 2008.

2. The Queensland Department of Agriculture and Fisheries (QDAF) to inform the Department of the Environment and Energy (the Department) of any intended material changes to the East Coast Otter Trawl Fishery management arrangements that may affect the assessment against which Environment Protection and Biodiversity Conservation Act 1999 decisions are made.

**Progress: Ongoing**

There have been no changes to management arrangements to the ECOTF in 2018.

3. QDAF to produce and present reports to the Department annually as per Appendix B of the Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition.

**Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. QDAF to:

- a. complete and publish the ecological risk assessment for the area of the fishery south of the Great Barrier Reef Marine Park, and
- b. address risk to species and habitats identified as being at or above intermediate risk from the impacts of fishing in the risk assessments (areas south of the Great Barrier Reef and within the Great Barrier Reef Marine Park) according to protocols described in the Fisheries Queensland Ecological Risk Assessment Guideline and encourage additional research through the Fisheries Queensland Monitoring and Research Plan.

**Progress: Ongoing**

Queensland DAF has published the Ecological Risk Assessment (ERA) for the Southern Queensland component of the ECOTF. A full copy of the report can be found at

[https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf). The assessment included all waters fished by otter trawlers between the southern limit of the Great Barrier Reef Marine Park (GBRMP) and the New South Wales (NSW) boarder, as well as areas of the RIBTF. The assessment focused

specifically on the prawn-trawl and tropical saucer scallop fishery, including both targeted and non-targeted species that interact with or have the potential to interact with the ECOTF during normal interactions.

As part of the Queensland's Sustainable Fishing Strategy 2017–2027 (the Strategy), Queensland DAF has released the new ERA guidelines. The ERA guidelines identify the principles for prioritising ERA's according to risk, assessment methods that reflect national standards and a formal approach for identifying and prioritising management actions to address ERA outcomes. In accordance with the ERA guidelines, Queensland DAF will ensure that species and habitats identified as being at or above intermediate risk are addressed through consultation with the ECOTF working group. For a copy of the guidelines see <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy> .

The Strategy commits to improving monitoring and research in order to ensure that accurate, timely data are available for fisheries management. The Monitoring and Research Plan was developed to identify key data needs and prioritise investment in monitoring and research. Risks identified through the ERA process and associated information gaps will be included in the annual update of the Monitoring and Research plan. The current Monitoring and Research plan is available at <https://publications.qld.gov.au/dataset/queensland-sustainable-fisheries-strategy/resource/fc7da976-661c-43ba-aaaa-9df8c2cb39d3>.

5. QDAF to:

- a. build stock resilience by working towards maximum sustainable yield in the short term and building to maximum economic yield for all fished stocks
- b. implement management measures to support the recovery of saucer scallops to ecologically sustainable levels and prevent future overfishing
- c. develop and implement finer scale management tools to improve spatial control of effort across all sectors of the fishery
- d. ensure that total effort in the Great Barrier Reef World Heritage Area does not increase above the historic proportion of total fishing effort in the East Coast Otter Trawl Fishery

**Progress: Ongoing**

The Strategy sets targets to rebuild stocks to at least the maximum sustainable yield (MSY) with a longer term target (2027) to build stocks up to achieve the maximum economic yield (MEY). A number of management arrangements have been implemented to support the recovery of saucer scallops in Queensland waters. These include the permanent closure of SRA's and introduction of a seasonal closure. For more details on the management changes for saucer scallops see the "Management Changes in 2018" heading above.

As part of the Strategy, Queensland DAF has commenced the reform and harvest strategy development process for priority fisheries, including the ECOTF. Harvest strategies are a framework of pre-determined management actions for defined species to achieve agreed ecological, economic and/or social management objectives. Harvest strategies will include limit reference points at which clear conditions will be in place to review or change management arrangements in a fishery if necessary. This will allow finer scale management tools and effort control methods to be developed across the fishery and its regions. In conjunction with fishery working groups and the expert advisory panel, Queensland DAF will develop harvest strategies for all major fisheries by the end of 2020, with a priority to develop the ECOTF by the end of 2018. Harvest strategy guidelines have been developed and can be viewed at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

Queensland DAF released a discussion paper for the ECOTF in May 2018. The discussion paper outlined proposed changes for the ECOTF and can be found at <https://publications.qld.gov.au/dataset/sfs-discussion-papers-fisheries-reform/resource/77e8d52d-a1d3-4a5c-942d-35e07cb1895b>. Public comment on the discussion papers closed 20<sup>th</sup> May.

The Trawl Fishery Working group was established in October 2017 and has met five times to provide advice on the proposed management reform processes and harvest strategy development for the ECOTF. Meeting communiques are available at. <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

6. In consultation with relevant stakeholders, QDAF to develop and implement a statistically robust monitoring regime with appropriate levels of fisheries independent data to inform the introduction of harvest strategies for target species, including robust and quantitative data on byproduct and bycatch species (including EPBC Act protected species).

**Progress: Ongoing**

With the implementation of the Strategy, Queensland DAF is developing harvest strategies in consultation with relevant stakeholders, working groups and the expert panel. See response to condition 4 and 5 above.

Fishery Independent trawl surveys continue to monitor the recruitment and abundance of key ECOTF species including saucer scallops, blue swimmer crabs and Moreton bay bugs as well as documenting any interactions with species of conservation interest. The results from these surveys are used for stock status assessments and the development of harvest strategies in line with the Strategy.

7. Risks associated with habitat to be re-evaluated once new assessments under the Fisheries Queensland ERA Guideline are progressively implemented from 2018. QDAF to commit to mitigating unacceptable risks to species and habitats resulting from fishing activities. Under the Queensland Sustainable Fisheries Strategy 2017-2020, species and habitat considered to be at high risk will be prioritised for management action.

**Progress: Ongoing**

See response to condition 4.

## East Coast Pearl Fishery

The Queensland East Coast Pearl Fishery (ECPF) is a small-scale, wild-harvest fishery that licences operators to collect live adult pearl oyster shell as broodstock for the pearl aquaculture industry. The general demand for wild-harvested pearl oysters is very low as the aquaculture industry produces the majority of its broodstock needs from within its farmed resources.

### Management

The ECPF is managed under the Queensland *Fisheries Act 1994* and Fisheries Regulation 2008.

### Management changes in 2018

No management changes in 2018.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
Silverlip Pearl Oyster ( <i>Pinctada maxima</i> )	East Coast	Sustainable	Not Assessed	Sustainable

No other pearl oyster species were assessed in 2016.

### Progress in implementing recommendations

The ECPF was recently assessed by DOEE in consideration of a ten year LENS as a low risk fishery. On 17 November 2015, Queensland DAF received notification that the ECPF was approved for a ten year LENS which now expires on the 28<sup>th</sup> August 2025.

## East Coast Spanish Mackerel Fishery

The East Coast Spanish Mackerel Fishery (ECSMF) is a line fishery targeting the largest of the mackerel species in Queensland—*Scomeromorus commerson*. The fishery extends along the eastern Queensland coastline and the species is highly sought after by both commercial and recreational fishers.

### Management

The ECSMF is managed under the Queensland *Fisheries Act 1994* and *Fisheries Regulation 2008*.

### Management changes in 2018

No significant changes were made to the ECSMF management regime in 2018.

### Research & monitoring

An updated stock assessment for Spanish mackerel was completed in 2018 and can be found here <http://era.daf.qld.gov.au/id/eprint/6202/>.

The previous Spanish Mackerel stock assessment can be found here

<https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting>

### Latest monitoring reports can be found here:

For the latest monitoring information on Spanish Mackerel can be found here

<https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/monitoring-reporting/commercial-fisheries>

Fishery catch statistics are also publicly available and can be found here

<https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting>

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	2018 Proposed SAFS status
Spanish Mackerel ( <i>Scomberomorus commerson</i> )	East Coast	Sustainable	Not Assessed	Sustainable

### Progress in implementing conditions and recommendations:

The ECSMF was recently assessed in March 2018. The fishery was approved for a ten year LENS on which expires on the 28<sup>th</sup> August 2025.

## East Coast Trochus Fishery

The Queensland East Coast Trochus Fishery (Trochus Fishery) is a single species, hand collection fishery. Commercial trochus fishers are permitted to harvest with hand-held non-mechanical implements. Trochus are collected from the intertidal zone and from reefs by divers, usually on Self Contained Underwater Breathing Apparatus (SCUBA) or hookah apparatus. Recreational fishers are not permitted to use SCUBA or hookah apparatus.

### Management

The Trochus Fishery is managed under the Queensland *Fisheries Act 1994* and Fisheries Regulation 2008.

### Management changes in 2018

No management changes in 2018.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
<b>Trochus</b> ( <i>Trochus niloticus</i> )	East Coast	Not assessed	Sustainable	Not Assessed

### Progress in implementing recommendations

The Trochus Fishery was recently assessed by DOEE in consideration of a ten year LENS as a low risk fishery. On 17 November 2015, Queensland DAF received notification the Trochus Fishery was approved for a ten year LENS which now expires on the 28<sup>th</sup> August 2025.

## Eel Fishery

The Queensland Eel Fishery (QEF) targets the longfin eel, *Anguilla reinhardtii*, and the southern shortfin eel, *Anguilla australis*, in rivers and freshwater impoundments. The resource is harvested at two stages in the lifecycle, the adult stage (eels > 30 cm) and the glass eel / elver stage (eels < 30 cm). There are spatial limitations on where adult and juvenile eels can be harvested.

### Management

The QEF is managed under the *Fisheries Act 1994*, the Fisheries Regulation 2008.

### Management changes in 2018

Due to a change in Government policy direction the proposed changes to access any dams within Queensland provided in the last progress report did not progress. There were no management changes in 2017.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
Freshwater eel ( <i>Anguilla australis</i> and <i>A. reinhardtii</i> )	East Coast	Not assessed	Sustainable	Not Assessed

### Progress in implementing recommendations

The QEF was recently assessed by DOEE in consideration of a ten year LENS as a low risk fishery. On 17 November 2015, Queensland DAF received notification that the QEF was approved for a ten year LENS which now expires on the 28<sup>th</sup> August 2025.



## Fin Fish (Stout Whiting) Trawl Fishery

The Queensland Fin Fish (Stout Whiting) Trawl Fishery (FFTF) is a demersal fish trawl and Danish seine net fishery targeting stout whiting (*Sillago robusta*) and red spot whiting (*Sillago flindersi*) and retaining permitted by-product species. The FFTF area lies between the 20 and 50 fathom [36 and 90 m] depth contours off southern Queensland (from Sandy Cape south to the NSW border). With currently only two operators in the fishery, there is a high level of industry involvement in management and stock monitoring processes. An annually revised Total Allowable Catch (TAC) applies to stout whiting, yellowtail scad and goatfish, and in possession limits apply to other by-product species.

### Management

The FFTF is managed under the *Fisheries Act 1994* and the *Fisheries Regulation 2008*.

### Management changes in 2018

2017 TACs for target and byproduct species were set via declaration and remain the same for the 2018 fishing season:

- stout whiting—1 106 t;
- goatfish—100 t; and
- yellowtail scad—100 t.

Consistent with management arrangements introduced in 2015:

- the fishery season extends from 1 January till 31 December;
- ITQ (individual transferable Stout Whiting catch quota) units are operative;
- quota reporting via the Quota Monitoring System and Automated Interactive Voice Response system, require fishers to notify Queensland DAF when entering port, and unloading product from each fishing trip; and
- TACs for the target and byproduct species were set via declaration.

### Research & monitoring

The penultimate stout whiting stock assessment recommended a TACC for 2016 of 1 000–1 100 t<sup>5</sup>. A summary of the assessment report can be found here: <http://era.daf.qld.gov.au/5200/>.

The latest stock assessment report can be found here: <http://era.daf.qld.gov.au/5199/>.

Fishery-dependent biological monitoring is carried out to collect stout whiting length and age data and used in the stock assessments on which the annual TACC is based. Otolith weightings and length frequency data required for catch curve analysis beyond 2015 were unavailable at the time of the 2017 TACC assessment.

Collaborative research between Queensland DAF and CSIRO assembled bycatch data from multiple research and monitoring sources and constructing robust metrics with which to gauge management efficacy in reducing bycatch in the ECOTF and in this fishery. The final report from this research is not yet accessible via the internet but is available from FRDC<sup>6</sup>.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
Whiting–stout ( <i>Sillago robusta</i> )	Eastern Australian	Sustainable	Not Assessed	Sustainable

<sup>5</sup> O'Neill, MF. and Leigh, GM, 2016, Stout Whiting Fishery Summary: Queensland Total Allowable Catch for 2016, Technical Report, Department of Agriculture and Fisheries, Queensland.

<sup>6</sup> FRDC Communications Team on 02 6285 0415 or email [frdc@frdc.com.au](mailto:frdc@frdc.com.au)

Since 1997, Stout Whiting Fishery management is centred on annual assessments of total allowable commercial catch (TACC). The TACC is assessed before the start of each fishing year using statistical assessment methodologies, namely evaluation of trends in fish catch rates and catch-at-age frequencies measured against management reference points. The TACC has been under-caught in many years<sup>5</sup>.

In 2016, the stout whiting TACC reduced by 60 tonnes to 1090 tonnes. Each TAC for yellowtail scad and goatfish was maintained at 100 tonnes. The new assessment process supporting the 2016 TACC was again used to estimate the 2017 TACC<sup>5</sup>. In general stout whiting catch rate and survival indicators used in the 2017 TAC assessment showed that recent fishery harvests were sustainable. In accordance with recommendations of the assessment<sup>5</sup>, a 2017 stout whiting TAC of 1 106 tonnes was declared in October 2016. As the fishery continues to operate with two licence holders the 2018 quota remained that same as 2017.

### Impacts of the fishery on the ecosystem in which it operates

An Ecological Risk Assessment (ERA) report of the East Coast Otter Trawl Fishery (ECOTF) south of the Great Barrier Reef Marine Park has been completed that includes species shared with the FFTF as either retained species or bycatch. The relative impact of the FFTF on these species is likely to be insignificant compared to the spatially overlapping shallow eastern king prawn sector of the ECOTF which from 2009–15, applied on average about 20 times more fishing effort days per year to these species. A copy of the ERA is available here [https://www.daf.qld.gov.au/data/assets/pdf\\_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf](https://www.daf.qld.gov.au/data/assets/pdf_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf).

### Progress in implementing conditions and recommendations

The FFTF was reassessed in February 2017 and declared a wildlife trade operation (WTO) until 14<sup>th</sup> February 2020. Progress on the conditions and recommendations attached to the approval are below.

#### Conditions on the Part 13A approved wildlife trade operation declaration for the Fin Fish (Stout Whiting) Trawl Fishery

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1. Operation of the fishery will be carried out in accordance with the management regime under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

#### Progress: Ongoing

Operation of the fishery was carried out in accordance with the management arrangements in force under the Queensland Fisheries Act 1994 and the Queensland Fisheries Regulations 2008.

2. The Queensland Department of Agriculture and Fisheries to inform the Department of the Environment and Energy of any intended material changes to the Queensland Finfish (Stout Whiting) Trawl Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

#### Progress: Ongoing

The 2018 annual Quota for stout whiting in remained that same at 1106t.

In 2017, Queensland DAF approved a General Fisheries Permit to trial an expanded fisheries area in the stout whiting fishery. The permit commenced on 17 August 2017 and has been issued for a 2 year period. The following activities are authorised:

- Fishing south of Cape Moreton inside 20 fathoms.
- Fishing south of Cape Moreton outside 20 fathoms (No T4 fishing south of Cape Moreton from 21 September-31 March).

- Fishing north of Cape Moreton including inside 20 fathoms 1 April-20 September with an inner limit of 1nm offshore (except where existing trawl closures applies at Tin Can Bay).
- Fishing north of Cape Moreton outside 20 fathoms all year (as per existing regulations).

DoEE were informed of the above management changes before their implementation.

3. The Queensland Department of Agriculture and Fisheries 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'.

#### **Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. The Queensland Department of Agriculture and Fisheries to develop, finalise and release publicly, an ecological risk assessment that examines the fishery's risk to target, byproduct and bycatch species and the ecosystem.

As part of Queensland's Sustainable Fishing Strategy 2017–2027 (the Strategy), Queensland DAF has commenced the process of completing Ecological Risk Assessments (ERA's) to investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem. The ERA program has commenced and is being delivered in accordance with new ERA guidelines see <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy> Queensland DAF will discuss the draft ERA reports with working group to ensure appropriate information has been used to assess risk levels. Reports will also be reviewed by the Sustainable Fisheries Expert Panel. Risks identified in the ERA process will be discussed with working groups to determine whether they can be incorporated into harvest strategies, minimised by other management interventions or require ongoing research to clarify the risks. Completing an ERA for the FFTF will review and investigate the impacts of fishing activities on species (target and non-target) and the broader marine ecosystem.

5. The Queensland Department of Agriculture and Fisheries to ensure that by mid-2019, any unacceptable risks to byproduct and bycatch species (including protected species) that are identified through the ecological risk assessment have been mitigated.

Queensland DAF will review the results of the ERA for the FFTF once complete and use the results to mitigate any unacceptable risks to by-product and bycatch species.

6. The Queensland Department of Agriculture and Fisheries to work with industry to develop and implement a statistically robust validation program that will collect information on target, byproduct and bycatch species, including EPBC Act protected species.

As part of the Strategy Queensland DAF has commenced the reform and harvest strategy development process for priority fisheries, including the FFTF. Harvest strategies are a framework of pre-determined management actions for defined species to achieve agreed ecological, economic and/or social management objectives. Harvest strategies will include limit reference points at which clear conditions will be in place to review or change management arrangements in a fishery if necessary. In conjunction with fishery working groups and the expert advisory panel, DAF Queensland will develop harvest strategies for all major fisheries by the end of 2020, with a priority to develop trawl, crab and inshore fisheries by the end of 2018. A copy of *Queensland's Harvest Strategy Policy* is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

## Gulf of Carpentaria Developmental Fin Fish Trawl Fishery

The Gulf of Carpentaria Developmental Fin Fish Trawl Fishery (DFFTF) is a limited-entry, quota-managed, semi-demersal trawl fishery that has operated under developmental permit administered by the Queensland Fisheries Joint Authority (QFJA) since June 1998. The DFFTF operators predominantly target red snappers in Queensland waters of the Gulf of Carpentaria.

### Management

The Queensland Fisheries Joint Authority (QFJA), through the *Fisheries Act 1994* and *Fisheries Regulation 2008* manages all targeted fishing for northern demersal and pelagic fin fish in waters adjacent to Queensland in the Gulf of Carpentaria. Access to the DFFTF is restricted through the issue of developmental fishery permits. This is a limited entry fishery with three permits issued for the period August 2014 to July 2016.

### Management changes in 2018

There were no management changes to the GOCDFFTF in 2018.

In February 2017, the Department issued three developmental fishing permits (the previous permits had lapsed). Since 2017, there has been no effort in the DFFTF. The new permits expire on 30 June 2020.

### Research & monitoring

Latest stock assessment report can be found here:

<https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting/fish-stock-status-reports>

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
<b>Snapper–crimson</b> ( <i>Lutjanus erythropterus</i> )	Northern Australian	Sustainable	Not Assessed	Sustainable
<b>Snapper–saddletail</b> ( <i>Lutjanus malabaricus</i> )	Northern Australian	Sustainable	Not Assessed	Sustainable
<b>Snapper–golden</b> ( <i>Lutjanus johnii</i> )	Gulf of Carpentaria	Sustainable	Not Assessed	Sustainable
<b>Snapper–goldband</b> ( <i>Pristipomoides multidens</i> )	Northern Australian	Sustainable	Not Assessed	Cross Jurisdictional stock
<b>Red Emperor</b> ( <i>Lutjanus sebae</i> )	Gulf of Carpentaria	Undefined	Not Assessed	Undefined
<b>Spangled Emperor</b> ( <i>Lethrinus nebulosus</i> )	Gulf of Carpentaria	Not Assessed	Not Assessed	Undefined
<b>Mangrove Jack</b> ( <i>Lutjanus argentimaculatus</i> )	Gulf of Carpentaria	Overfished *	Transitional-Recovering ↑	Recovering

\*non-SAFS species

### Progress in implementing conditions and recommendations

The Gulf of Carpentaria DFFTF was reassessed in 2016 and declared an approved wildlife trade operation on 25 November 2016 until 22 November 2019. Progress on the conditions and recommendations that were attached to the approval are below.

## Conditions on the Part 13A approved wildlife trade operation declaration for the Gulf of Carpentaria Developmental Fin Fish Trawl Fishery

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1. Operation of the fishery will be carried out in accordance with the management regime under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

### **Progress: Ongoing**

Operation of the fishery was carried out in accordance with the management arrangements in force under the Queensland *Fisheries Act 1994* and the Queensland Regulations 2008.

2. The Queensland Department of Agriculture and Fisheries to inform the Department of any intended material changes to the Queensland Gulf of Carpentaria Developmental Fin Fish Trawl Fishery management arrangements that may affect the assessment against which Environment Protection and Biodiversity Conservation Act 1999 decisions are made.

### **Progress: Ongoing**

There have been no changes to management arrangements in the Gulf of Carpentaria Developmental Fin Fish Trawl Fishery (DFFTF) in 2018.

In February 2017, the Department issued three developmental fishing permits (the previous permits had lapsed). The new permits expire on 30 June 2020. The new permits introduced a range of key management changes, compared to the previous permits:

- The quota categories have changed to create five new single-species quotas for crimson snapper, saddletail snapper, mangrove jack, golden snapper and red emperor based on maximum sustainable yield (MSY) estimates
- There is an 'other species' group quota, based on historical catch ratios
- A number of species were made no-take to satisfy the requirements of the Offshore Constitutional Settlement, where previously some were allowed an incidental catch:
- Barramundi, sharks, tuna and tuna-like fish, pomfrets, billfish, black jewfish, queenfish, king salmon, blue salmon, grey mackerel, Spanish mackerel and squid
- Quota species are now 'zero discard'
- New requirement to prior report using automated interactive voice reporting (AIVR) prior to landing
- New requirement for independent observation on certain trips and if gear trials are being conducted
- New requirement to use a turtle excluder device at all times
- New requirement to use a bycatch reduction device to achieve less than 10% of catch below 35 cm

3. The Queensland Department of Agriculture and Fisheries to produce and present reports to the Department annually as per Appendix B of the 'Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition'.

### **Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. The Queensland Department of Agriculture and Fisheries to work with industry to develop and implement a statistically robust validation program that will collect information on target, byproduct and bycatch species.

### **Progress: Ongoing**

Queensland DAF utilise a number of methods to monitor and validate information on target, byproduct and bycatch species. As part of the fisheries reform, updated logbooks were released in July 2017 with higher detailed recording methods for target, byproduct, bycatch and SOCI species. Queensland DAF continues to collect biological information on a range of key species through the Monitoring Program. The program collects biological data from fish taken by recreational and commercial fishers, as well as from fishery independent surveys. Data from the monitoring

provides inputs to stock assessment models, informs annual stock status assessments and is used in developing management strategies for all Queensland's fisheries resources.

The Strategy commits to improving monitoring and research in order to ensure that accurate, timely data are available for fisheries management. A Monitoring and Research Plan has been published to identify key data needs and prioritise investment in monitoring and research. The monitoring and research plan is available at <https://publications.qld.gov.au/dataset/queensland-sustainable-fisheries-strategy/resource/fc7da976-661c-43ba-aaaa-9df8c2cb39d3>. A Data Validation Plan has also been published to outline measures being implemented to improve data validation, collection and storage. The data validation plan is available at

<https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy> .

The Strategy includes a commitment to require vessel tracking across all commercial and charter boats by 2020. Vessel tracking will commence on all BSCF vessels from 1 January 2019. Further information about vessel tracking is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy> .

Under the Advance Queensland Small Business Innovation Research (SBIR) program, Queensland DAF are currently funding the development of systems designed to replace slow and costly manual logbooks with automated real-time monitoring. Systems may include the commercial fishing app or an Elog to record catch data in, or near, real time. As a result, Queensland DAF will receive more accurate information in real time, enhancing the confidence, timeliness and quality of data. More information on the Small Business Innovation Challenge project and partnership with Advance Queensland is available in the recent media statement:

<http://statements.qld.gov.au/Statement/2018/6/6/innovative-companies-to-develop-automated-fisheries-monitoring>

## Gulf of Carpentaria Inshore Fin Fish Fishery

The Gulf of Carpentaria Inshore Fin Fish Fishery (GOCIFFF) is a multi-species fishery and includes commercial, recreational (including charter) and Indigenous fishing. The commercial fishery allows use of mesh nets to target shark, grey mackerel, barramundi, blue and king threadfins, barred javelin fish, jewfish, queenfish, garfish and mullet. Other fish species may also be taken as by-product. The fishery extends within tidal waters from the shoreline to the Australian Fishing Zone limit. A temporal closure, size and in possession limits apply in the GOCIFFF. Spatially-based gear restrictions also apply in the commercial fishery<sup>7</sup>.

### Management

Under the Offshore Constitutional Settlement Agreement, the Queensland Fisheries Joint Authority (QFJA), through the *Fisheries Act 1994* and Fisheries Regulation 2008 manages fishing for northern demersal and pelagic fin fish (including shark and grey mackerel) in waters adjacent to Queensland in the Gulf of Carpentaria. Fishing for exempt species such as Barramundi, King Threadfin and Javelin are managed directly by the state of Queensland.

### Management changes in 2018

There were no major management changes in 2018 other than hammerhead sharks. Amendments to the management arrangements of hammerhead sharks took effect from 1 January 2018 see <https://www.daf.qld.gov.au/news-media/media-centre/fisheries/news/new-rules-commence-for-hammerhead-sharks>

### Research & monitoring

A quantitative assessment of the Queensland Gulf of Carpentaria and east coast shark stocks was completed in 2015 and the report can be found at: <https://www.daf.qld.gov.au/our-organisation/research/eresearch-archive>

A quantitative assessment of Queensland Gulf of Carpentaria and east coast barramundi was completed in 2017 and the report can be found at <https://www.daf.qld.gov.au/our-organisation/research/eresearch-archive>

Fishery-dependent biological monitoring is carried out to collect length and age data for barramundi.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
<b>Mackerel–grey</b> ( <i>Scomberomorus semifasciatus</i> )	Gulf of Carpentaria	Sustainable	Not Assessed	Sustainable
<b>Mackerel–school</b> ( <i>Scomberomorus queenslandicus</i> )	Northern Australian	Not Assessed	Not Assessed	Undefined
<b>Barramundi</b> ( <i>Lates calcarifer</i> )	Northern GOC	Sustainable	Not Assessed	Sustainable
	Southern GOC	Transitional-depleting ↓	Transitional-depleting ↓	Depleting
<b>Black Jewfish</b> ( <i>Protonibea diacanthus</i> )	Gulf of Carpentaria	Undefined	Not Assessed	Undefined
<b>Blacktip Shark</b> ( <i>Carcharhinus tilstoni</i> , <i>C. limbatus</i> , <i>C. sorrah</i> )	Gulf of Carpentaria	Undefined	Not Assessed	Undefined
<b>Cobia</b> ( <i>Rachycentron canadum</i> )	Gulf of Carpentaria	Not assessed	Sustainable	Not Assessed

<sup>7</sup> <https://www.legislation.qld.gov.au/LEGISLTN/SLS/2011/11SL236.pdf>

<b>Threadfin-king</b> ( <i>Polydactylus macrochir</i> )	Gulf of Carpentaria	Transitional-depleting ↓	Transitional-depleting ↓	Depleting
<b>Threadfin-blue</b> ( <i>Polydactylus macrochir</i> )	Gulf of Carpentaria	Not assessed	Sustainable	Sustainable
<b>Javelin</b> ( <i>Pomadasys</i> spp.)	Gulf of Carpentaria	Not assessed	Undefined	Not Assessed
<b>Queenfish</b> ( <i>Scomberoides</i> spp.)	Gulf of Carpentaria	Not assessed	Undefined	Not Assessed
<b>Mangrove Jack</b> ( <i>Lutjanus argentimaculatus</i> )	Gulf of Carpentaria	Overfished *	Transitional-recovering ↑	Recovering
<b>Emperor-Spangled</b> ( <i>Lethrinus nebulosus</i> )	Gulf of Carpentaria	Not assessed	Negligible	Not Assessed
<b>Tuskfish</b> ( <i>Choerodon</i> spp.)	Gulf of Carpentaria	Not assessed	Negligible	Not Assessed
<b>Dart - other</b> ( <i>Trachinotus</i> spp.)	Gulf of Carpentaria	Not assessed	Negligible	Not Assessed

\*non-SAFS species

### Impacts of the fishery on the ecosystem in which it operates

Under the Sustainable Fishing Strategy an Ecological Risk Assessment (ERA) is to be completed for the GOCIFFF. This will investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem.

### Progress in implementing conditions and recommendations

The GOCIFFF was recently reassessed for a Wild Life Trade Operation (WTO) in September 2018. A temporary extension was granted until 14 December 2018. Given the close proximity of reassessment and the temporary extension granted, the update against conditions and recommendations provided below is the same as provided in the most recent WTO reassessment submitted in September 2018.

#### [Conditions on the Part 13A approved wildlife trade operation declaration for the Queensland Gulf of Carpentaria Inshore Fin Fish Fishery,](#)

1. Operation of the fishery will be carried out in accordance with the management regime for the Gulf of Carpentaria Inshore Fin Fish Fishery in force under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

#### **Progress: Ongoing**

Operations of the fishery were carried out in accordance with the management arrangements in force under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

2. The Queensland Department of Agriculture, Fisheries and Forestry (DAF) to inform the DOEE of any intended amendments to the management arrangements that may affect the assessment of the fishery against the criteria on which *Environment Protection and Biodiversity Conservation Act 1999* decisions are based.

#### **Progress: Ongoing**

There have been no changes to management arrangements in the Gulf of Carpentaria Inshore Fin Fish Fishery (GOCIFFF) in 2018.

Amendments to the management arrangements of hammerhead sharks took effect from 1 January 2018. These changes include:



1. A TACC of 150 tonnes split across the Gulf of Carpentaria (50 tonnes), GBR (78 tonnes) and Southern East Coast (22 tonnes). A trigger point at 75% TACC was set at which time; a trip limit of 10 hammerhead sharks for net fishers and 4 for line fishers applies; and all commercial fishers will be required to land their catch of hammerheads in whole form.
2. Improved reporting for commercial fishers will also be required, including; Data validation measures such as prior and upload reporting through the Automated Integrated Voice Response system; and reporting of discards and species-specific catch information in logbooks.

The DoEE were consulted prior to implementing these changes.

3. DAF to produce and present reports to the DOEE annually as per Appendix B to the *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.

**Progress: Ongoing**

Queensland DAF continues to produce and present reports to the DoEE.

4. **DAF to:**

- a) taking into account the outcomes of recent research and in conjunction with the DOEE, evaluate the effectiveness of the current management measures and operation of the Gulf of Carpentaria Inshore Fin Fish Fishery in minimising interactions with and mortality of spartooth sharks, to ensure the survival and recovery of important populations of the species. This may include consideration of, for example, habitats fished, specifications of the gear used, the timing of fishing operations (seasonal, monthly, daily, tidal), etc.  
(Note: This evaluation may be undertaken as part of the ecological risk assessment update referred to in Recommendation 1.)
- b) encourage further relevant research, for example, as indicated by the Australian Government *Multispecies Issues Paper for Sawfish and River Sharks* and any recovery plan for the spartooth shark, to assist in determining if Gulf of Carpentaria Inshore Fin Fish Fishery operations are affecting the survival or recovery of the spartooth shark.

**Progress: Ongoing**

DAF is currently conducting a revision of the GOCIFFF 2010 Ecological Risk Assessment (ERA); scheduled completion by June 2017.

An evaluation of the effectiveness of current management and GOCIFFF operations in minimising interactions with, and mortality, of spartooth sharks, will form part of the assessment and go some way to identifying-related sources of risk and their mitigation as described in the objectives of the Australian Government Sawfish and River Sharks Recovery Plan, 2015.

Queensland DAF has assessed the merits of a collaborative project proposal by SCIRO, the University of Qld and University of New England to capture, tag and monitor movement, diet and population size of spartooth sharks inhabiting the Port Musgrave catchment (including freshwater and estuarine habitats of the Wenlock and Ducie Rivers) in north western Cape York Peninsula. Since November 2012, DAF has provided legislative approval for this research.

Results will be important for population structure analysis as have implications for contemporaneous research estimating size of, and trends in, the Wenlock spartooth shark population—a specific criteria by which success of the *Australian Government Sawfish and River Shark Recovery Plan* will be determined.

This research is pivotal to identifying critical habitat upon which appropriate management can be based. When complete, results will inform to what extent GOCIFFF operations may be affecting the survival or recovery of the

spartooth shark. In the interim the ERA is assessing characteristics of net, line and crab fishing and associated risks to the Wenlock River spartooth shark population

### Recommendations to the Queensland Department of Agriculture, Fisheries and Forestry on the ecologically sustainable management of the Queensland Gulf of Carpentaria Inshore Fin Fish Fishery

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1. DAF to update the ecological risk assessment for the Gulf of Carpentaria Inshore Fin Fish Fishery in conjunction with relevant stakeholders, including the DOEE , and make public the results of the risk assessment.

**Progress: Ongoing**

Queensland DAF is currently conducting a revision of the GOCIFFF 2010 ERA; scheduled completion by June 2017.

2. DAF to continue to encourage relevant research on shark species at risk from fishing in the Gulf of Carpentaria Inshore Fin Fish Fishery through consultation at appropriate intra- and inter-state forums and apply relevant research outcomes to the fishery as appropriate.

**Progress: Ongoing**

Inter-jurisdictional consultation on the conservation and management of sharks takes place annually through the auspices of the Australian Government's National Plan of Action for the Conservation and Management of Sharks 2012 (Shark Plan 2). Queensland DAF and DoEE are represented on the Shark Plan 2 shark representative group (SRG) which meets to review progress on specific priority issues and their corresponding actions. Qld DAF has as its primary focus a number of high priority issues including improvement of stock assessments for target and byproduct shark species. Qld DAF has committed to continued efforts to maintain and improve the standard of stock assessments for target shark species in dedicated shark fisheries within its jurisdiction. The recently completed shark stock assessment of the main species harvested in Queensland GOC and east coast shark fisheries provides good evidence for this.

Further collaboration with shark researches includes the University of Queensland in collaboration with CSIRO Marine Research to study predatory fish species including spartooth shark (*G. glyphis*) and bull shark (*Carcharhinus leucas*) – from known locations of habitation in the northern GOCIFFF. The aim of this three year research program is to track and sample local populations of these species and their prey to determine their feeding ecology, population status, and extant of available habitat use (see responses to Condition 4 and Recommendation 7)

3. The Queensland Department of Agriculture, Fisheries and Forestry to:
  - a) report annually on the management and monitoring of all species listed on Appendix II of CITES which are permitted to be retained in the Gulf of Carpentaria Inshore Fin Fish Fishery
  - b) in consultation with the DOEE and Australia's CITES Scientific Authority, annually evaluate the management arrangements for species listed on Appendix II of CITES which are permitted to be retained in the fishery, to ensure that CITES non detriment findings can continue to be made, and
  - c) continue and encourage further co-operation with relevant jurisdictions to pursue increased knowledge and complementary management of CITES listed species encountered in the fishery across fisheries and across jurisdictions.

**Progress: Ongoing**

Queensland DAF has provided DOEE background information on current management arrangements for hammerhead sharks in the GOCIFFF and through ongoing provision of logbook data and consultation, is assisting the Threatened Species Scientific Committee's (TSSC) assessments as required.

Queensland DAF is working in consultation with DOEE to ensure that the CITES NDF for hammerhead shark species taken in the GOCIFF continues and is assisting the TSSC with Ongoing assessments.

DAF has liaised closely with stakeholders and jurisdictions regarding the TSSC assessments for hammerhead sharks. Recently DAF facilitated a workshop in Townsville, convened by GBRMPA and attended by Northern Territory Fisheries, DoEE and members of the scientific community, where management options for hammerhead sharks were discussed with fishing industry advisers. Most recently DAF, NT Fisheries, GBRMPA, DoEE and the TSSC met to review management options for hammerhead sharks in Australian fisheries.

DAF also takes a significant role in discussions with other jurisdictions working through the National Plan of Action for Sharks.

4. Taking into account all available information and in collaboration with other relevant jurisdictions, the Queensland Department of Agriculture, Fisheries and Forestry to encourage research into alternate best practice compliance measures to deter illegal finning of sharks in the Gulf of Carpentaria Inshore Fin Fish Fishery.

**Progress: Ongoing**

DAF regulates shark finning in the GoCIIFF making it mandatory for shark bodies to be held onboard with their fins and tail. This issue is in the highest priority category for compliance/enforcement in the GoCIIFF8 where compliance is very high. From 2011-16, 270 commercial vessel inspections failed to detect a single finning offence. However, as collaborator on the Shark Plan 2 SRG, DAF is aware of multi-jurisdictional efforts to implement anti-finning measures and assess their effectiveness.<sup>9</sup>

Recent NSW research into management implications of selectively targeting smaller sharks to increase relative fin to body harvest weight, decrease discard wastage and deliver more sustainable outcomes in terms of reducing fishing mortality on larger sharks (Pleizier et al., 2015).<sup>10</sup> Discussions with other jurisdictions on illegal finning deterrents in Australian shark fisheries will continue through this forum.

5. By 31 December 2015, the Queensland Department of Agriculture, Fisheries and Forestry to analyse and report to the DOEE the results of the past Fisheries Observer Program in the N3 (inshore) sector of the Gulf of Carpentaria Inshore Fin Fish Fishery for interactions with species protected under the Environment Protection and Biodiversity Conservation Act 1999.

**Progress: Complete**

A report on GoCIIFF N3 endorsed fishing licence interactions with EPBC Act protected species as recorded by Qld Government fishery observers from 2008-09, was completed and forwarded to DoEE in December 2015.

6. By 30 November 2016, taking into account the outcomes of relevant research, the Queensland Department of Agriculture, Fisheries and Forestry to identify areas where fishing effort in the Gulf of Carpentaria Inshore Fin Fish Fishery overlaps with known and likely important habitats of inshore dolphin and sawfish species and seek to identify locations, areas or regions with higher or lower risk of interactions and/or mortalities occurring.

**Progress: Ongoing**

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<sup>8</sup> exert from the State Fisheries Compliance Plan

<sup>9</sup> Shark Plan 2 Issue 3, Action 7

<sup>10</sup> Pleizier, N, Gutowsky, L, Peddemors, V M, Cooke, SJ, Butcher, PA, 2015, Variation in whole-, landed- and trimmed-carcass and fin-weight ratios for various sharks captured on demersal set-lines off eastern Australia, *Fisheries Research* 167, 2015, 190–198.

As part of the current GoCIFFF ERA review, DAF is consulting the results of research studies into the habitat preferences of sawfish species as cited in Australian Government Multispecies Issues Paper for Sawfish and River Sharks (2015) and inshore dolphin.

In addition, DAF reports SOCI logbook data to DoEE annually including, if it occurs, reported catches of dolphin and sawfish species. Observer data from the inshore (N3) net fishery (see Recommendation 5) and the offshore (N9) net fishery spanning the period 2008-09 and 2000-06 respectively, is providing a frame of reference against SOCI logbook data and will be used in the current review of the GoCIFFF ERA.

7. Queensland DAF to encourage relevant research into sawfish and inshore dolphin species found in the Gulf of Carpentaria Inshore Fin Fish Fishery to ensure that fishing operations do not affect the survival or recovery of sawfish species protected under the Environment Protection and Biodiversity Conservation Act 1999 or the conservation status of inshore dolphin species.

#### **Progress: Ongoing**

Under the same multi-species research permit as mentioned against Condition 4, freshwater sawfish (*Pristis pristis*) are being tagged to monitor their movement and habitat use in the Wenlock River. Findings from this research will complement those from other sawfish research as cited in the Australian Government Multispecies Issues Paper for Sawfish and River Sharks (2015) and Australian Government Sawfish and River Sharks Recovery Plan (2015). DAF is monitoring the outcomes of the current research into freshwater sawfish movement and population status in the northern GoCIFFF area. This is part of the University and Queensland and CSIRO collaborative predatory fish research initiated in May 2015, with legislative approval and outcome monitoring activities provided by DAF until its scheduled completion in 2018.

DAF continues to encourage relevant research into sawfish and inshore dolphin species found in the GoCIFFF. Queensland's Research Advisory Committee (RAC) has identified "Managing impacts on the ecosystem, including non-target species" as a key driver in the draft Research, Development and Extension Plan. A current priority research area identified by the Queensland RAC is informing fisheries management of information gaps; determining the risks of these gaps and how they can be filled. Applications received by FRDC under a call for expressions of interest will be assessed by the Queensland RAC.

## Gulf of Carpentaria Line Fishery

The Gulf of Carpentaria Line Fishery (GOCLF) is a multi-species fishery which harvests a range of pelagic (open water) and demersal (bottom-dwelling) fish. Spanish mackerel accounts for the vast majority of the fishery's catch. Other species taken include trevally and small mackerels that are caught using surface trolling methods, and demersal tropical snappers, cods and emperors that are primarily caught on coral and rocky reefs between 1–30 m deep using hand lines. The fishery operates under an L4 fishery symbol, with fishing grounds including all tidal waters in the Queensland Gulf of Carpentaria from Slade Point near the tip of Cape York Peninsula to the Queensland–Northern Territory border.

### Management

The Queensland Fisheries Joint Authority (QFJA), through the *Fisheries Act 1994* and *Fisheries Regulation 2008* manages all targeted fishing for northern demersal and pelagic fin fish in waters adjacent to Queensland in the Gulf of Carpentaria.

### Management changes in 2018

There were no management changes in 2018.

### Research & monitoring

Fishery-dependent biological monitoring is carried out to collect length and age data for line-caught Spanish mackerel. <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/monitoring-reporting/commercial-fisheries>

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
Mackerel–Spanish ( <i>Scomberomorus commerson</i> )	Gulf of Carpentaria	Sustainable	Not Assessed	Sustainable

### Impacts of the fishery on the ecosystem in which it operates

The last Ecological Risk Assessment (ERA) for this fishery was conducted in 2004

<https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting/ecological-risk-assessment>

An updated ERA will be completed in line with Queensland's *Sustainable Fishing Strategy (2017–2027)*.

### Progress in implementing conditions and recommendations

The GOCLF was reassessed in November 2017 and declared an approved wildlife trade operation on 23 November 2017. Progress on the conditions and recommendations that were attached to the approval are listed below.

#### Conditions on the Part 13A approved wildlife trade operation declaration for the Gulf of Carpentaria Line Fishery, 23<sup>rd</sup> November 2017.

1. Operation of the fishery will be carried out in accordance with the management regime under the Queensland *Fisheries Act 1994* and the *Fisheries Regulation 2008*.

#### Progress: Ongoing

The GOCLF was managed and continues to manage in accordance with provisions outlined in the Queensland *Fisheries Act 1994* and the Queensland *Fisheries Regulations 2008*.

2. The Queensland Department of Agriculture and Fisheries to inform the Department of any intended material changes to the Queensland Gulf of Carpentaria Line Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

**Progress: Ongoing**

There have been no changes to the management arrangements in the GOCLF in 2018.

3. The Queensland Department of Agriculture and Fisheries 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*.

**Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. The Queensland Department of Agriculture and Fisheries to provide appropriate identification tools and education to assist fishers in providing accurate identification and recording of sharks at the species level.

**Progress: Ongoing**

Queensland DAF recently updated commercial log books with greater detail to assist in species identification and improved reporting of shark catches.

## Marine Aquarium Fish Fishery

The Queensland Marine Aquarium Fish Fishery (MAFF) targets the collection of marine aquarium fish and invertebrates from the east coast of Queensland that are marketed domestically and internationally. Specimens can also be collected recreationally for display in home aquaria.

### Management

The MAFF is managed under the *Fisheries Act 1994*, the Fisheries Regulation 2008.

### Management changes in 2018

The Fisheries (Coral Reef Fin Fish) Management Plan 2003 has been incorporated into the Fisheries Regulations 2008. No management changes in 2018.

### Status of target stocks

Target species in the fishery are subject to regular ecological risk assessments which determine the level of risk that the actions of the fishery pose on their sustainability. The sustainability of two fish species were determined to be at a medium risk from the fishery, and a further seven species were at low risk. All other species (500+) are at a negligible risk. No further management action is required to address this level of risk other than maintaining the current management regime.

### Impacts of the fishery on the ecosystem in which it operates

An ecological risk assessment was conducted for the fishery in 2007. No unacceptable risks to the ecosystem were identified. The fishing industry has linked its Stewardship Action Plan to ERA outputs to ensure collection practices do not exacerbate risk levels further (follow this [link](#) to the Stewardship Action Plan). An updated ERA will be completed in line with Queensland's *Sustainable Fishing Strategy (2017–2027)*.

### Progress in implementing conditions and recommendations

The MAFF was recently reassessed on 26<sup>th</sup> march 2018 and approved a wildlife trade operation until 26 March 2021. Progress on the conditions and recommendations that were attached to the approval are listed below.

#### Conditions on the Part 13A approved wildlife trade operation declaration for the Queensland Marine Aquarium Fish Fishery

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1. Operation of the Queensland Marine Aquarium Fish Fishery will be carried out in accordance with the Queensland *Fisheries Act 1994*, the Queensland Fisheries Regulation 2008.

#### Progress: Ongoing

The MAFF was managed and continues to manage in accordance with provisions outlined in the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulations 2008.

2. The Queensland Department of Agriculture and Fisheries to inform the DoEE of any intended material changes to the Queensland Marine Aquarium Fish Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

#### Progress: Ongoing

There have been no changes to management arrangements in the Marine Aquarium Fish Fishery in 2018.

3. The Queensland Department of Agriculture and Fisheries to produce and present reports to the DOEE annually as per Appendix B of the Guidelines for the *Ecologically Sustainable Management of Fisheries - 2nd Edition*.

#### Progress: Ongoing

Queensland DAF continues to produce and present reports annually to the DoEE.



## Mud Crab Fishery

The Mud Crab Fishery (MCF) covers the majority of Queensland tidal waters, except closed waters. Mud crabs (*Scylla* spp.) are an important species to both the commercial and recreational sectors and are distributed across Northern Australia. The commercial and recreational sectors use dillies (with the exception of inverted dillies) and crab pots (with rigid or collapsible frames).

### Management

The MCF is managed under the *Fisheries Act 1994* and *Fisheries Regulation 2008*.

### Management changes in 2018

There were no management changes in 2018.

### Status of target stocks

Species	SAFS Stock name	2015 QLD status (Non-SAFS year)	2016 SAFS status	2017 QLD status (Non-SAFS year)
Crab–mud ( <i>Scylla</i> spp.)	East Coast	Not assessed	Sustainable	Sustainable
	Northern Australian	Not assessed	Sustainable	Sustainable

### Progress in implementing conditions and recommendations

The MCF was recently reassessed for a Wild Life Trade Operation (WTO) in October 2018. A temporary extension was granted until 31 May 2019. Given the close proximity of reassessment and temporary extension granted, the update against conditions and recommendations provided below is the same as provided in the most recent reassessment (October 2018).

#### Conditions on the approved wildlife trade operation declaration for the Queensland Mud Crab Fishery

1. Operation of the Queensland Mud Crab Fishery (QMCF) will be carried out in accordance with management regime in force under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

#### Progress: Ongoing

Operation of the fishery was carried out in accordance with the management arrangements in force under the Queensland Fisheries Act 1994 and the Queensland Fisheries Regulation 2008.

2. The Queensland's Department of Agriculture and Fisheries (Queensland DAF) to inform the Department of the Environment of any intended material changes to the QMCF management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

#### Progress: Ongoing

There have been no changes to management arrangements in the Mud Crab Fishery (MCF) since the most recent reassessment.

3. Queensland DAF to produce and present reports to the Department of the Environment annually as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.

#### Progress: Ongoing

Queensland DAF continues to produce and present reports annually to the DoEE.

4. Queensland DAF, in collaboration with crab fishery stakeholders, to investigate and implement management measures to monitor and manage the distribution of C1 symbols between the respective crab fisheries (Gulf of Carpentaria and Queensland East Coast MCF, and the BSCF) to ensure there is minimal risk to the target stock, bycatch, EPBC Act listed threatened, endangered and protected (TEP) species or the broader ecosystem from unsustainable fishing pressure.

### **Progress: Ongoing**

#### Sustainable Fisheries Strategy

Queensland's Sustainable Fisheries Strategy 2017-2027 (the Strategy) outlines the government's reform agenda for fisheries management over the next ten years. The strategy identifies 33 actions across ten major areas of reform. Key areas of reform include: Improved monitoring and research, setting sustainable catch limits through harvest strategies, improved stakeholder engagement, undertaking Ecological Risk Assessment's (ERA's) and managing high risks in the relevant harvest strategy, reviewing fishing rules and access, implementing more responsive decision-making and strengthening compliance powers and resourcing. Details of the Strategy are available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable-fisheries-strategy>.

#### Crab Fishery Working Group

A Crab Fishery Working Group (CFWG) was established in 2017 to provide advice to DAF in relation to the management of crab fisheries including mud crabs. The working group includes representatives from the commercial and recreational fishing sectors, the Great Barrier Reef Marine Park Authority (GBRMPA) and Queensland DAF. The working group has met four times to discuss the management reform options and harvest strategy development for the MCF. Key discussion points from the meetings are outlined in meeting communiques available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy/fishery-working-groups/crab-working-group>

#### Expert Panel

A key action of the Strategy is to improve stakeholder engagement and support evidence-based fisheries management through a sustainable fisheries expert panel.

The Sustainable Fisheries Expert Panel was established and members appointed by the Government in July 2017. Members of the Expert Panel, the role of the panel and communiques from Expert Panel meetings are available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

#### Harvest Strategy Guidelines

The Sustainable Fisheries Strategy commits to managing fisheries under a harvest strategy framework. Harvest Strategy guidelines have been developed and can be viewed at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

#### Management Reform Proposals

A discussion paper on the management reform options for the crab fishery was released in March 2018. Submission for public comment closed 20 May 2018. The discussion paper includes proposed changes for the MCF. More information is available at <https://publications.qld.gov.au/dataset/sfs-discussion-papers-fisheries-reform/resource/dab96625-68d7-4149-bc1a-33104a005342>.

The proposed reforms for the MCF include:

- Division of the fishery into two management units based on biological mud crab stocks.
  1. Mud crab – Gulf of Carpentaria
  2. Mud crab – East coast

Genetic evidence suggests that there are at least two biological stocks of mud crabs: one to the west of Torres Strait incorporating the Gulf of Carpentaria and north coast, and one to the southeast of Torres Strait. There is thought to be two biological stocks for mud crabs on the east coast divided at Cooktown (Gopurenko and Hughes 2002), but given the little catch and effort in the far north, the CFWG considered this stock could be managed effectively and efficiently as part of the east coast.

- Introduction of an Individual Transferable Quota (ITQ's) system for MCF to set a total allowable commercial catch.
- Introduce traceability tags for commercially caught mud crab to verify ITQ and reduce black marketing.
- Adjustment of recreational possession limits for mud crabs and the introduction of a boat limit.
- Review mud crab fishing apparatus to improve interactions between crab apparatus and bycatch and protection species, e.g. escape vents on commercial and recreational apparatus.

### Ecological Risk Assessment (ERA)

The Strategy commits to completing ERA's to investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem. The ERA program has commenced and is being delivered in accordance with new ERA Guidelines (see <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable-fisheries-strategy/ecological-risk-assessment-guidelines>). Queensland DAF will discuss the draft ERA reports with fishery working groups to ensure appropriate information has been used to assess risk levels. Reports will also be reviewed by the Expert Panel. Risks identified in the ERA process will be discussed with fishery working group to determine whether they can be incorporated into harvest strategies, minimised by other management interventions or require ongoing research to clarify the risks.

### Recommendations to the Queensland Department of Agriculture and Fisheries on the ecologically sustainable management of the Queensland Mud Crab Fishery

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1. Queensland DAF to work with relevant agencies and crab fishery stakeholders to improve data confidence and accountability of stock estimates for target and discard species. This should include:
  - a) robust catch-and-effort data should be recorded for the commercial sector and estimated from surveys for the recreational and Indigenous fishing sectors;
  - b) robust estimates of bycatch and discard species interaction and mortality should be determined for all sectors;
  - c) measures to effectively monitor and respond to triggered performance indicators;
  - d) appropriate triggers for the commercial sector that account for the cumulative impact of the recreational sector.

### **Progress: Ongoing**

#### Sustainable Fisheries Strategy

As part of the Strategy, Queensland DAF has commenced a process of management reform and harvest strategy development for the MCF. The harvest strategy will be used to manage the MCF into the future and includes pre-determined management actions to achieve agreed ecological, economic and/or social management objectives. The harvest strategy will include limit reference points at which clear conditions will be in place to review or change management arrangements in a fishery if necessary. The CFWG and Expert Panel will provide advice on the proposed management reform processes and the harvest strategy for the MCF. The Strategy outlines the timeframe for developing harvest strategies for all major fisheries by the end of 2020, with a priority to develop the MCF harvest strategy by the end of 2018. A copy of Queensland's Harvest Strategy Policy is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable/sustainable-fisheries-strategy>

The Strategy also includes a commitment to require vessel tracking across all commercial and charter boats by 2020. Vessel tracking will commence on all MCF vessels from 1 January 2019. Further information about vessel tracking is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable-fisheries-strategy/vessel-tracking>.

Under the Advance Queensland Small Business Innovation Research (SBIR) program, Queensland DAF are currently funding the development of systems designed to replace slow and costly manual logbooks with automated real-time monitoring. Systems may include the commercial fishing app or an Elog to record catch data in, or near, real time. As a result, Queensland DAF will receive more accurate information in real time, enhancing the confidence,

timeliness and quality of data. More information on the Small Business Innovation Challenge project and partnership with Advance Queensland is available in the recent media statement:

<http://statements.qld.gov.au/Statement/2018/6/6/innovative-companies-to-develop-automated-fisheries-monitoring>.

Queensland DAF continues to complete recreational fishing surveys to provide reliable catch and effort estimates for mud crabs caught by Queensland's recreational fishing sector. Currently there has been three surveys in 2000 (national survey), 2010 and 2013-14. An updated survey is due for completion in 2019. More information about the most recent survey (2013-14) is available here: <https://www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/monitoring-reporting/recreational-fishing>

Queensland DAF continues to monitor the recreational catch of mud crabs through Boat Ramp Surveys (BRS). BRS have recently been expanded to cover 45 boat ramps throughout Queensland. The BRS complement the state-wide recreational phone surveys to provide regional catch and effort data for recreationally caught mud crabs, to allow the monitoring of indices of effort and catch rate through time.

2. Queensland DAF to work with relevant agencies and crab fishery stakeholders to further assess and actively promote the use of escape vents in the commercial and recreational crab fishing sectors.

**Progress: Ongoing**

Queensland DAF will continue discussion with the CFWG and other stakeholders in relation to the use of bycatch reduction devices, such as escape vents, in the commercial and recreational crab sectors.

### Conditions on the Part 13 accreditation's for the Queensland Mud Crab and Blue Swimmer Crab Fisheries

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1. Queensland DAF, in consultation with crab fishery stakeholders and other government agencies to:
  - a) complete a robust evaluation of operational management measures to examine the risk of TEP species entanglements with crab pots; and
  - b) taking into account the evaluation of management arrangements, implement a suite of management measures to minimise the risk of TEP species entanglement with crab pots. Measures could include spatial and seasonal closures and/or potential gear modifications.

**Progress: Ongoing**

Ecological Risk Assessments

The Strategy commits to completing ERA's to investigate the impact of fishing activities on species (target and non-target) and the broader marine ecosystem. The ERA program has commenced and is being delivered in accordance with new ERA guidelines <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable> Queensland DAF will discuss the draft ERA reports with fishery working groups to ensure appropriate information has been used to assess risk levels. Reports will also be reviewed by the Expert Panel. Risks identified in the ERA process will be discussed with fishery working groups to determine whether they can be incorporated into harvest strategies, minimised by other management interventions or require ongoing research to clarify the risks. Completing an ERA for the MCF will review and investigate the impacts of fishing activities on species (target and non-target) and the broader marine ecosystem. Queensland DAF will continue to work with the CFWG to identify options for mitigating the risk of interactions with TEP species.

2. Queensland DAF to work with crab fishery stakeholders, to:
  - a) investigate and improve monitoring and reporting of protected species interactions by fishers in the commercial sector; and

b) implement a system to independently validate commercial fishery interactions with TEP species.

**Progress: Ongoing**

The Strategy commits to improving monitoring and research in order to ensure that accurate, timely data are available for fisheries management. A Monitoring and Research Plan has been published to identify key data needs and prioritise investment in monitoring and research. The monitoring and research plan is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable> .

A Data Validation Plan has also been published to outline measures being implemented to improve data validation, collection and storage. The data validation plan is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable> .

The Sustainable Fisheries Strategy includes a commitment to require vessel tracking across all commercial and charter boats by 2020. Vessel tracking will commence on all MCF vessels from 1 January 2019. Further information about vessel tracking is available at <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable>

Through the Advance Queensland Small Business Innovation Research (SBIR) program, we are now working with two innovative startups to develop cutting-edge systems which can track fishing activity and location, as well as use cameras, sensors and machine learning to automatically recognise the types and quantities of fish caught and discarded. Currently, most of our monitoring data comes from commercial fishers filling out paper logbooks and calling an automated voice recognition system to report on quota. These approaches are costly and time consuming for government, but also place considerable burden on our fishers. The cutting-edge solutions we're exploring through the SBIR have the potential to almost completely eliminate this burden, while providing us with the accurate, real-time information we need to effectively manage Queensland's fisheries.

For further information see:

- <http://statements.qld.gov.au/Statement/2018/6/6/innovative-companies-to-develop-automated-fisheries-monitoring>
- <https://www.youtube.com/watch?v=Tq7fA2Oodak&feature=youtu.be>
- <https://advance.qld.gov.au/small-business/sbir.aspx>

## River and Inshore Beam Trawl Fishery

The River and Inshore Beam Trawl Fishery (RIBTF) target species include greasyback (bay) prawns, banana prawns and school prawns. River and inshore beam trawling is confined to east coast estuarine and inshore areas where vessels under nine metres in length tow a single beam trawl net. The only exception is Laguna Bay (near Noosa), where a small otter trawl net may be used, but which is included in the T5 (Laguna Bay and all rivers and creeks from Double Island Point to the NSW border) area of the fishery.

### Management

The RIBTF is managed under the *Fisheries Act 1994*, the Fisheries Regulation 2008 and the Queensland Fisheries (East Coast Trawl) Management Plan 2010 and their amendments.

### Management changes in 2018

There were no management changes proposed or introduced in the RIBTF in 2018.

### Research & monitoring

The latest report on quantitative assessment of trawl fishery stocks is mentioned in the East Coast Otter Trawl Fishery section of this report.<sup>11</sup> The RIBTF typically takes negligible quantities of the species assessed, i.e. <0.5% of the tiger prawn catch, and <0.1% of the endeavour prawn and red spot king prawn catch.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
<b>Prawn–banana</b> ( <i>Fenneropenaeus merguensis</i> )	East Coast	Sustainable	Not Assessed	Sustainable
<b>Prawn–school</b> ( <i>Metapenaeus macleayi</i> )	Queensland	Sustainable	Not Assessed	Sustainable

### Impacts of the fishery on the ecosystem in which it operates

A comprehensive Ecological Risk Assessment (ERA) has been conducted in consultation with stakeholders to assess beam trawl impacts throughout the RIBTF. Results have been considered in current stock status assessments and review of legislative instruments that apply to the RIBTF. Legislative amendments for mandatory use of bycatch reduction devices and turtle excluder devices are expected to further reduce capture of sea snake, sea turtle and bycatch species in general. The published ERA is available here [https://www.daf.qld.gov.au/data/assets/pdf\\_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf](https://www.daf.qld.gov.au/data/assets/pdf_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf)

### Progress in Implementing conditions and recommendations

The RIBTF was reassessed in July 2015 and approved a wildlife trade operation until 15 February 2019. Progress on the conditions and recommendations that were attached to the approval are listed below.

#### Conditions on the approved wildlife trade operation declaration for the River and Inshore Beam Trawl Fishery

1. Operation of the Queensland River and Inshore Beam Trawl Fishery will be carried out in accordance with the management regime in force under the Queensland Fisheries Act 1994 and the Queensland Fisheries (East Coast Trawl) Management Plan 2010.

<sup>11</sup> Wang, N, 2015, Application of a weekly delay-difference model to commercial catch and effort data in multi-species fisheries, PhD Thesis, University of Queensland & Queensland Department of Agriculture, and Fisheries, Brisbane.

**Progress: Ongoing**

Operation of the RIBTF was carried out in accordance with the management arrangements in force under the Queensland Fisheries Act 1994, the Queensland Fisheries Regulation 2008 and the Fisheries (East Coast Trawl) Management Plan 2010.

2. The Queensland Department of Agriculture and Fisheries to advise the Department of the Environment of any intended amendments to the River and Inshore Beam Trawl Fishery management arrangements that could affect the criteria on which Environment Protection and Biodiversity Conservation Act 1999 decisions are based.

**Progress: Ongoing**

There have been no changes to management arrangements in the Mud Crab Fishery (MCF) since the most recent reassessment.

3. The Queensland Department of Agriculture and Fisheries to produce and present reports for the River and Inshore Beam Trawl Fishery to the Department of the Environment annually as per Appendix B of the Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition.

**Progress: Ongoing**

Queensland DAF continues to produce and present reports annually to the DoEE.

4. The Queensland Department of Agriculture and Fisheries to finalise and publish, by 1 March 2017, the outcomes of the River and Inshore Beam Trawl Fishery ecological risk assessment.

**Progress: Complete**

QDAF has published the outcomes of the RIBTF ecological risk assessment (ERA) as part of the Ecological Risk Assessment of the Southern Queensland East Coast Otter Trawl Fishery and River and Inshore Beam Trawl Fishery. The assessment included all areas of the RIBTF including both targeted and non-targeted species that interact with or have the potential to interact with the RIBTF during normal fishing operations. A full copy of the report can be found at [https://www.daf.qld.gov.au/data/assets/pdf\\_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf](https://www.daf.qld.gov.au/data/assets/pdf_file/0004/1402672/Sth-QLD-Trawl-ERA-Final.pdf).

5. The Queensland Department of Agriculture and Fisheries to ensure that by 15 February 2019, any unacceptable risks to bycatch (including protected species) that are identified through the ecological risk assessment have been mitigated.

**Progress: Ongoing**

Queensland DAF will review the results of the RIBTF ERA and insure any unacceptable risks to by-product and bycatch species are mitigated. The results of the ERA will be used in the development of a harvest strategy for the RIBTF and other areas of reform under the *Sustainable Fishing Strategy 2017–2027*. For more information on the development of harvest strategies and the sustainable fishing strategy please see <https://www.daf.qld.gov.au/business-priorities/fisheries/sustainable>

## Sea Cucumber Fishery (East Coast)

The Queensland Sea Cucumber Fishery is one of the oldest fisheries in the state, with commercial harvesting beginning in the early 1800s. The fishery has a history of focusing effort on the most commercially valuable species, such as white teatfish, sandfish and, burrowing blackfish. Commercial sea cucumber fishers are permitted to harvest by hand, using free-diving methods or with the aid of hookah apparatus or Self Contained Underwater Breathing Apparatus (SCUBA). Recreational fishers are permitted only to harvest by hand, without the aid of hookah apparatus or SCUBA.

### Management

The management arrangements in this fishery are under the Queensland *Fisheries Act 1994* and the Queensland Fisheries Regulation 2008.

### Management changes in 2018

There were no management changes in 2018.

### Research & monitoring

The Queensland Sea Cucumber Industry Association funded and provided field support for a resurvey of Black Teatfish resources in the northern section of the fishery. The study was specifically designed to meet criteria in the Performance Measurement System (PMS) for re-opening of the Black Teatfish fishery, which was effectively closed (set to 0 t TACC) in 1999 following concerns raised by industry in regards to stock levels. A Scientific Advisory Group concluded that the findings met the requirements of the fishery PMS and considered the results to be scientifically valid. The study indicated that Black Teatfish resources in reefs surveyed in areas open to fishing were above 70% of the biomass of Black Teatfish found within closed reefs. Queensland DAF and the Great Barrier Reef Marine Park Authority are considering the study findings.

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
White Teatfish	East Coast	Not assessed	Sustainable	Sustainable
Burrowing Blackfish	East Coast	Not assessed	Sustainable	Not Assessed

### Progress in implementing conditions and recommendations

The Queensland Sea Cucumber Fishery was recently assessed by DoEE in consideration of a ten year LENS as a low risk fishery. On 25<sup>th</sup> March 2018, Queensland DAF received notification that the Queensland Sea Cucumber Fishery was approved for a ten year LENS which now expires on the 28<sup>th</sup> August 2025.



## Spanner Crab Fishery

The Queensland Spanner Crab Fishery (SCF) is predominantly a commercial fishery that targets *Ranina ranina*. The majority of the catch is exported live to Asia, with a small quantity of crab sold as chilled cooked product to local and interstate markets. The fishery was the first in Queensland to be managed under a quota system. Spanner crab fishing is permitted in all Queensland coastal waters, from the New South Wales (NSW) border to the Northern Territory border however the fishery is concentrated in the area between Yeppoon in central Queensland and the Queensland–NSW border. The commercial fishery is divided spatially into two Managed Areas (A and B).

### Management

The SCF is managed under the *Fisheries Act 1994* and Fisheries Regulation 2008.

### Management changes in 2018

Quota Amendments: 847 t for the 2018-19 Season. Decision rules suggested no change despite historic low commercial and independent catch rates. Industry and science recommended applying decision rule 6 to decrease the TAC below current catch levels (941t) in order to avoid the possibility of a full fishery closure in the near future.

Spanner Crab closure (spawning closure): The original closure (20 November – 20 December) has been amended at the request of industry and informed by best available science. The new seasonal closure of the SCF is 1 November – 15 December. The closure change was implemented in order to provide protection to spawning crabs in early November, and greater access to the Christmas market. The new closure periods apply from November 2018.

### Research & monitoring

The Qld fishery for spanner crabs uses quota setting rules to assess and adjust a total allowable harvest around an agreed target harvest of 1631 t and capped at a maximum of 2000 t. The quota varies based on catch rate indicators from the commercial fishery and a fishery independent survey. The annual fishery independent surveys are carried out in Spanner crab fishing grounds between Gladstone and the Gold Coast, and in collaboration with NSW Fisheries. The latest quota setting report can be found here:

<https://www.daf.qld.gov.au/fisheries/monitoring-our-fisheries/data-reports/sustainability-reporting/stock-assessment-reports>

Latest monitoring reports can be found here:

<https://www.daf.qld.gov.au/fisheries/monitoring-our-fisheries/commercial-fisheries/species-specific-programs/monitoring-reporting>

### Status of target stocks

Species	SAFS Stock name	2016 SAFS status	2017 QLD status (Non-SAFS year)	Proposed 2018 SAFS status
Crab–spanner ( <i>Ranina ranina</i> )	East Coast	Not Assessed	Sustainable	Depleting

### Progress in implementing conditions and recommendations

The SCF was assessed by DOEE in consideration of a ten year LENS as a low risk fishery. On 17 November 2015, Queensland DAF received notification that the SCF was approved for a ten year LENS which now expires on the 28<sup>th</sup> August 2025.