Gulf of Carpentaria inshore fishery

Consultation on gillnet-free zones and fishery reforms

Discussion paper



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The Department of Agriculture and Fisheries proudly acknowledges all First Nations peoples (Aboriginal peoples and Torres Strait Islanders) and the Traditional Owners and Custodians of the country on which we live and work. We acknowledge their continuing connection to land, waters and culture and commit to ongoing reconciliation. We pay our respect to their Elders past, present and emerging.

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Background

On 5 June 2023, the Australian and Queensland Governments announced over \$160 million to phase-out gillnet fishing in the Great Barrier Reef and to address other high-risk fishing activities.

Commitments relating to the Queensland Gulf of Carpentaria inshore fishery included the following:

- establish additional gillnet free zones
- accelerate implementation of the Queensland Sustainable Fisheries Strategy 2017–2027
- introduce legislation to mandate independent onboard monitoring
- all hammerhead sharks to be made no-take species.

The Future Fishing Taskforce (taskforce) was formed to provide expert advice to the Queensland Government on the best approach, design and implementation of a \$100 million structural adjustment package and decisions relating to gillnet fishing in the Great Barrier Reef and proposals for the Gulf of Carpentaria; and impact mitigation package for changes to the Great Sandy Marine Park Zoning Plan. Owing to the inter-connected nature of commercial fishing licences and symbols across Queensland, and the cumulative impacts to seafood supply from these decisions, the taskforce considered all these initiatives together. The taskforce deliberations are now complete and the Queensland Government is currently considering their response. No decisions have been made yet.

The taskforce recommended that additional consultation inform the final locations and design of gillnet-free zones for the Gulf of Carpentaria. The feedback from this consultation paper will be provided to government as part of the decision-making process.

In addition, there are serious concerns about the health of king threadfin (*Polydactylus macrochir*) stocks in the Gulf of Carpentaria. The <u>2021 stock assessment</u> estimated the biomass to be at 5% of unfished levels. Under Commonwealth and Queensland harvest strategy guidelines, immediate management action is required to rebuild fish stocks when the biomass falls below the limit reference point of 20%. An updated stock assessment for king threadfin is currently underway with new catch, effort and biological data. Feedback and learnings from the two independent reviews of the Spanish mackerel stock assessment will also be considered in the revised king threadfin stock assessment. The revised stock assessment will be used to inform future management measures for this species.

This paper also flags other upcoming changes to fisheries management for the Gulf of Carpentaria, which are necessary under the Sustainable Fisheries Strategy. The current management framework does not support modern fishery management controls necessary for an effective harvest strategy or protected species management plan.

It is recognised that future changes to the management of the Gulf of Carpentaria inshore fishery may pose difficulties for certain operators in maintaining their commercial fishing activities without additional financial investment or significant change.

The Queensland Government has provided dedicated funding for the industry-led <u>Stay Afloat program</u> administered by Seafood Industry Australia. This has been developed to help break the stigma associated with poor mental health within the commercial seafood industry, develop a network of trusted industry advocates who fishers can reach out to and find support and educate primary healthcare networks about industry pressures. Stay Afloat is now operating in Queensland to support commercial fishers, fishing businesses and their families. If you would like to know more about Stay Afloat or know someone who might be interested, please visit <u>stayafloat.com.au</u>. You can also contact the Program Manager, Jo Marshall – email jo@seafoodindustryaustralia.com.au or call 0408 008 344.

Have your say

No decisions have been made at this point time and none will be made until after consultation.

Results from this discussion paper will be discussed with the Gulf of Carpentaria Inshore Fishery working group and the Sustainable Fisheries Expert Panel before any decisions are made.

Find out more about the:

- > Queensland Sustainable Fisheries Strategy: 2017–2027
- > Gulf of Carpentaria inshore fishery working group
- > Future Fishing Taskforce and UNESCO Reef Monitoring Report.

Fisheries Queensland is seeking feedback from commercial, recreational and charter fishers, First Nations peoples, environmental groups and other stakeholders on the management reform options presented in this discussion paper. Feedback on this discussion paper will be used to guide the development of new gillnet-free zones, management strategies and fishery reform options, delivering key actions of the Sustainable Fisheries Strategy.

The reform options in this discussion paper will affect different users of the fishery in different ways. It's important that we understand how they affect you so we can make a balanced decision on final management arrangements.

Your feedback will be used to assess the proposed options based on environmental, economic and social impacts.

The fastest and easiest way to provide your feedback is to complete the online survey at: <u>daf.engagementhub.com.au/gulf-of-carpentaria-fishery</u>.

The survey questions are also available at the end of this document if you would prefer to print the survey and post your submission to:

Gulf of Carpentaria inshore fishery discussion paper Department of Agriculture and Fisheries GPO Box 46 Brisbane Qld 4001

PLEASE NOTE: The survey questions are designed to seek your input – **they are not a voting tool**. Answers to these questions will be used to help inform management action and provide an insight into the preferences of all stakeholders.

Submissions close 5 pm, Friday 17 November 2023

For more information, email <u>future.fishing@daf.qld.gov.au</u> or call 13 25 23.

If you would like to receive updates on the Gulf of Carpentaria inshore fishery consultation, email your details to <u>future.fishing@daf.qld.gov.au.</u>

About the fishery

The Gulf of Carpentaria inshore fishery is a complex, multi-species, multi-gear fishery operating in the Queensland Gulf of Carpentaria. The fishery includes multiple fishing symbols authorising the take of several species and the use of various gear types. Target species across the fishery depend on fishing location and gear types used (Table 1). The gillnet component of the fishery uses set mesh nets, and the line component uses line gear with fishing hooks and lures.

The fishing season for the Gulf of Carpentaria inshore fishery is year-round, but with restrictions on the use of gillnets during the barramundi closure from 7 October to 31 January each year. During this closure, harvest is limited to the L4 (line) and N11 (small mesh net) symbols, and also applies to the charter, recreational and traditional fishing sectors.

With the removal of gillnet fishing from the Great Barrier Reef, there are concerns about the transfer of fishing effort from the east coast into the Gulf of Carpentaria inshore fishery. In the 2021 fishing season there were 24 unused gillnet licences and 29 unused line licences.



The fishery does not currently have suitable management arrangements in place, or a harvest strategy that responds to changes in stock abundance or other circumstances. For example, if there were concerns about the sustainability of a key target species, it would not be possible to constrain the catch or effort of that particular species to rebuild the stock. Management reforms in accordance with the Sustainable Fisheries Strategy will be required before a responsive harvest strategy can be developed.

Currently, the fishery is managed based on a series of input controls (e.g. restrictions on gillnet length and mesh size, the number of gillnets used in various areas and spatial closures) to control commercial catch. There are no output controls for many target species (e.g. total allowable catch limits) that can directly control harvest and ensure stock sustainability. There are several closures, including Australian Government marine park closures, seasonal closures (e.g. barramundi) and fishery closures (e.g. river systems). Recreational catch is controlled through size and possession limits, although there are some fish species with no size or specific recreational possession limits.

Commercial operations in the Gulf of Carpentaria operate differently to the those on Queensland's east coast, due to the remote nature of the region and limited transport infrastructure to service the fishing fleet. Most commercial operators in the Gulf of Carpentaria inshore fishery undertake extended fishing trips and remain at sea or at land-based camps for a number of weeks before returning to either Karumba or Weipa. Markets can often influence the species that are targeted and the form in which they are landed (e.g. fillets or whole fish). Some commercial operators also fish within Northern Territory waters, where the same species are targeted.

Summary of Gulf of Carpentaria inshore fishery symbols and gear types					
Symbol	Total symbols	Active symbols (2021)	Fishery area	Gear	Key species
N3 – Net 85		Rivers and creeks	Max net length: 120 m Mesh size: 160 mm – 215 mm Maximum number of nets: 6 with combined length of 360 m	Barramundi King threadfin Scaley jewfish	
	85	61	Nearshore (waters <2 m deep)	Max net length: 600 m Mesh size: 160 mm – 215 mm Maximum number of nets: 6 with combined length of 600 m	Barramundi King threadfin Scaley jewfish Queenfish
			Offshore (waters >2 m deep out to 7 nm)	Max net length: 300 m or 600 m with two N3 symbols on licence	Grey mackerel Spanish mackerel Shark Queenfish
N12 – Net	3	3	7 nm – Australian Fishing Zone	Max length 1800 m Mesh size: 160 mm –165 mm	Grey mackerel Spanish mackerel
N13 – Net	1	1	25 nm – Australian Fishing Zone	Max length 1800 m Mesh size: 160 mm – 165 mm	Shark Queenfish
L4 – Line	46	17	All tidal waters	Max 3 lines and 6 hooks	Spanish mackerel

Overview of future management options

There are several measures being proposed that will change the way the Gulf of Carpentaria inshore fishery is managed into the future. These are necessary to modernise management arrangements, be responsive to changes in stock levels, optimise economic and social benefits, manage ecological risks and ensure fair and equitable access by all.

Changes are expected to be implemented within the following timeframes:

- new gillnet-free zones short term
- king threadfin rebuilding actions short to medium term
- harvest strategy (including management reforms) medium term
- protected species management strategy implementation medium term
- improved reporting arrangements *medium term*
- independent onboard monitoring *longer term*.

Other changes on the horizon, but not discussed in this paper, include a future review of access fees to align all Queensland-managed commercial fisheries to a beneficiary-pays model. Also, the Sustainable Fisheries Strategy includes the development of a latent effort policy to remove inactive licences and prevent increase in effort over time. Future consultation will be undertaken about the fee review and development of a latent effort policy.

It is acknowledged that these changes are likely to make it challenging for some commercial operators to maintain their operations in the same way and may result in economic impacts. While consultation will inform total allowable harvest levels, harvest strategy mechanisms, a protected species management plan and a recovery plan for king threadfin, it is expected that the future management of the fishery will look very different to today.

The aim of this discussion paper is to establish a framework for the future direction of the Gulf of Carpentaria inshore fishery and a clear vision of the operational landscape that lies ahead, with a focus on providing guidance to all stakeholders, particularly those in the commercial industry.

Short-term reforms

New gillnet-free zones

The Gulf of Carpentaria is a highly productive area for commercial fisheries but is also an area with high habitat values for protected species, supporting some of the most significant populations of threatened and endangered marine species, including all known sawfish species. The region supports significant natural and cultural values, while providing opportunities for a range of different users.

Unlike the Queensland east coast, the Gulf of Carpentaria does not have the same level of protection as state marine parks and the Great Barrier Reef World Heritage Area. Unlike the east coast, there is no network of integrated protected zones or management areas within the Gulf of Carpentaria, except for several small-scale gillnetting closures in selected rivers and creeks. The Gulf of Carpentaria includes two marine parks in Commonwealth waters – the Gulf of Carpentaria Marine Park and the West Cape York Marine Park. As both marine parks are located in Commonwealth waters, they only overlap with the line fishery (L4 symbol) and the offshore net fishery (N12 and N13 symbol). They do not afford suitable protection to habitats within the inshore components of the gillnet fishery (N3 symbol).

The implementation of additional gillnet-free zones in the Gulf of Carpentaria is a commitment made by the Australian and Queensland governments and will deliver a number of objectives, including:

- safeguarding and future-proofing economic opportunities in Gulf of Carpentaria fisheries and improving the social licence of the industry
- delivering objectives of the Sustainable Fisheries Strategy, responding to ecological risk assessments and reducing impacts on threatened species
- reducing the risks to, and improving the resilience of, threatened species in a changing global environment
- · improving stock sustainability of key fisheries resources
- recognising and protecting cultural values and recognising First Nations people's native title rights and connection to their sea country
- supporting future economic growth through improved tourism and recreational and charter fishing opportunities.

Several threatened and endangered species are known to inhabit the Gulf of Carpentaria. Fisheries Queensland completed a level 2 species-of-conservation concern <u>ecological risk assessment</u> for the Gulf of Carpentaria inshore fishery. The ecological risk assessment contains a number of high-risk ratings for protected species. A summary of the protected species known to inhabit the Gulf of Carpentaria, current conservation status under the *Environment Protection and Biodiversity Conservation Act 1999* and risk rating from the level 2 ecological risk assessment is provided in Appendix 1.

The taskforce heard from a number of scientific experts about the costs and benefits of gillnet-free zones in a number of regions in the Gulf of Carpentaria. The taskforce agreed that larger closed areas were preferable to smaller areas to support compliance activities and ensure areas offer an adequate refuge for protected species. The taskforce recommended including all rivers, creeks and nearshore waters (waters <2 m deep at low tide) within in each proposed gillnet-free zone.

The proposed gillnet-free zones (see map overleaf) recommended by the taskforce sought to balance the social, economic and ecological costs and benefits. The taskforce recommended consultation with affected stakeholders to inform a final decision. The Queensland Government is considering financial support for commercial fishers to implement the proposed gillnet-free zones in the Gulf of Carpentaria as part of the \$100 million structural adjustment package announced for the Great Barrier Reef.



The following proposed options only relate to Queensland's inshore gillnet fisheries. They do not relate to the northern prawn fishery, which is managed by the Australian Government.

The proposed gillnet-free zones are only focused on the inshore components of the fishery and will mostly extend and supplement existing closures to maximise protection benefits and reduce the impact on the commercial industry. The N3 symbol is the only commercial net fishing symbol affected. It is proposed that small mesh nets under the N11 symbol in each location would continue to be used to maintain the collection of bait that supports commercial fishing operations in remote locations (e.g. line and crab fishing operations).

The Taskforce recommended that the following 4 potential gillnet-free zones be further investigated and released for public consultation before they are finalised and declared.

Proposed zone 1: Northern gillnet-free zone



Location:

All rivers and creeks and nearshore waters from Thud Point north to the tip of Cape York.

Why:

The western Cape includes known habitat for the critically endangered speartooth shark, all sawfish species, snubfin and Indo-Pacific humpback dolphins and crocodiles, and provides nesting sites for several vulnerable marine turtle species, including the endangered olive ridley turtle.

This area is home to 11 Traditional Owner groups whose connection to sea country dates back thousands of years, including contemporary initiatives such as the Land and Sea Ranger work to monitor and protect marine turtle nests.

Weipa is known nationally as a recreational and charter fishing tourism drawcard. It is a significant location for the small local and tourist-centred recreational and charter fishing industry, with dozens of short-term and live-aboard charter operations spread throughout the western Cape's rivers and bays.

The proposed northern gillnet-

free zone adds value to existing net closures around the townships of Weipa and Mapoon, where existing gillnet closures exist in the Embley, Mission and Pine Rivers, and the foreshore regions of the Mapoon township in Port Musgrave. This expansion of area closed to gillnet fishing includes the foreshore and rivers systems from Duyfken Point north to the tip of Cape York and will provide additional protection to the critically endangered speartooth shark. The closure includes all waters of Albatross Bay.

Impact:

Harvest	Licences	Proportion of total fishery
50 tonnes	10	4.4%

Proposed zone 2: Western gillnet-free zone



Location:

All rivers and creeks and nearshore waters from the border with the Northern Territory east to Johns Creek, including all N3 waters around the Wellesley Islands.

Why:

This western region of the Gulf of Carpentaria includes known habitat for all sawfish species, dugong, snubfin and Indo-Pacific humpback dolphins and crocodiles, and provides nesting sites for several vulnerable marine turtle species, including the green turtle that annually migrates to the east coast of Queensland.

This area had previously been considered in a 1999 Gulf of Carpentaria inshore fin fish fishery issues paper that identified parts of this area as an important dugong area (based on work conducted by universities and observations from commercial fishers).

Some of this region is already part of a 'gentleman's agreement' in which commercial fishers voluntarily recognise and support First Nation peoples' exclusive use of the area. However, the Traditional Owners of Mornington Island have raised

concerns about commercial fishing operations impacting the sustainability of fish stocks and protected species that the island communities rely on.

The bulk of the area includes the group of 22 islands that make up the Wellesley Islands and that have significant cultural value for the 4 Traditional Owner groups residing on Mornington Island. The Wellesley Islands Ranger unit provides sea country management activities, such as marine turtle research.

Impact:

Harvest	Licences	Proportion of total fishery
62 tonnes	6	5.7%

Proposed zone 3: Norman River gillnet-free zone



Location:

All remaining waters of the Norman River and associated tributaries.

Why:

The Norman River is one of the most used rivers in the Gulf of Carpentaria, flowing adjacent to the major townships of Karumba and Normanton. This river includes known habitat for all sawfish species and crocodiles, and historically had important dugong intertidal areas in adjacent coastal foreshores.

The lower Norman River area is home to 3 Traditional Owner groups (with more than 50% of the population made up of First Nations peoples) and provides significant employment opportunities.

Karumba is one of the main towns in the Queensland Gulf of Carpentaria and is a wellknown tourist destination for recreational fishers.

Recreational fishers are known to travel great distances to Karumba and commonly fish the waters of the Norman River, which are shared with commercial and charter fishers.

The Norman River already has 2 areas closed to commercial gillnet fishing – the downstream section of the river around the township of Karumba (which includes offshore waters of the river mouth) and the upstream section of the Norman River from the township of Normanton.

Impact	
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Harvest	Licences	Proportion of total fishery
54 tonnes	19	4.9%

Proposed zone 4: Pormpuraaw gillnet-free zone



Location:

All rivers, creeks and nearshore waters between Balurga Creek and the Chapman River, including nearshore waters north of Balurga Creek and south of the Chapman River.

Why:

The rivers and foreshores of the Pormpuraaw area include known habitat for all sawfish species and crocodiles, and are important nesting beaches for the vulnerable flatback turtle and endangered olive ridley turtle.

The township of Pormpuraaw and its adjacent waterways have significant cultural value for the 5 Traditional Owner groups that make up most of the predominantly First Nations population. As well as cultural significance, the region provides an economic opportunity for First Nationsrun camping and recreational fishing operations.

The proposed Pormpuraaw gillnet-free zone value-adds to 2 existing gillnet closures in Moonkan Creek and the foreshore regions of the Pormpuraaw township.

It extends the existing foreshore closure north to

Balurga Creek and south past the Chapman River, and includes all waters of the Edward River Balurga Creek and remaining waters in the Chapman River.

Harvest	Licences	Proportion of total fishery
40 tonnes	7	3.7%

Impact:

Short-term to medium-term reforms

King threadfin recovery

King threadfin are an important commercial and recreational species in the region. They are commercially caught from the inshore areas using set mesh nets in rivers, creeks and nearshore regions under the N3 fishing symbol. The species is also popular for land-based and boating recreational and charter fishers, often targeting them using bait and lures.



King threadfin stocks are influenced by environmental drivers, with improved breeding and survival following high freshwater flows. They are commonly caught in nets by the commercial sector when targeting barramundi and other inshore species. King threadfin are difficult for commercial fishers to completely avoid, and they have low survival rates after being released. Due to these complexities, implementing management measures to recover threadfin that do not impact the harvest of barramundi and other targeted inshore species is challenging.

The <u>2021 stock assessment</u> for king threadfin estimated biomass for 5 king threadfin stocks in Queensland – one in the Gulf of Carpentaria and 4 on the east coast. The assessment used the available commercial, recreational and biological data, and estimated that the spawning biomass of king threadfin in the Gulf of Carpentaria in 2019 was around 5% of unfished levels.

To ensure the best science is available to inform the management of king threadfin, Fisheries Queensland is updating the 2021 stock assessment. The new stock assessment will include additional historical biological data not included in the 2021 assessment, and will include additional years of commercial catch and effort data and biological information that will address several areas of uncertainty in the original stock assessment. The new stock assessment is also taking into account various recommendations from the 2023 <u>Hoyle and Dunn review</u> of the Spanish mackerel stock assessment, which will improve confidence in the assessment estimates.

The updated stock assessment is expected to be finalised in early 2024 and the science has been supported by industry through increased access to biological samples. It should be noted that under Commonwealth and Queensland harvest strategy guidelines, immediate management action is required to rebuild fish stocks when the biomass falls below the limit reference point of 20%. Doing nothing is not an option and would go against the fundamental principles of the Sustainable Fisheries Strategy, the main objective of the *Fisheries Act 1994* and the Queensland's Government's responsibility to ensure our public fishery resources are managed in a responsible and sustainable manner.

Management action has been taken for other Queensland stocks estimated at below 20% biomass, including Spanish mackerel, scallops, snapper and pearl perch. Should the updated assessment of king threadfin indicate that stocks are depleted to below 20% biomass, recovery management action will be necessary.

Once the updated stock assessment is available, Fisheries Queensland will engage with the Gulf of Carpentaria inshore fishery working group, industry and the Sustainable Fisheries Expert Panel to discuss the appropriate management options for the fishery going forward. Should stock biomass still be assessed at or below the 20% limit reference point, urgent management action will be considered.

Medium-term reforms

Harvest strategy

Implementation of a harvest strategy for the Gulf of Carpentaria is an action of the Sustainable Fisheries Strategy.

The Gulf of Carpentaria working group was established in January 2022 and has already considered many elements of the harvest strategy. In accordance with the *Fisheries Act 1994*, a draft harvest strategy will be released for consultation before being considered by the Minister for approval.

This discussion paper broadly outlines options for implementing a modernised management framework that will enable an effective Gulf of Carpentaria harvest strategy.

Stakeholders will have another opportunity to comment on a draft harvest strategy before it's finalised.

The *Queensland harvest strategy policy* provides a framework that guides the development and implementation of harvest strategies for all Queensland fisheries. The policy is consistent with contemporary best-practice fisheries management principles, as well as principles of ecologically sustainable development.

Find out more about harvest strategies and the policy.

To address the complex multispecies, multi-sector and multi-gear nature of fisheries like the Gulf of Carpentaria inshore fishery, the policy provides important guidance to ensure that fisheries management measures are flexible and provide the certainty needed to balance the objectives of all stakeholder groups. The *Fisheries Act 1994* also specifies elements that must be included in each Queensland fisheries harvest strategy.

Species tiers

Identifying the target, secondary and byproduct species of the fishery is an important part of the harvest strategy. It ensures management needs can focus on the species of greatest ecological, economic or social importance, and enables the identification of assessment and monitoring requirements. In a complex multi-species fishery, the identification of true target, secondary and byproduct species can be difficult.

Species management tiers are defined in the Queensland harvest strategy policy as follows:

Tier 1

- Usually target species
- High volume catch
- High economic value
- Managed via individual Transferable Quota (ITQ)
- Major driver of overall fishing effort in a fishery
- May be a secondary species high assessment or management needs due to stock status
- Usually prescribed sectoral allocations

Tier 2

- Usually secondary species
- Important species to the fishery
- Input or output controls in place to manage harvest
- Drives some fishing effort in the fishery (i.e. certain region or gear component of a fishery)
- May be a byproduct species that Requires high assessment or management needs due to stock status

Tier 3

- Usually byproduct species
- Mostly aren't targeted
- May not have specified management controls in place
- Opportunistically fished or cocaught as opposed to driving fishing effort
- Lower historical catch by all sectors

In consultation with the Gulf of Carpentaria inshore fishery working group, the following species tiers have been proposed for the Gulf of Carpentaria inshore fishery harvest strategy:

Management tier	Proposed species	
Tier 1	Spanish mackerel (Scomberomorus commerson)	
	Barramundi (<i>Lates calcarifer</i>)	
	Grey mackerel (Scomberomorus semifasciatus)	
Tier 2	King threadfin (Polydactylus macrochir)	
	Blacktip sharks complex (Carcharhinus tilstoni, Carcharhinus limbatus, Carcharhinus sorrah)	
	Blue threadfin (Eleutheronema tetradactylum)	
	Queenfish (Scomberoides spp.)	
	Scaly jewfish (<i>Nibea squamosa</i>)	
	Sharks and rays (complex)	
	Black jewfish (Protonibea diacanthus)	
Tier 3	All other species	

Management regions

Best-practice fisheries management needs to be at an appropriate scale. It may reflect target species, biological stock boundaries, geographical boundaries, gear types used or combination of these. In most, but not all cases, the 'management unit' will be reflect spatial regionalisation that allows for management arrangements to be applied at a local scale. For instance, the east coast inshore fishery was divided into 5 management regions, which made sense for the target species distribution and stocks, and separate quota is set for each region.

Implementing several management regions can avoid blunt management intervention across a whole fishery, and allows for more regionalised, specific responses.

For a number of reasons, it is considered appropriate that the Gulf of Carpentaria be managed as one unit under the harvest strategy. Working group members commented that given the highly variable climatic conditions that drive fishing behaviour and abundance, one large region will give them the flexibility of movement needed to adapt in different conditions. Due to the unique environmental variables, further regionalisation of the fishery beyond the current fishery symbols may impact commercial viability by constraining fishers to regions that may be unproductive, having a negative social, economic and ecological impact.

Basing management on a species stock boundary is not considered practical for this fishery, as the genetic stock boundaries for some target species are not known.

Other harvest strategy elements

There are several harvest strategy elements that the working group are yet to develop. These will depend on the outcome of the preferred management framework to be adopted for the fishery (e.g. quota, net units, input/output controls). These elements are mandatory in all harvest strategies and include allocation of catch shares between recreational, commercial and First Nation peoples, measuring performance, management action triggers and decision rules. A draft harvest strategy will be released for consultation in the future and will include all of these elements.

Management framework options

The Gulf of Carpentaria inshore fishery does not have management arrangements in place to support an effective harvest strategy that can respond to changes in stock abundance or other circumstances. The Sustainable Fisheries Strategy clearly states the preference is to move to output controls, like quota or competitive catch limits, wherever possible.

The complexity of the Gulf of Carpentaria inshore fishery means that management options must be carefully considered to avoid outcomes that are inconsistent with the fishery objectives. Several management reform options have been discussed with the Gulf of Carpentaria inshore fishery working group and are presented in the options below. These are deliberately focused on the commercial industry because when formalised catch shares are established for the Gulf of Carpentaria fisheries, they will hold the largest allocation for most species.

Option 1: Prescribed commercial catch limits

This option would include setting an overall catch quota or 'prescribed commercial catch' (PCC) limits for each target species in each management region of the fishery. PCC (sometimes referred to as total allowable commercial catch) is the total catch limit for the commercial sector in a fishery and does not include fish caught by recreational, charter or First Nation fishers.

A PCC provides direct controls to ensure sustainable catch limits can be set to achieve biomass targets. They are competitive and are not allocated between commercial operators – they can be accessed by all relevant symbol holders. A PCC can be lowered or raised in response to changes in stock biomass, in accordance with the decision rules in the harvest strategy.

For instance, black jewfish in the Gulf of Carpentaria is already managed using a PCC, and similar catch quotas would be set for other tier 1 or tier 2 species, such as barramundi, king threadfin and Spanish mackerel. For species that don't have a peer-reviewed stock assessment output, a PCC may be set using average historical catch and relevant decision rules would monitor stock performance.

Because a PCC is competitive, it can create a race to fish and reduce the security of access for commercial fishers (when compared to other output controls such as individual transferable quota). This can impact business operations and commercial viability, and have a negative consequence on fishing behaviour (such as working in unsafe weather conditions) if operators fish hard before a species quota is reached.

A competitive PCC may be more appropriate for inshore species targeted under the N3 fishery, where some species are caught together and are difficult to avoid when fishing. A competitive PCC ensures more species can be retained, but introduces complexities in management responses when a single species quota is reached and fishing continues. A competitive PCC can also introduce the risk of high-grading and quota avoidance through less accountable reporting obligations.

Option 2: Individual transferable quota

Individual transferrable quota (ITQ) is generally regarded as best-practice fisheries management in Australian fisheries. It is a fisheries management tool used to unitise the total allowable commercial catch (TACC) of a species. Being a percentage of the TACC, the ITQ units define the maximum weight of a species that can be caught per ITQ unit in a single year. The allocation of ITQ units is usually based on the reported catch history attached to a primary commercial fishing licence with relevant fishery symbols between defined dates.

The unit value of each ITQ unit can be adjusted up or down in response to stock performance and harvest strategy rules to meet fishery objectives and ensure target biomass levels are achieved.

Unlike a competitive PCC, ITQ does not create a race to fish and provides business certainty for commercial operators as they have a defined share for each fishing season. This allows operators to forward plan their operations and maximise commercial economics and time spent fishing on the water. ITQ units can also be transferred and traded throughout the fishing season.

ITQ is likely to be appropriate for offshore species like shark and mackerel where there is less bycatch of other target species. However, it may present some challenges for the inshore components of the N3 fishery (where multiple species are caught in the same location) as quota for each relevant species must be held to retain the catch. If insufficient ITQ is held by a fisher to cover the catch, this can lead to discarding and wastage of marketable fish.

Option 3: Effort units (N3 symbol)

The commercial industry has proactively developed their own preferred approach, which is to unitise the N3 symbol. This is an effort-based rationalisation that proposes a reduction of the maximum net length allocated to each unit. This reform option allows for an industry-led structural adjustment and rationalisation that will reduce total net length in the fishery, potentially link to the fisheries harvest strategy and manage effort shift.

Unitisation of the N3 symbol involves the allocation of 6 individual units to each N3 symbol. Each unit allows the use of one net and an associated maximum net length. It is proposed to reduce the maximum net length of each unit as follows:

	River and creek		Nearshore		Offshore	
Description	Total net length/ N3 (m)	Net length/ N3 unit (m)	Total net length/ N3 (m)	Net length/ N3 unit (m)	Total net length/ N3 (m)	Net length/ N3 unit (m)
Current	360	60*	600	100*	300	50*
Proposed*	300	50	480	80	240	40
Net reduction	60	10	120	20	60	10

*Note: There are no current N3 units allocated and this number represents what the net length of one N3 unit would be under the current total net lengths prescribed in each region of the fishery.

Reducing each net length by the proposed values above results in a 19% reduction of the total length of net permitted in the fishery. Unitisation can be linked to the harvest strategy to monitor and respond to effort shifts, and additional management measures can be developed that ensure unitisation does not increase the fisheries risk to protected species. Harvest strategy decision rules that monitor days fishing could ensure effort levels do not increase above current or historic levels.

Unitising the N3 symbol may introduce the ability to better manage the fishery in response to stock performance, with unit values being adjustable under the harvest strategy. For example, if there were sustainability concerns for king threadfin, the N3 unit value on the nearshore regions of the fishery could be reduced to limit fishing effort and targeting of the species. Additionally, specific regions of the fishery could be closed by reducing the unit value to zero, allowing fishing in other regions to continue where these species do not inhabit.

However, it should be noted that there remains a significant number of inactive or 'latent' N3 symbols, so this proposal may not result in any real reduction of net length in the water. Compliance of this framework would be costly, relying on Queensland Boating and Fisheries Patrol officers measuring net lengths on the water, compared to quota validation and monitoring systems that can be audited effectively at the point of landing and in transit.

Unitisation of the N3 symbol may be an effective input control to reduce total net length and fishing effort, but it does not negate the need for species quotas. To comply with the Sustainable Fisheries Strategy, sustainable catch limits would still need to be set for target and secondary species based on scientific evidence and the principle of achieving 60% biomass. Combining effort units and quota introduces considerable regulatory burden and complexity, and may mean that harvest decision rules are unnecessarily complicated and possibly incompatible and inefficient.

Other general fishery reforms

There is also a need to continually review the broader fishing rules and regulations, remove red tape and redundancies, and ensure rules remain clear and relevant. The Gulf of Carpentaria inshore fishery working group has discussed several general fishery reform items; however, others may be identified in the future.

Issue	Detail	Proposed amendment
Marking nets with lights on both ends	Lights are required at both ends of a set net when the net and equipment is >50 m. The current definition includes the measurement of all equipment used to set the net, including the net head rope, anchor lines and float lines at each end.	Amend legislation so the measurement of net only includes the net headrope and excludes the anchor lines and additional ancillary equipment
	Only the length of net head rope should be included in the definition. The need to have a light on both ends of the net when >50 m remains a requirement for marine navigation purposes.	used to set the net.
Net closure for N12 symbol – 7 October to 31 January	The net closure in the Gulf of Carpentaria is associated with the barramundi spawning closure over the summer months. Limiting the use of nets in the offshore region is not applicable during this closure as barramundi are not caught in these regions. With sustainable catch limits being implemented for key target species, including grey mackerel and shark species, fishing in the N12 fishery during the barramundi closure is not likely to have a detrimental impact on inshore barramundi stocks. Allowing offshore fishing for grey mackerel and shark species during the net closure can improve fishery economics and access to favourable conditions, reducing fishing effort and protected species interactions. Should be introduced in parallel with other management measures (such as PCC) for grey mackerel.	Remove net closure for N12 symbol.
Species that can be retained by L4 symbol	Current legislation restricts the ability for L4 symbols to retain the following species – barramundi, black jewfish, blue threadfin, giant queenfish, king threadfin, scaly jewfish and silver jewfish.	Allow the retention of all listed permitted species by the L4 symbol.
	Permitting the retention of these species by the L4 symbol may improve commercial economics and encourage the uptake of alternate fishing methods that can limit fishing-related risks to protected species.	
Fishery area of N13	The fishery area of the N13 is 25 nm from the coastline out to the Australian Fishing Zone and border with the Northern Territory. The economic viability of the N13 symbol is limited by the remote offshore waters it is restricted to. Amending the fishery area to locations consistent with current symbols will improve commercial economics and ensure sustainable catch limits are caught quickly, reducing fishing effort on bycatch and protected species.	Amend fishery area of N13 to align with N12 fishery symbol (7nm – to Australian Fishing Zone and Northern Territory border).

Protected species

The broader community has shown considerable interest in the sustainable harvesting of fisheries resources and the inadvertent impacts on protected species and bycatch. Interactions with protected species and bycatch are primary sources of public concern, especially in the context of inshore netting.

Increased scrutiny of interactions and reduction measures are likely to be a key component of ongoing Commonwealth Wildlife Trade Operation accreditations and will be necessary to demonstrate that fishing activities are not a risk to the sustainability of protected species and bycatch.

The Queensland Fisheries Strategy also outlines the principle that species considered to be at high risk are prioritised for management action. The *Queensland harvest strategy policy* outlines that harvest strategies must include relevant decision rules that trigger management actions in response to any high ecological risks identified through ecological risk assessments.

The level 2 species of conservation concern <u>ecological risk assessment</u> for the Gulf of Carpentaria net fishery contains several high-risk ratings for protected species (Appendix 1). These risks are being reviewed and addressed as part of the fishery reforms. A key recommendation from the ecological risk assessment was to review current net attendance provisions.

Improved net attendance ensures any interactions with protected species can be identified in a timely manner and reduce the likelihood of an interaction resulting in the death of the animal. Current net attendance provisions for the N3 fishery are 5 nm (9.26 km) in rivers and creeks and 6 nm (11.11 km) on the nearshore.

These distances are considerably higher than those for the net fishery on the east coast, which on average are between 100 m and 1 nm (1.85 km) in rivers and creeks and nearshore areas of the fishery.

Similar to the <u>east coast inshore fishery</u>, a protected species management strategy will be developed for the Gulf of Carpentaria inshore fishery to address several high-risk ratings of bycatch and protected species. Additional working group meetings are planned to discuss the development of a protected species management strategy for the fishery and a dedicated protected species management workshop will be held with industry and scientific experts.

To protect threatened, endangered and protected species into the future, a combination of management measures and a protected species management strategy are likely to be necessary including:

- increased net attendance rules
- bycatch reduction devices
- individual or regional accountability limits with escalating management responses to interactions (such as closures and/or licence suspension)
- independent data validation and use of camera's and/or observers
- gillnet free-zones and other spatial and temporal closures
- mandatory species identification and handling training
- implementation of best management practices
- switch to alternative gears.

We are seeking initial input on the management measures for protected species before organising a workshop focused on addressing current fishery risks and developing a comprehensive protected species management strategy.

Future reporting arrangements

On 1 September 2021, reporting requirements commenced for all commercial fisheries on the Queensland east coast and the mud crab fishery in the Gulf of Carpentaria. These reporting requirements play an important role in the sustainable management of Queensland's fisheries resources by:

- ensuring the integrity of the quota management of fisheries, which is essential to ensuring fish stocks are not overfished and fishers' access rights are not eroded
- improving the accuracy and timeliness of catch and effort information to support informed compliance activities and help prevent black-marketing
- increasing the quality and confidence of data used to assess the status of fish stocks and make management decisions, which ensures the long-term sustainability of fisheries resources.

Where possible, Fisheries Queensland is seeking to standardise the reporting requirements across the state to provide greater consistency across all fisheries.

Some of the new reporting arrangements already apply to quota-managed species in the Gulf of Carpentaria inshore fishery (e.g. black jewfish). The final reporting requirements for the fishery will depend on the management mechanism for target species (e.g. net units, PCC or ITQ).

Some of the reporting arrangements implemented in September 2021 for other fisheries are summarised in Appendix 2. This summary is provided so Gulf of Carpentaria inshore fishery operators are aware of the future reporting obligations that are likely to apply to target species in the fishery.

The Qld eFisher app is available for reporting (logbooks and quota notices) in some fisheries; however, it requires data connectivity at certain times and does not currently cater for transhipment notices. Connectivity in most remote regions of the Gulf of Carpentaria can be limited, which introduces challenges to meeting the above reporting requirements.

It's acknowledged the new reporting arrangements are likely to be more onerous for industry and commercial fishers should be prepared to change their operations and fishing practices to meet higher standards, which are increasingly being expected by the seafood-consuming Australian public.

Longer term reforms

Independent onboard monitoring

Independent onboard monitoring is part of every professional fisher's future. For those higher risk fisheries, this is likely to be sooner rather than later and it will be a requirement for the Gulf of Carpentaria inshore fishery by 2027, during the life of the Sustainable Fisheries Strategy.

Independent onboard monitoring is critical to improving our understanding of fishery operations and the ecological risks associated with fishing activities, and ensuring that accurate and reliable information informs evidencebased management decisions. There are several factors influencing the need for independent onboard monitoring in the Gulf of Carpentaria inshore fishery. These include the need to:

- validate protected species interactions
- validate reported catch and effort information
- address high risks in ecological risk assessments
- improve the fishery's social licence
- satisfy the requirements of Wildlife Trade Operation accreditations under the *Environment Protection and Biodiversity Conservation Act 1999.*

There are 2 main methods used for independent monitoring of commercial fishing operations at sea:



Most of the information used to inform management decisions is received from fishery-dependent sources, with limited capacity to validate this information. This includes both catch and effort information and reported protected species interactions. While validation of retained catch occurs through routine and risk-based inspections by the Queensland Boating and Fisheries Patrol, spatial fishing patterns and fishing effort validated through vessel tracking, there is currently no independent validation of bycatch or interactions with protected species.

Following the Australian and Queensland government commitments to significantly reduce gillnet fishing and other high-risk fishing activities impacting protected species, Fisheries Queensland are progressing a change to legislation that requires independent onboard monitoring of high-risk fisheries, including the Gulf of Carpentaria inshore fishery.

Due to the high cost, scalability limitations, logistical challenges and operational health and safety issues associated with implementing an independent onboard observer-only program across all priority vessels, Fisheries Queensland is currently investigating the use of onboard cameras through a voluntary field trial. Results of the field trial will be used to inform the development of an independent onboard monitoring program across Queensland's priority fisheries.

The field trial aims to test the ability of onboard camera systems and software to detect interactions with protected species and other bycatch during commercial fishing activities. It is likely that a future independent onboard monitoring program for some fisheries will involve the complementary use of both independent observers and onboard cameras.

Find out more about the field trial and details of how to get involved.

Appendix 1

The following table is a summary of protected species (listed under the *Environment Protection and Biodiversity Conservation Act 1999*) known to inhabit the Gulf of Carpentaria, conservation status and risk rating from the level 2 species-of-conservation-concern ecological risk assessment.

Common name	Species name	Status	Risk rating
Marine turtles			
Green turtle	Chelonia mydas	V	High
Loggerhead turtle	Caretta caretta	E	Precautionary high
Hawksbill turtle	Eretmochelys imbricata	V	High
Flatback turtle	Natator depressus	V	High
Olive ridley turtle	Lepidochelys olivacea	E	High
Leatherback turtle	Dermochelys coriacea	E	Precautionary high
Sirenia			
Dugong	Dugong dugon	-	High
Dolphins			
Australian humpback dolphin	Sousa sahulensis	-	High
Australian snubfin dolphin	Orcaella heinsohni	-	High
Common bottlenose dolphin	Tursiops truncatus	-	Precautionary high
Indo-Pacific bottlenose dolphin	Tursiops aduncus	-	Precautionary High
False killer whale	Pseudorca crassidens	-	Precautionary High
Spinner dolphin	Stenella longirostris	-	Precautionary High
Sharks			
Speartooth shark	Glyphis glyphis	CE	High
Great hammerhead shark	Sphyrna mokarran	-	High
Scalloped hammerhead shark	Sphyrna lewini	CD	High
Winghead shark	Eusphyra blochii	-	High
Batoids			
Reef manta ray	Mobula alfredi	-	Precautionary high
Kuhl's devilray	Mobula kuhlii	-	Precautionary high
Largetooth sawfish	Pristis pristis	V	High
Narrow sawfish	Anoxypristis cuspidata	-	High
Green sawfish	Pristis zijsron	V	High
Dwarf sawfish	Pristis clavata	V	High
Bottlenose wedgefish	Rhynchobatus australiae	-	Precautionary high
Eyebrow wedgefish	Rhynchobatus palpebratus	-	Precautionary high

Appendix 2

Overview of reporting arrangements implemented for other Queensland-managed fisheries. The commercial fisher in control is responsible for the reporting requirements.

Pre-trip notice	 Required before a fishing operation begins Provides details of planned fishing activities Includes details of the primary commercial fishing licence number, commercial fisher in control, purpose of the trip (i.e. commercial, recreational or charter), proposed landing place
Amending notice	 Allows for a change to the landing place (given in the pre-trip notice) while at sea Must be given at least one hour before landing Includes new landing location.
Transhipment notice	 Required when fish are transfered from a fishing operation to a transport vessel while at sea Must be given before the fish are transhipped Includes the transport code, landing place and time of the transport vessel, and accurate number of fish or containers of fish being transhipped Transferred fish must be labelled and keep seperate on transport vessel.
Prior notice	 Required before landing the authorised boat for the fishing operation Required for species managed under an individual transferable quota or competitive total allowable commercial catch Includes accurate numbers of fish in the form they will be landed (e.g. number of whole fish, number of containers of fillets)
Weight notice	 Required to record the weight of landed fish in the form they were landed Includes the accurate weight of species to one decimal place Must be provided within 24-48 hours after the fishing operation ends, and before the commencement of a new fishing operation (whichever is earliest)
Catch disposal record	 Required by fisheries managed under the quota system to record and report the disposal of fish taken during a fishing operation Includes details of the primary commercial fishing licence number, boat mark, quota notice transactions relating to the disposed fish, fish details by species, disposal and consignment information Must be made within 7 days after the fishing operation ends, and before the commencement of the new fishing operation (whichever is earliest)
Retained fish notice	 Required before the boat departs on a second fishing operation and applies when fish have not been unloaded from the first fishing operation Includes reference to the previous prior notice and number of fish being retained Must be provided within 24-48 hours after the first fishing operation ends, and before starting a new fishing operation (whichever is earliest)

Survey questions

Your say matters and we want to hear from you about which gillnet-free zones and management measures you prefer. The questions with an asterisk (*) are mandatory.

The Department of Agriculture and Fisheries is collecting the information on this form to inform new gillnet-free zones in the Gulf of Carpentaria and key fishery reforms proposed as part of the Sustainable Fisheries Strategy in the Gulf of Carpentaria under the *Fisheries Act 1994* and subordinate legislation.

This information is being collected for the purpose of obtaining feedback on proposed changes to management actions. Your personal information will not be disclosed to any other parties unless authorised or required by law.

Question 1. Your information

Name:

Address:

Postcode*:

Email address*:

Question 2. What sector of the fishery are you part of?*

- □ Commercial fisher
- □ Recreational fisher
- □ Charter fishing operator
- Traditional fisher / Traditional Owner
- □ Seafood wholesaler/marketer
- □ Hospitality (restaurant, café, fish and chip shop) owner/worker
- □ Fishing tackle retailer
- □ Environmental group
- □ Industry peak body
- □ Other non-government organisation
- □ Interested community member
- □ Other

Gillnet-free zones are part of the Gulf of Carpentaria's future. It is a highly productive area for commercial fisheries with high habitat values for protected species. The risks to these species must be addressed. When considering locations for gillnet-free zones, it is important to consider all social, economic and ecological impacts associated with each location.

Question 3. GILLNET-FREE ZONES – Do you agree with proposed zone 1 in the northern region (all rivers and creeks and nearshore waters from Thud Point north to Cape York)?

- □ Strongly agree
- □ Agree
- Neither agree nor disagree
- □ Disagree
- □ Strongly disagree

Comments

GILLNET-FREE ZONES – Do you agree with proposed zone 2 in the western region (all
rivers and creeks and nearshore waters from the border with the Northern Territory east to
Moonlight Creek, including all N3 waters around the Wellesley Islands)?

- □ Strongly agree
- □ Agree
- □ Neither agree nor disagree
- □ Disagree
- □ Strongly disagree

 Question 5.
 GILLNET-FREE ZONES – Do you agree with proposed zone 3 in the Norman River (remaining waters of the Norman River and associated tributaries)?

 □
 Strongly agree

- □ Agree
- □ Neither agree nor disagree
- □ Disagree
- □ Strongly disagree

Comments

Question 6. GILLNET-FREE ZONES – Do you agree with proposed zone 4 around the Pormpuraaw region (remaining rivers, creeks and nearshore waters between Balurga Creek and the Chapman River, including nearshore waters north of Balurga Creek and south of the Chapman River)?

- □ Strongly agree
- □ Agree
- □ Neither agree nor disagree
- □ Disagree
- □ Strongly disagree

Comments

Question 7. GILLNET-FREE ZONES – Are there other locations in the Gulf of Carpentaria where gillnetfree zones should be considered?

□ Yes – Please specify locations and why they should be considered.

□ No

Question 8. GILLNET-FREE ZONES – Do you have any other feedback that should be considered as the new gillnet-free zones in the Gulf of Carpentaria are developed?

Comments:

The 2019 king threadfin stock assessment estimated the Gulf of Carpentaria biomass to be at 5% of unfished levels. Under Commonwealth and Queensland harvest strategy guidelines, immediate management action is required to rebuild fish stocks when their biomass falls below the limit reference point of 20%.

The updated stock assessment is expected to be finalised in early 2024. This new assessment will improve the confidence of the assessment outputs and proposed management measures. Once the updated stock assessment is available, Fisheries Queensland will meet with the Gulf of Carpentaria inshore fishery working group and the Sustainable Fisheries Expert Panel to discuss appropriate management options for the fishery going forward. Should stock biomass still be assessed at or below the 20% limit reference point, urgent management action will be considered.

Question 9. KING THREADFIN – What management measures would you recommend to support the recovery of king threadfin stocks?

Implementation of a harvest strategy for the Gulf of Carpentaria is an outstanding action of the Sustainable Fisheries Strategy.

The Gulf of Carpentaria working group was established in January 2022 and has already considered many elements of the harvest strategy. In accordance with the *Fisheries Act 1994*, a draft harvest strategy will be released for consultation before being considered by the Minister for approval.

The *Queensland harvest strategy policy* provides a framework that guides the development and implementation of harvest strategies for all Queensland fisheries. The policy is consistent with contemporary best practice fisheries management principles, as well as principles of ecologically sustainable development.

Stakeholders will have a further opportunity to comment on a draft harvest strategy before it is finalised. Find out more about <u>harvest strategies and the policy</u>.

Question 10. HARVEST STRATEGY - Do you agree with the draft list of species tiers?

- □ Yes
- □ No What changes would you recommend?

Comments:

Question 11. HARVEST STRATEGY – Do you support the management of the Gulf of Carpentaria inshore fishery under one single management unit?

□ Yes

□ No – What management units would you recommend?

The Gulf of Carpentaria inshore fishery does not have the necessary management arrangements in place to support a fisheries harvest strategy that responds to changes in stock abundance or other circumstances. The Sustainable Fisheries Strategy clearly states that the preference is to move to output controls, like quota or competitive catch limits wherever possible. Output controls ensure set biomass targets can be achieved that support social, economic and ecological outcomes.

Question 12. MANAGEMENT FRAMEWORK – Do you support competitive prescribed commercial catch limits as an option?

🗆 Yes

 \Box No – Why not?

Comments:

Question 13. MANAGEMENT FRAMEWORK – To which species/species groups should competitive prescribed commercial catches apply?

Comments:

Question 14. MANAGEMENT FRAMEWORK - Do you support individual transferable quota as an option?

□ Yes

□ No –Why not?

Question 15. MANAGEMENT FRAMEWORK – To which species/species groups should individual transferable quota apply?

Question 16. MANAGEMENT FRAMEWORK – Would you recommend a different management reform option that ensures sustainable catch limits for target species? □ Yes – Please specify. □ No Comments: Question 17. MANAGEMENT FRAMEWORK – Do you support unitisation of the N3 symbol? □ Yes □ No Comments: Question 18. MANAGEMENT FRAMEWORK - What other management measures should be considered along with unitisation of the N3 symbol (e.g. output controls, net attendance provisions, maximum gillnet lengths etc.)? Comments:

The Sustainable Fisheries Strategy reforms include the continual review of broader fishing rules and regulations for the fishery to remove red tape and redundancies, and to ensure rules remain clear and relevant. The Gulf of Carpentaria inshore fishery working group has discussed several general fishery reform items; however, there may be others identified in the future.
Question 19. GENERAL REFORMS – Do you support marking nets with lights on both ends?
□ No – Why not?
Comments:
Question 20. GENERAL REFORMS – Do you support changing the fishing season of the N12 fishery?
□ No – Why not?
Comments:
Question 21. GENERAL REFORMS – Do you support the take of additional species using line gear?
□ No – Why not?
Comments:

Question 22.	GENERAL	REFORMS -	-Do you support	changing the	fishery area	of the N13 symbol?

□ Yes

 \Box No – Why not?

Comments:

Question 23. GENERAL REFORMS – Are there any other reforms that should be considered (e.g. size and possession limits, spatial and temporal closures, net and line management arrangements etc.)?

 \Box Yes – Please specify.

🗆 No

The Sustainable Fisheries Strategy prioritises management action for species considered to be at high risk. The *Queensland harvest strategy policy* outlines that harvest strategies must include relevant decision rules that trigger management actions in response to any high risks identified through ecological risk assessments.

A protected species management strategy will be developed for the Gulf of Carpentaria inshore fishery to address several high-risk ratings for bycatch and protected species. Additional working group meetings are planned to discuss the development of a strategy for the fishery and a dedicated protected species management workshop will be held with industry and scientific experts.

Question 24. PROTECTED SPECIES MANAGEMENT – Do you support reducing the Gulf of Carpentaria inshore fishery net attendance provisions?

- 🗆 No
- □ Yes What distance do you support?
 - □ Less than 1 nautical mile
 - □ 2 nautical miles
 - □ 3 nautical miles
 - □ 4 nautical miles
 - □ 5 nautical miles

Question 25. PROTECTED SPECIES MANAGEMENT – What other management measures should be considered during development of a protected species management strategy?

Comments:

Thank you for your submission and for taking the time to provide feedback on this important process to develop gillnet-free zones and implement Sustainable Fisheries Strategy reforms.