



Protected species management strategy for the east coast inshore fishery

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1 Introduction

Managing the risks and impacts of fishing activities on non-target species, including protected species, is a principle of the *Sustainable Fisheries Strategy 2017-2027*. It is a requirement for all fisheries that interact with species listed under the federal *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to manage these risks to maintain a fisheries Commonwealth Wildlife Trade Operation (WTO) Accreditation.

The East Coast Inshore Fishery (ECIF) is a net and line fishery that extends along the Queensland Coast. Primary target species in the ECIF are barramundi, king threadfin salmon, grey mackerel, sea mullet, whiting, bream and school mackerel. In targeting these species, the fishery is known to incidentally interact with a range of protected species (listed threatened species (i.e. vulnerable, endangered or critically endangered), conservation dependent species, cetaceans, listed migratory species and other listed marine species).

The broader community has been focused on the impacts from fishing on non-target species, particularly on those species that have a vulnerable life history. The fishery's ongoing access and community acceptance depends on the commercial fishing industry's ability to demonstrate that it is accountable and takes all reasonable steps to reduce the risk of interactions with protected species to as low a level as possible.

To inform the Protected Species Management Strategy (PSMS) the following actions are in place:

- Ecological Risk Assessments (ERA) are undertaken every three years
- protected species determined to be at high risk through ERA are prioritised to have specific management arrangements developed to reduce the risk
- monitoring and reporting to inform management, based on agreed performance indicators, triggers and mitigating actions.

The PSMS outlines the mitigation strategies in place to achieve the harvest strategy objective "to minimise and mitigate high ecological risks arising from fishing related activities on protected species".

2 Ecological risk assessment

A foundation of sustainable fisheries management is managing the impact of fishing activities on non-target species and the broader marine ecosystem. An ERA is an analysis of the best available information about fishery impacts on target species, non-target and protected species and the broader ecosystem. Risk profiles developed through an ERA assist in identifying areas where more information is required, and/or areas where additional monitoring can contribute to our understanding of the impacts of fishing activities. They also identify issues that must be further managed under harvest strategies or a complementary PSMS, where appropriate.

A qualitative (Level 1) ERA has been completed and produces a broad risk profile for each fishery. In the ECIF the Level 1 ERA examined fishing-related risks in 16 broader ecological components including target, byproduct, bycatch, protected species, marine habitats and ecosystem processes. Table 1 outlines the risk profile developed under the ECIF Level 1 assessment.

Table 1: Risk profile under ECIF Level 1 ERA

Ecological Component	Level 1 Risk Rating	Progression
Target and Byproduct	High	Level 2 ERA
Bycatch	Intermediate/High	Level 2 ERA
Protected species		
Marine turtles	High	Level 2 ERA
Dugongs	Intermediate/High	Level 2 ERA
Whales	Low/Intermediate	Not progressed further
Dolphins	High	Level 2 ERA
Sea snakes	Low	Not progressed further
Crocodiles	Low	Not progressed further
Protected teleosts	Low	Not progressed further
Batoids	High	Level 2 ERA
Sharks	High	Level 2 ERA
Syngnathids	Negligible	Not progressed further
Seabirds	Low	Not progressed further
Terrestrial mammals	Negligible	Not progressed further
Marine habitats	Low	Not progressed further
Ecosystem processes	Precautionary High	Not progressed due to data deficiencies

Given there are a number of high-risk ratings from the Level 1 assessment, more complex Level 2 assessments are under development for the ECIF. These use more comprehensive data on the life-history constraints of each ecological subcomponent (e.g. species, species groupings, marine habitats) and the fisheries that they interact with. In Queensland, level 2 assessments will consist of semi-quantitative assessments and, if data permits, low-data quantitative risk assessments. The Level 2 assessments for the ECIF (individual ERAs will be developed for large mesh nets (gillnets, ringnets), tunnel nets and ocean beach fishery) are scheduled for 2020 and 2021 and will further inform the PSMS when they are finalised.

The Fisheries Queensland's Ecological Risk Assessment Guideline is published online at www.daf.qld.gov.au/business-priorities/fisheries/monitoring-research/data/sustainability-reporting/ecological-risk-assessment. ERAs for each of Queensland's fisheries are available online at www.daf.qld.gov.au/business-priorities/fisheries/monitoring-compliance/data/sustainability-reporting/ecological-risk-assessment.

3 Wildlife Trade Operation accreditation

In July 2018, the ECIF was reassessed for WTO accreditation under the EPBC Act. Recognising that major reforms were underway as part of the Queensland Government’s Sustainable Fisheries Strategy, that were expected to significantly improve the management of the fishery and address many of the issues identified in the fisheries assessment, the ECIF (formerly known as the East Coast Inshore Fin Fish Fishery or ECIFFF) was granted WTO accreditation for three years, until 10 December 2021. Accreditation is provided by declaring the fishery an approved WTO and amending the list of exempt native specimens under the EPBC Act. The accreditation also outlines a number of additional provisions and conditions against which the fishery is expected to progress.

On 30 September 2020, the existing WTO approval for the ECIF was revoked, primarily due to a number of these conditions for the ECIF not being met within the specified timeframes. This revocation related only to part 13A of the EPBC Act regarding exports from the fishery, and not to the Part 13 approval, relating to interactions with protected species, which is scheduled to expire on 10 December 2021.

A separate WTO application was progressed for the ocean beach seine net fishery operating under K symbols. This was approved on 21 May 2021 and means that fisheries resources that are caught using the K fishery symbol in an original ocean beach area during the ocean beach fishery season (1 April – 31 August) can be exported.

The revocation, accreditation and associated conditions are available at <http://environment.gov.au/marine/fisheries/qld/east-coast-fin-fish>, and those that are relevant to this PSMS are outlined in table 2.

Table 2: ECIF WTO Accreditation conditions relating to this PSMS

<i>Condition 4</i>	<i>By January 2020 the Queensland Department of Agriculture and Fisheries to implement foundational reforms (actions 1.1-1.4) identified in the Queensland Government’s Sustainable Fisheries Strategy 2017–2027 for the ECIFFF and collect accurate and reliable data, sufficient to monitor and assess the fishery’s impact on target and non-target species, including protected species, with a high degree of confidence.</i>
<i>Condition 5</i>	<i>The Queensland Department of Agriculture and Fisheries progress the development and implementation of an independent data collection and validation program including:</i> <i>a. Assess feasibility and complete proof of concept trials for electronic monitoring by December 2019.</i> <i>b. Implement an independent data collection and validation program in ECIFFF from January 2020 (this may include electronic monitoring or alternative interim solutions).</i>
<i>Condition 8</i>	<i>The Queensland Department of Agriculture and Fisheries to:</i> <i>a. Publish a level 1 ecological risk assessment for the Queensland East Coast Inshore Fin Fish Fishery by July 2019.</i> <i>b. Implement strategies to mitigate risks identified in the level 1 ecological risk assessment by December 2019.</i> <i>c. Develop and publish level 2 ERAs according to the Queensland Government ERA guidelines and implement appropriate risk mitigations strategies.</i> <i>All precautionary risk management strategies should be developed and implemented in consultation with relevant experts and stakeholders, and performance should be monitored and reported annually in accordance with Condition 3.</i>

Condition 9	<p><i>The Queensland Department of Agriculture and Fisheries to implement by January 2020 harvest strategies that monitor and manage impacts associated with the East Coast Inshore Fin Fish Fishery on target, byproduct and bycatch (including protected species). The harvest strategy must include decision rules and reference points that trigger management actions to ensure the fishery remains ecologically sustainable.</i></p>
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This PSMS has been developed to minimise risk of protected species interactions in the ECIF and to pursue these WTO conditions. Importantly, it also sets out how management of this fishery will transition towards improving individual fisher accountability and implementing more direct measures to reduce the risk of interactions with protected species. Central to this is improved fishing practices, reporting and monitoring.

4 Principles

The main purpose of *Fisheries Act 1994* (the Act) is to “provide for the use, conservation and enhancement of the community’s fisheries resources and fish habitats in a way that seeks to ... promote ecologically sustainable development.” Effectively, this means that fishing activities should not be detrimental to the survival or conservation status of any species, or the ecosystem more generally, and fishers are required to take all reasonable steps to ensure that protected species are not killed or injured.

The Act also provides for “... balancing the principles [of ecological sustainable development]... having regard to ensuring access to fisheries is allocated in a way that maximises the potential economic, social and cultural benefits to the community.” Effectively, this provides that the management of our fisheries should be proportionate to the risk.

In line with the purposes of the Act, the following principles will underpin management actions under the PSMS:

- reduce interactions and the ecological risk of fishing where possible
- develop management actions that are proportionate to the risk to protected species
- promote best practice and stewardship to minimise the need for excessive regulation
- work with industry to provide opportunities to innovate and improve their practices
- ensure accurate and cost-effective reporting of all interactions
- provide increased transparency about level of interactions.

The overarching principle is for Fisheries Queensland and commercial fishers to work together in a continual improvement process to take all reasonable steps to minimise interactions with protected species. The ECIF Working Group, regional harvest strategy workshops and the ERA process will be an ongoing and integral part of the PSMS.

5 Objectives

The PSMS aims to pursue the ECIF ecological objectives to “ensure the fishery is a low risk to bycatch and protected species”. To pursue this objective, Fisheries Queensland’s ERA process will be the primary tool for informing ecological risk in the fishery, and in turn which protected species to prioritise for management action. For protected species where populations are already low and vulnerable, the aim is to reduce interactions to as close to zero as possible, while allowing sustainable fishing practices.

This PSMS has been developed to be consistent with the principles and aims to minimise protected species interactions with commercial netting apparatus in the ECIF by adopting an individual responsibility approach to create incentives for fishers to innovate and adopt best practices. It also outlines a continual improvement plan to improve reporting, fishing practices and mitigation strategies.

6 Continual improvement

A number of measures are already in place to minimise the impact of fishing on protected species within this fishery. Measures include a series of fishing rules (e.g. attendance rules for commercial net fishing) and Dugong Protection areas along the east coast of Queensland. However, to achieve the objectives of the PSMS further measures are required through a continual improvement process.

Table 3: Needs and actions to pursue the objectives of the PSMS

Needs	Actions
Accurate data on protected species interactions and support for fishers to adopt best practice mitigation.	<p>All fishers to report in their threatened, endangered, or protected (TEP) species animal interaction logbook for any interaction, in accordance with the Fisheries (Commercial Fisheries) Regulation 2019.</p> <p>Industry and Fisheries Queensland to identify, review and publish best practice mitigation options for commercial netting.</p> <p>Improved education on protected species handling to improve safe release should an interaction occur.</p> <p>Fisheries Queensland and fishers to work together to implement an independent data collection and validation program for the fishery, including through introducing digital observer coverage.</p>
Greater accountability and stronger incentives for individual fishers to minimise interactions.	<p>Recognising that commercial fishers are best placed to adjust their gear, setting of gear and timing of fishing to minimise interactions; more so than layers of regulation, individual fishers are responsible for their actions to minimise interactions.</p> <p>Fisheries Queensland to cross check existing information sources (protected species reports, vessel tracking, confirmed protected species fatalities) to identify non-compliance with reporting obligations and repeated behaviours.</p> <p>Fisheries Queensland to implement a system of proportionate management responses for protected species interactions by individual fishers. Including where there are any subsequent interactions, a series of escalating management responses are applied to individual fishers culminating in closures for fishers who are unable to minimise their interactions.</p>

Needs	Actions
Improved research on spatial distribution of at-risk species to inform improved mitigation strategies and review of existing closures effectiveness	Great Barrier Reef Marine Park Authority and Department of Environment and Science to develop a supporting research plan with key scientific experts to support evidence-based decisions on minimising interactions with protected species. As evidence becomes available, Industry and Fisheries Queensland to review management arrangements and fishing rules to implement minimise risks.
Alternative gear and bycatch reduction devices (BRDs) innovation	Fisheries Queensland to develop a clear process for trialling alternative gear, BRDs and other innovations that will minimise the risk of protected species interactions. Industry and Fisheries Queensland to promote and encourage innovation, potentially by leveraging funding for a biannual challenge Smartgear competition.
Develop Best Management Practice	Industry to partner with government and external bodies to develop regionally specific codes of practice that could include: <ul style="list-style-type: none"> • fishing locations (avoid high risk areas) • gear usage (shot times, hanging coefficient, how to set) • good handling and safe release practices • vessel design.
Regular information updates and training on protected species risks in Queensland	Industry to partner with researchers and Fisheries Queensland to provide regular protected species information, education and training for all net fishers.
Regular review of fishing rules to ensure their ongoing effectiveness and remove ineffective restrictions	Through the ECIF Working Group and Harvest Strategy regional workshops review fishing rules and closures to ensure they remain effective and where appropriate recommend changes to minimise the risk of interactions and remove unnecessary restrictions.

7 Management measures

7.1 Best management practices

It is proposed that a Best Management Practice (BMP) program for holders of a Primary Commercial Fisher Licence operating in the ECIF be developed and rolled out to industry. Longer term, it is intended to develop regional accredited BMP programs (as required) that would be mandatory for:

- new entrants to the fishery
- fishers who have triggered an individual fisher limit
- all fishers in a management area that reaches a trigger.

Fisheries Queensland will work with industry and other relevant stakeholders to assist with the development of an initial BMP by mid-2022.

7.2 Individual fisher limits

In addition to the overall fishery management measures used to reduce the risk of interactions with protected species, individual fisher accountability measures will be used where appropriate to encourage personal accountability for their fishing impacts. This is a series of escalating management actions that are applied to individual fishers who have an interaction with particular high risk protected species (Attachment A) and will be supported through the implementation of an independent data collection and validation program for the fishery.

Individual accountability limits will ensure that fishers have a measure that allows them to compare their fishing practice to the best practice management standards and will encourage them to actively work to limit interactions or modify their fishing behaviour to avoid those fishing practices that increase the risk of an interaction.

The individual fisher limits will also provide managers with a range of measures that establish a clear escalating management response to interactions and will allow those fishers who are able to avoid interactions to continue to fish responsibly.

Table 4 outlines the individual triggers and related management actions that apply over a calendar year period.

Table 4: Triggers and fisher and management responses for interactions per calendar year – interaction means any physical contact between fishing gear or a vessel and a protected species, and mortality event means any interaction that results in mortality of one or more protected species

Individual triggers	Fisher and management response
<p>Any interaction</p> <p>An interaction with any protected species.</p>	<ul style="list-style-type: none"> • The fisher must report the interaction by submitting a TEP animal interaction logbook report within 24 hours (electronically) or 7 days (paper) after the fishing operation ends. • If the interaction is with a marine mammal, the fisher must report the interaction to the Wildlife Hotline on 1300 264 625 within 24 hours. • If the interaction is with a species listed at Attachment A, the fisher must also report the interaction to Fisheries Queensland on (13 25 23 or at fisheriesmangers@daf.qld.gov.au) within 48 hours after the fishing operation ends (unless reporting logbooks electronically).
<p>First mortality event</p> <p>The first mortality event for any species listed in Attachment A within a calendar year.</p>	<ul style="list-style-type: none"> • The fisher must follow the responses outlined for ‘Any interaction’. • Upon notification, Fisheries Queensland will contact the fisher and undertake an evaluation of the event with the fishers to better understand the circumstances of the event and discuss options for minimising the risk of further mortality events from fishing.
<p>Second mortality event</p>	<ul style="list-style-type: none"> • The fisher must follow the responses outlined for ‘Any interaction’.

Individual triggers	Fisher and management response
The second mortality event for any species listed in Attachment A within a calendar year.	<ul style="list-style-type: none"> Upon notification, Fisheries Queensland will assist the fisher in reviewing the fisher’s operation and, prior to recommencing fishing, require the fisher to develop an individual mitigation plan for approval prior to recommencing fishing. Information on mitigation plans is outlined in section 8.4.
Subsequent mortality event/s Subsequent mortality event/s for any species listed in Attachment A within a calendar year.	<ul style="list-style-type: none"> The fisher must follow the responses outlined for ‘any interaction’. Upon notification, Fisheries Queensland will review the fisher’s individual mitigation plan with the fisher to help identify any improvements. In addition to previous requirements, the fisher will be subject to a show cause notice and may have the fisher’s operation further conditioned. <p>Remedial actions could include further conditioning of the fisher’s operation (i.e. gear restrictions to reduce the risk for a nominated period of time), requiring monitoring (observer or electronic) on board to monitor the operation (at fisher’s expense), or suspension from netting operations for up to 12 months.</p>

While individual fisher accountability measures will be the primary tool used under the PSMS, Fisheries Queensland will consider the suitability of applying regional and cumulative mortality trigger limits for high-risk protected species in the PSMS in consultation with the ECIF fishery working group and based on the best available scientific information.

8 Rules for commercial fishers

8.1 Protected species reporting

Under the Fisheries (Commercial Fisheries) Regulation 2019 (the Regulation), commercial fishers are required to have on board, make entries, and submit a TEP animal interaction logbook¹ for all interactions with protected species. Protected species are defined as:

- a) a protected animal under the *Nature Conservation Act 1992*; or
- b) an animal that is a listed threatened species, listed migratory species or listed marine species under the EPBC Act.

Copies of logbooks are available online at www.business.qld.gov.au/industries/farms-fishing-forestry/fisheries/monitoring-reporting/requirements/logbooks.

Fisheries Queensland publishes a quarterly summary of all reported protected species interactions to ensure the ECIF continues to meet its accreditation requirements under the EPBC Act. These are available at www.data.qld.gov.au/dataset/quarterly-reports-species-of-conservation-interest-soci-interactions-from-2006.

¹ From 1 September 2021 the ‘Species of Conservation Interest (SOCI) logbook’ is replaced by the ‘TEP animal interaction logbook’.

Under the provisions of the Nature Conservation (Wildlife Management) Regulation 2006 (NCWM Regulation), the taking of a marine mammal or marine turtle during a lawful fishing operation must also be reported to the Wildlife Hotline on 1300 264 625 operated by the Department of Environment and Science.

8.2 Failure to report

Where a fisher fails to report an interaction, penalties may apply under the Regulation, NCWM Regulation or the EPBC Act.

Accurate information is critical to ensuring the risks of fishing are minimised and commercial fishers maintain access to fisheries generally. Where there is low confidence in reporting, additional fishing rules and validation programs will likely be implemented to improve the accuracy of information. For example, Fisheries Queensland may require higher levels of monitoring in some high-risk fisheries over time to validate protected species interactions.

8.3 Evaluation with fisher

In addition to completing a TEP logbook report, Fisheries Queensland may request additional information through an interaction evaluation report about the circumstances of the interaction. This allows Fisheries Queensland to evaluate any factors that may have contributed to the interaction and provide feedback or suggestions to the fisher. An Interaction Evaluation Report template is at Attachment B.

8.4 Mitigation plan

Where a fisher has had two protected species mortality events in a calendar year, they are required to develop an individual mitigation plan that outlines what actions are being taken by the fisher to minimise interactions. Fisheries Queensland will only approve a mitigation plan where it is satisfied it details actions to minimise interactions being taken in the following areas:

- fishing practices (e.g. how the gear is being set)
- gear setup (e.g. any recent gear changes or modifications)
- mitigation devices (e.g. any mitigation or modifications).

Mitigation plans must be updated by a fisher if there are any changes to actions being taken to minimise interactions. The updated version must be approved by Fisheries Queensland before implementation and recommencing fishing.

If there are further mortality events, Fisheries Queensland may require the fisher to carry an on-board observer or electronic monitoring to confirm appropriate mitigation strategies are being used by the fisher.

9 Species specific review and mitigation

Assessment of the recovery capacity of protected species indicates that many species, particularly inshore dolphin and dugong populations, can only sustain extremely low levels of mortality. It is therefore critical that fishing-related risks are at a low level and that ongoing fishing activity does not impair or impede recruitment potential. This PSMS specifies additional review for interactions with protected species that have been identified as at a higher conservation risk, including inshore dolphins, dugongs, sawfish (dwarf and green) and turtles.

These reviews will be triggered following any interaction with these species and may involve Fisheries Queensland convening a regional workshop to discuss with commercial fishers the significance of the interaction; the need to actively minimise the risk of further interactions; and species-specific information to assist with mitigation, safe release techniques and remind about reporting obligations.

Each review will inform the management action that may be appropriate to minimise the ongoing risk to those species and region.

In addition, Fisheries Queensland will review all protected species interactions annually, and as part of the annual Harvest Strategy working group meeting, to discuss any trends in interactions and to determine appropriate management arrangements for the following fishing season to minimise the ongoing risk.

9.1 Mitigating interactions with dugongs

There are a number of regulatory requirements designed to mitigate the risk of fishing interactions with dugongs in Queensland. This includes Dugong Protection Areas (legislated under the Fisheries Declaration 2019), gear restrictions and attendance rules. Complementing this is a network of Commonwealth and State marine park zoning and net free zones in Queensland which prohibit the use of netting apparatus.

The highest risk fishing activities are associated with mesh nets. All other fishing activities (tunnel net, ocean beach seine and line) have been assessed as low risk.

9.2 Mitigating interactions with dolphins

There are a number of regulatory requirements designed to mitigate the risk of fishing interactions with dolphins in Queensland. This includes a range of existing restrictions on net length, mesh size and attendance rules and use of bycatch reduction devices that vary between fishing symbol and area of operation. Complementing this is a network of Commonwealth and State marine park zoning and net free zones in Queensland, which prohibit the use of netting apparatus.

Fisheries Queensland is collaborating with universities to develop projects focussing on the identification of movement patterns and residency for the high-risk species.

The key driver of risk for dolphins is associated with large mesh netting apparatus with other fishing activities (tunnel net, ocean beach seine and line) presenting a lower risk or being a contributing risk factor.

9.3 Mitigating interactions with sawfish

There are a number of regulatory requirements designed to mitigate the risk of fishing interactions with sawfish in Queensland. This includes gear restrictions and attendance rules. Complementing this is a network of Commonwealth and State marine park zoning and net free zones in Queensland which prohibit the use of netting apparatus.

The key driver of risk for sawfish is associated with large mesh netting apparatus, with other fishing activities (tunnel net, ocean beach seine and line) presenting a lower risk or being a contributing risk factor.

9.4 Mitigating interactions with turtles

There are a number of regulatory requirements designed to mitigate the risk of fishing interactions with turtles in Queensland. This includes gear restrictions and attendance rules. Complementing this is a network of Commonwealth and State marine park zoning and net free zones in Queensland which prohibit the use of certain apparatus.

The key driver of risk for turtles is associated with large mesh netting apparatus and tunnel netting apparatus, with other fishing activities (ocean beach seine and line) presenting a lower risk or being a contributing risk factor

9.5 Mitigating interactions with protected sharks and rays

There are a number of regulatory requirements designed to mitigate the risk of fishing interactions with protected sharks and rays in Queensland. Management arrangements for shark fishing which may also provide some protection to shark and ray species. This includes a Total Allowable Commercial Catch (TACC) for all shark species, a hammerhead shark specific TACC, possession and size limits for sharks, requirement to land certain shark species with fins naturally attached and a specific commercial fishery symbol ('S') which allows for targeted shark fishing.

Complementing this is a network of Commonwealth and State marine park zoning and net free zones in Queensland which prohibit the use of netting apparatus.

The key driver of risk to protected shark and ray species is associated with large mesh netting apparatus, with other fishing activities (tunnel net, ocean beach seine and line) presenting a lower risk or being a contributing risk factor.

10 Monitoring and data collection

The success of this PSMS relies on accurate reporting of protected species interactions to ensure that the management responses are effective. To measure this, Fisheries Queensland collects information on the quantity and nature of interactions (including species identification) as well as spatial and temporal information on interactions.

This information is primarily collected through logbook and wildlife hotline reporting by fishers, as well as through 'interaction evaluation reports' which will be submitted by industry when requested by Fisheries Queensland.

All commercial fishers operating in Queensland's fisheries are required to complete daily catch and effort logbooks and record any interactions with protected species during fishing operations (including during down time, steaming, anchoring or drifting), whether or not the animal is harmed.

In addition to the information gathered from logbooks, Fisheries Queensland carries out a range of other fisheries monitoring programs to collect vital information to help scientists assess the status of fish stocks and help to safeguard the ecological sustainability of fisheries. These include:

- Catch Disposal Records and Automated Integrated Voice Response (AIVR)
- at sea monitoring programs
- in port biological sampling programs
- Vessel Monitoring Systems (VMS).

Because accurate information on protected species interactions is key to the success of the PSMS, improving monitoring, data collection and data validation will remain a priority for Fisheries Queensland within the ECIF.

11 Schedule of performance monitoring, assessment and review

The fishery's performance will be reviewed against the ECIF Harvest Strategy and ERA process annually. This review will include convening the ECIF Working Group to provide operational advice on the fishery's performance and any matters that may need addressing.

While the PSMS provides transparency in terms of management decisions in response to protected species information, there must be flexibility to allow new information or changing circumstances to be considered and implemented.

This PSMS will remain in place for a period of five years, consistent with the ECIF Harvest Strategy, after which time it will be fully reviewed in accordance with the Act. The PSMS may also be subject to further review and amendment as appropriate, within the five-year period, if the following circumstances arise:

- there is new information that substantially changes the status of a protected species or the risk profile of the fishery
- there are new and effective mitigation methods identified to reduce the risk of interactions with protected species
- it is clear the PSMS is not working effectively and the objectives of the PSMS is at risk of not being met.

Further explanation and information on the processes for amending harvest strategies and PSMS can be found in the Queensland Harvest Strategy Policy.

12 Definitions

Acronym/term	Definition
the Act	<i>Fisheries Act 1994 (Qld)</i>
Best Management Practice (BMP)	Best Management Practice (BMP) means a practice, or combination of practices, that is determined to be an effective and practicable (including technological, economic, and institutional considerations) means of preventing or reducing interactions with protected species.
BRD	Bycatch reduction device
ECIF	East Coast Inshore Fishery
ECIFF	East Coast Inshore Fin Fish Fishery – now known as ECIF
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
ERA	ecological risk assessments
Interaction	Any physical contact between fishing gear or a vessel and a protected species.
Mortality event	An interaction that results in mortality of a species, or a combination of species, listed in Attachment A.
NCWM Regulation	Nature Conservation (Wildlife Management) Regulation 2006 (Qld)
Protected species	<ul style="list-style-type: none"> • A protected animal under <i>the Nature Conservation Act 1992</i>; or An animal that is a listed threatened species, listed migratory species or a listed marine species under the <i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
PSMS	Protected Species Management Strategy
the Regulation	Fisheries (Commercial Fisheries) Regulation 2019 (Qld)
SOCI	Species of Conservation Interest
TACC	Total Allowable Commercial Catch
TEP	Threatened, endangered or protected (species)
WTO	Commonwealth Wildlife Trade Operation

Attachment A: ECIF prioritised protected species

The following prioritised protected species (Table 5) are subject to escalating management responses.

Table 5: List of prioritised protected species that are subject to escalating management responses under the PSMS. Listing and ERA risk rating information correct as at March 2021

Species	Nature Conservation Act Status	EPBC Act Status	ERA Level 1 Risk Rating
Australian humpback dolphin	Vulnerable	Cetacean; Migratory	High (dolphins)
Australian snubfin dolphin	Vulnerable	Cetacean; Migratory	High (dolphins)
Dugong	Vulnerable	Marine, Migratory	Intermediate/High
Dwarf sawfish	Vulnerable	Vulnerable; Migratory	High (batoids)
Green sawfish	Vulnerable	Vulnerable; Migratory	High (batoids)
Largetooth sawfish	Vulnerable	Vulnerable; Migratory	High (batoids)
Grey nurse shark	Endangered	Critically endangered	High (sharks)
White shark	Vulnerable	Vulnerable; Migratory	High (sharks)
River sharks (<i>Glyphis</i> spp.) incl. Speartooth shark*	Critically endangered*	Critically endangered*	High (sharks)
Green turtle	Vulnerable	Vulnerable	High (Marine turtles)
Flatback turtle	Vulnerable	Vulnerable	High (Marine turtles)
Leatherback turtle	Endangered	Endangered	High (Marine turtles)
Olive Ridley turtle	Endangered	Endangered	High (Marine turtles)
Loggerhead turtle	Endangered	Endangered	High (Marine turtles)
Hawksbill turtle	Endangered	Vulnerable	High (Marine turtles)

This list may be reviewed as new information becomes available that changes the status of a protected species or the risk profile of the fishery.

Attachment B: Interaction evaluation report

TEP logbook	No:	Page:		Fishing symbol:	
How was the TEP caught (select one)	Meshed	Wrapped by headrope	Wrapped by footrope	Bagged in mesh	Fell out at bow
Carcass condition	Clean, undamaged			Lice damaged.	
Shot and haul time	Start:			End:	
Shot depth (m)					
Weather & sea conditions at time interaction:					
Standard shot (if no describe problems / tangles etc)					
Were TEP observed before setting?	YES			NO	
Were TEP observed during setting?	YES			NO	
Were TEP observed during hauling?	YES			NO	

Description of fishing gear	Net type, length and mesh size:				
	Overall mesh condition:	Poor	Average	Good	Excellent
	Mesh condition either side of interaction location in net:	Poor	Average	Good	Excellent
	Hanging ratio:				
	Mono ply diameter:				
	Footrope specification:	Weight:		Diameter:	
	Method of anchoring net:	Anchor	Chain	Block	None
	Mesh colour:				
Additional comments	Provide any additional comments that may be relevant and not recorded above:				