

# Queensland crayfish and rock lobster fishery harvest strategy: 2021–2026

Business area owner Management & Reform

Endorsed by Deputy Director-General (Fisheries & Forestry) in accordance with delegated powers under Part 2, Division 1 (Harvest Strategies) of the *Fisheries Act 1994*

Approved by Minister responsible for fisheries in accordance with section 16 of the *Fisheries Act 1994*

#### Revision history

Version no.	Approval date	Comments
0.01	September 2020	Draft harvest strategy for consultation
1.00	June 2021	Approved harvest strategy

Enquiries and feedback regarding this document can be made as follows:

Email: info@daf.qld.gov.au  
Telephone: 13 25 23 (Queensland callers only)  
(07) 3404 6999 (outside Queensland)  
Monday, Tuesday, Wednesday and Friday: 8 am to 5 pm, Thursday: 9 am to 5 pm  
Post: Department of Agriculture and Fisheries GPO Box 46 BRISBANE QLD 4001 AUSTRALIA  
Website: daf.qld.gov.au

#### Interpreter statement



The Queensland Government is committed to providing accessible services to Queenslanders from all culturally and linguistically diverse backgrounds. If you need an interpreter to help you understand this document, call 13 25 23 or visit [daf.qld.gov.au](http://daf.qld.gov.au) and search for 'interpreter'.

© State of Queensland, 2021

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence.

Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms.



You must keep intact the copyright notice and attribute the State of Queensland as the source of the publication.

Note: Some content in this publication may have different licence terms as indicated.

For more information on this licence, visit <https://creativecommons.org/licenses/by/4.0/>.

The information contained herein is subject to change without notice. The Queensland Government shall not be liable for technical or other errors or omissions contained herein. The reader/user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using this information.

## Contents

What the harvest strategy is trying to achieve .....	4
Fishery overview.....	4
Stocks covered by the harvest strategy.....	5
Management units for the harvest strategy .....	5
Summary of management information.....	5
Fishery objectives .....	7
Catch shares .....	7
Measuring the performance of the fishery .....	8
Management of target species.....	10
Monitoring social and economic performance .....	12
Data collection, validation and assessment .....	13
Information and research priorities .....	13
Schedule of performance monitoring, assessment and review.....	14
Acronyms and definitions.....	16

## What the harvest strategy is trying to achieve

This harvest strategy has been developed in line with the *Queensland harvest strategy policy* to manage crayfish and tropical rock lobster resources of Queensland. Lobster stocks in Queensland are considered sustainable, with the risk of overfishing considered low due to the biology of the species, protection through marine park zoning and catch limits. This harvest strategy will inform decision-making through clear fishery objectives, performance indicators, triggers for management action and appropriate management responses based on the status of Queensland's lobster stocks.

Primary management methods for the Queensland crayfish and rock lobster fishery (QCRLF) are individual transferable quotas (ITQ) for commercial fishing and in-possession limits for recreational fishing. The decision rules are designed to set catch at levels appropriate for achieving maximum economic yield (MEY) (60% proxy) for tropical rock lobster species, as well as to maintain catch shares among sectors. Other management tools (e.g. size limits, spawning closures etc.) may also be used to support the sustainable management of stocks under this harvest strategy.

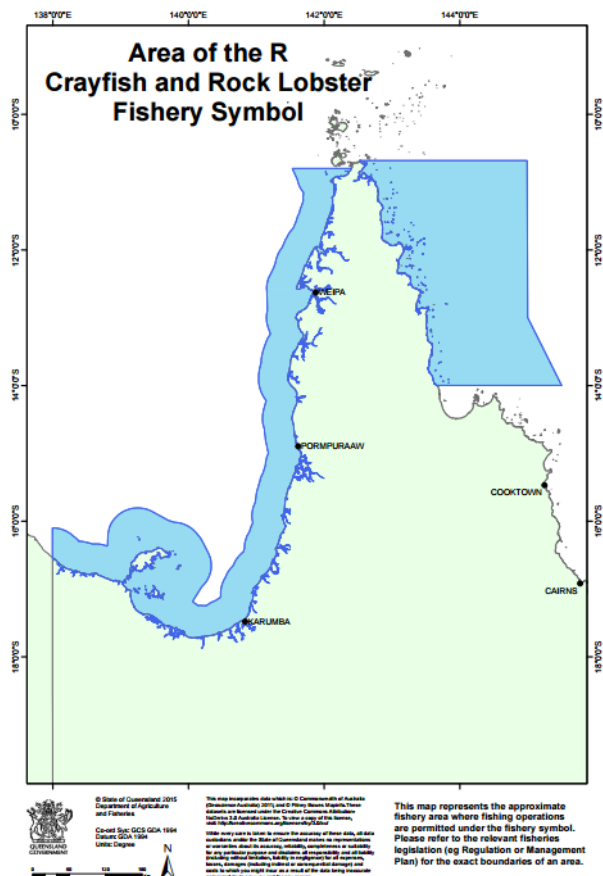
## Fishery overview

The QCRLF target species is the ornate rock lobster (*Panulirus ornatus*); however, other lobster from the family Palinuridae and the red champagne lobster (*Linuparus trigonus*) are also taken. Crayfish are also managed through the QCRLF. The commercial fishery comprises all tidal waters north from Princess Charlotte Bay to the Torres Strait, as well as tidal waters of the Gulf of Carpentaria (excluding the Protected Zone Joint Authority–managed Torres Strait rock lobster fishery). However, the commercial fishery operates almost exclusively on the east coast between Cape York and Cape Melville.

The QCRLF is a hand-harvest fishery for both commercial and recreational fishers. Divers collect bottom-dwelling lobsters by hand using small tender boats. The high-value ornate rock lobster harvested from this fishery is an important live export product for Queensland.

The recreational fishery covers all Queensland waters and is subject to in-possession and size limits as well as fishing gear restrictions.

The QCRLF is also an important fishery for Aboriginal peoples and Torres Strait Islanders, both culturally and for economic development.



## Stocks covered by the harvest strategy

Tropical rock lobsters are defined as all species in the family Palinuridae. The most common species, the ornate rock lobster, consists of a single stock in north-eastern Australian, which spans multiple management jurisdictions. Currently, the north-eastern stock is defined to include northern Queensland (managed by Queensland), the Coral Sea (managed by the Commonwealth) and the Torres Strait (managed by the Torres Strait Protected Zone Joint Authority). Research suggests that the Queensland component of the stock supplies recruits to both the northern fishery regions and that mixing larvae from different areas occurs in the Coral Sea. Fish stocks covered by this harvest strategy are outlined in Table 1.

**Table 1: Summary of fish stocks covered by this harvest strategy**

Feature	Details
Target species	Ornate rock lobster ( <i>Panulirus ornatus</i> )
Other species	Red champagne lobster and species within family Palinuridae
Biology	Ornate rock lobster grow rapidly and reach maturity at 2–3 years of age. They are also known to be highly fecund with some populations undertaking extensive spawning migration (mostly in the Torres Strait), from which they often suffer high natural mortality after spawning events. Recruitment patterns into the commercial fishery area are highly influenced by oceanographic conditions and have been shown to inter-annually favour either northward recruitment into the Torres Strait or southward recruitment to the east coast.

## Management units for the harvest strategy

The single management unit for this harvest strategy is the tidal waters east of longitude 142°31'49", south of latitude 10°41' and north of latitude 14°S. It also includes waters of the Gulf of Carpentaria and adjoining waterways, between the 25 nautical mile and the shore, south of latitude 10°48' south. The fishery area is defined by the Fisheries (Commercial Fisheries) Regulation 2019.

However, note that the commercial fishery is restricted to the northern rock lobster regulated waters, whereas recreational fishing includes all Queensland tidal waters and in practice mainly takes place south of the regulated waters.

## Summary of management information

A summary of the management arrangements for the QCRLF are set out in Table 2. Fishers may access copies of fisheries legislation at [legislation.qld.gov.au](http://legislation.qld.gov.au) or visit [fisheries.qld.gov.au](http://fisheries.qld.gov.au) for the latest information on fishing rules.

**Table 2: Summary of QCRLF management arrangements**

<b>Feature</b>	<b>Details</b>
<b>Commercial access</b>	Primary commercial fishing licence with an R fishery symbol
<b>Relevant fisheries legislation</b>	<i>Fisheries Act 1994</i> Fisheries (General) Regulation 2019 Fisheries (Commercial Fisheries) Regulation 2019 Fisheries Declaration 2019 Fisheries Quota Declaration 2019
<b>Other relevant legislation</b>	<i>Great Barrier Reef Marine Park Act 1975</i> and Great Barrier Reef Marine Park Regulations 2019 (Cwlth) <i>Environment Protection and Biodiversity Conservation Act 1999</i> and Environment Protection and Biodiversity Conservation Regulations 2000 (Cwlth) <i>Marine Parks Act 2004</i> (Qld)
<b>Working group</b>	Tropical rock lobster fishery working group Terms of reference and communiques are available at <a href="http://fisheries.qld.gov.au">fisheries.qld.gov.au</a>
<b>Gear</b>	The following apparatus are permitted for use: <ul style="list-style-type: none"> <li>• <b>commercial fishers</b> – hand collection, hand-held non-mechanical implements, spears and spear guns using underwater breathing apparatus</li> <li>• <b>recreational fishers</b> – hand collection, hand-held non-mechanical implements, spears and spear guns (excluding hookah/scuba)</li> </ul> Refer to <a href="#">fisheries legislation</a> for specific gear requirements and rules
<b>Main management methods</b>	<b>All sectors</b> <ul style="list-style-type: none"> <li>• Closed waters, regulated waters</li> <li>• Egg-bearing and tar-spot tropical rock lobsters are protected</li> </ul> <b>Commercial</b> <ul style="list-style-type: none"> <li>• Primary management method is species-specific ITQ</li> <li>• Limited commercial fishing access</li> <li>• Primary and tender vessel restrictions (number of tenders and distance from primary vessel)</li> <li>• Number of divers ‘to take’ restrictions</li> <li>• Size limits</li> </ul> <b>Recreational</b> <ul style="list-style-type: none"> <li>• In-possession limit</li> <li>• Boat limit of two times the in-possession limit</li> <li>• Size limits</li> </ul>
<b>Fishing year</b>	1 January – 30 September Closed season – 1 October to 31 December in the regulated fishery area
<b>Stock status</b>	Stock status is assessed using the nationally agreed <a href="#">Status of Australian Fish Stocks</a> (SAFS) classification framework – tropical rock lobster is listed as ‘sustainable’. *Note: The classification system used as part of the SAFS reporting is assessed against a 20% biomass sustainability criteria. Therefore, although a species may be classified as ‘sustainable’ in SAFS, this does not mean that the biomass is meeting the targets set out in the <i>Queensland Sustainable Fisheries Strategy: 2017–2027</i> . For more specific species biomass estimates, consult the relevant stock assessment for that species.
<b>Accreditation under the Environment Protection and Biodiversity Conservation Act 1999</b>	Part 13: Accredited (expires 2025) Part 13A: Accredited (expires 2025) Visit <a href="http://environment.gov.au">environment.gov.au</a>

## Fishery objectives

The objective of the harvest strategy is to manage the fishery in accordance with the objectives of the *Fisheries Act 1994* and the *Queensland Sustainable Fisheries Strategy: 2017–2027*.

Fishery objectives set out the direction and aspirations to achieve in the long term. The primary objective for the QCRLF is to:

- maintain the tropical rock lobster at, or returned to, a target spawning biomass level that aims to maximise economic yield (MEY) for the fishery.

**In pursuing the primary objective, the harvest strategy aims to:**

- minimise and mitigate any unacceptable ecological risks arising from fishing-related activities
- maximise economic performance of the commercial fishing sector
- maintain appropriate sectoral catch shares
- monitor the broader social and economic benefits of the fishery to the community.

## Catch shares

This harvest strategy aims to maintain the existing catch shares between sectors. The resource allocation arrangements set out in Table 3 below ensure that catch shares among sectors are maintained in response to changes in the total allowable catch (TAC).

The traditional fishing rights of Aboriginal peoples and Torres Strait Islanders are protected under native title legislation and relate to harvest for domestic, communal and non-commercial purposes. Accordingly, traditional and customary fishing is recognised in Queensland and is not a defined allocation.

Aboriginal peoples and Torres Strait Islanders and their communities continue to express a desire to have more economic opportunities through fishing, particularly in their own sea country. The *Aboriginal and Torres Strait Islander commercial fishing development policy* provides for an Indigenous fishing permit to be issued, on a case-by-case basis and in accordance with section 54 of the Fisheries (General) Regulation 2019, to provide opportunities to take part in fishing-related business.

**Table 3: Resource allocation arrangements for the QCRLF**

Fishery	Commercial fishing*	Recreational fishing**
Tropical rock lobster	95%	5%
Indigenous commercial fishing development	5 tonnes	

\* Commercial catch information collected through commercial logbook requirements.

\*\* Recreational catch share includes charter fishing is based on information from statewide recreational fishing surveys.

## Measuring the performance of the fishery

### Biomass-based performance indicators and reference points for target species

Key indicators measure the health of the fishery. The indicators relate to the objectives and use reference points to establish acceptable performance (Table 4 overleaf). The indicators measure the relative amount of fish biomass of key stock(s) against target and other reference points. The default biomass reference points identified in this harvest strategy are:

- a target reference point ( $B_{targ}$ ) of 60% of the unexploited spawning biomass being the relative biomass level the harvest strategy aims to achieve for key target species within the fishery – this is also considered a proxy for achieving maximum economic yield  $B_{mey}$
- a limit reference point of 20% of the unexploited spawning biomass ( $B_{lim}$ ) being the biomass level that the harvest strategy aims to avoid. If the stock is assessed to be below  $B_{lim}$ , the risk to the stock is unacceptably high and the stock is defined as “depleted”.

For key stocks, performance indicators and sustainable harvests for all sectors will be estimated from a stock assessment. The aim is to measure the capability for the stock to attain the target biomass level ( $B_{targ}$  60%), and at which point the harvest strategy will be considered as meeting its fishery objectives.

The decision rules for setting a sustainable harvest in the harvest strategy are based on a ‘hockey stick’ approach. This is where the TAC is set based on a linear relationship between  $B_{lim}$ , where the level of fishing mortality (F) is equal to zero, and  $B_{targ}$ , where the exploitation rate and TAC is set at the level to achieve MEY (Figure 1 overleaf). The decision rules take into account the current biomass level of the stock for determining the TAC to achieve the  $B_{targ}$ .

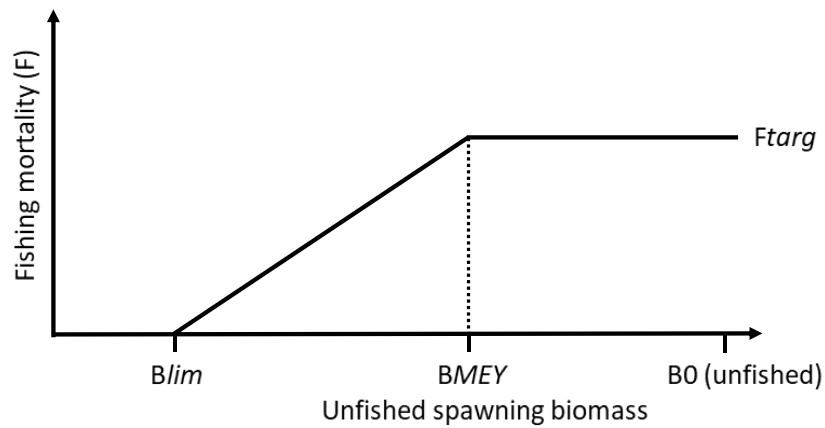
The recommended TAC is calculated by applying the rate of fishing mortality to achieve  $B_{targ}$  to the current spawning biomass level. As a result, the recommended TAC represents the total catch from all sectors (including discards) that can be harvested in the following years, to move the current biomass level towards the target level. A discount factor may also be included to account for uncertainty and to reduce the risk of a fishery not achieving its objectives.

If the spawning biomass of a stock falls below  $B_{lim}$ , targeted fishing of the stock must cease and a rebuilding strategy be developed to rebuild the spawning biomass above  $B_{lim}$  within a biologically reasonable timeframe (e.g. based on mean generation time<sup>1</sup>) and as informed by the *Queensland Harvest Strategy Policy*.

---

<sup>1</sup> a generation is defined as the average age of full maturity for the fish species.





**Figure 1: Showing the 'hockey stick' rule – *Blim* is limit reference point, *Bmey* is the biomass at MEY, *B0* is the unfished biomass at 100%, *F* is fishing mortality and *Ftarg* is the level of fishing mortality for *Bmey***

To meet the objectives of the fishery, the harvest strategy will also act to constrain all sectors within their allocated catch share. Should a new estimate of recreational harvest or catch from charter fishing logbooks indicate that a sector has increased their catch share outside of their allocated proportion for any TAC species, then adjustment will be made to constrain harvest within this share. Adjustments to the recreational fishing limits may be undertaken if large changes are made to the TAC for a species.

**Table 4: Performance indicators and reference points for the QCRLF**

Species	Performance indicator	Reference point/buffer	Reference level
Ornate rock lobster	Spawning biomass	Target ( <i>Btarg</i> )	60% spawning biomass
Ornate rock lobster	Spawning biomass	Limit reference point ( <i>Blim</i> )	20% spawning biomass
Secondary and by-product species (if available)	Biomass	Target ( <i>Btarg</i> )	60% biomass
Secondary and by-product species (if available)	Biomass	Limit reference point ( <i>Blim</i> )	20% biomass

## Management of target species

### 1.0 Decision rules for the commercial take of lobster

The decision rules provide guidance to set the total allowable commercial catch (TACC) based on an estimate of biomass being available. The decision rules use the outputs of the stock assessment and aim to achieve a target biomass ( $B_{targ}$ ) of 60%.

---

- 1.1 If the biomass is at or above  $B_{targ}$ , set the TACC at a level that maintains biomass at  $B_{targ}$ .
- 1.2 If biomass is below  $B_{targ}$  and above  $B_{lim}$ , the TACC should be set as inferred by the hockey stick approach, where fishing mortality is reduced to the rate that allows the biomass to increase effectively back to  $B_{targ}$ .
- 1.3 If biomass is at or below  $B_{lim}$ , there will be no targeted fishing for that species, and a rebuilding strategy will be developed to increase the stock biomass to above  $B_{lim}$  within a biologically reasonable timeframe and as informed by *the Queensland Harvest Strategy Policy*.
- 1.4 If any new information becomes available indicating that the assessment and TACC-setting arrangements are not consistent with the sustainable management of the fishery, decision rules must be reviewed and, if appropriate, the reference points or timeframes should be adjusted.

#### Notwithstanding that:

- 1.5 The rate of fishing mortality should not exceed that required to achieve  $B_{targ}$ .
  - 1.6 The TACC should not exceed the level of fishing mortality required to maintain a stock at maximum sustainable yield (MSY) at equilibrium.
- 

### 2.0 Decision rules for the recreational sector (including charter) take of lobster

The below decision rules have been designed to maintain catch shares between sectors. If a new estimate of recreational or charter harvest indicate that either sector have increased their catch outside of their allocated catch share, then management action will be taken to constrain them within this share.

---

- 2.1 If a recreational harvest estimate is no more than 5% above the allocated recreational catch proportion, then no management action is required.
- 2.2 If a recreational harvest estimate exceeds the catch share by greater than 5%, the recreational in-possession limit will be decreased to return catch to allocated proportions.
- 2.3 If a stock assessment recommends an increase in the TAC to a level that would result in an increase or decrease to the commercial catch share by 5% or more, then the recreational in-possession limit will be adjusted to ensure catch shares match allocated proportions.

#### Notwithstanding that

- 2.4 If a stock is below  $B_{lim}$  and a stock assessment recommends a TAC of zero, no targeted fishing for the species will be permitted for all sectors.
-

## Management of ecological risks from fishing

A foundation of sustainable fisheries management is managing the impact of fishing activities on non-target species and the broader marine ecosystem. Ecological risk assessments (ERA) identify and measure the ecological risks of fishing activity and identify issues that must be further managed under harvest strategies.

The QCRLF operates within the Great Barrier Reef World Heritage Area, and as a result this harvest strategy also considers the potential for management action to be taken if fishing is identified as a high risk under a Great Barrier Reef Marine Park Authority (GBRMPA) Reef Health Incident Response Plan. The below decision rules are in place to minimise and mitigate high ecological risks arising from fishing-related activities.

---

- 3.1 If an ERA identifies fishing impacts that result in an unacceptable level of risk to any ecological component, a review is triggered to investigate the reason for the increased risk, and appropriate management action taken to reduce the risk to an acceptable level.

### **AND**

- 3.2 To ensure fishery impacts do not result in serious or irreversible harm to the Great Barrier Reef World Heritage Area, if a reef event is identified under the GBRMPA Reef Health Incident Response Plan, a review will be led by GBRMPA and additional management action (voluntary or regulated) may be considered in order reduce the risk to an acceptable level.
- 

The most recent ERA for the QCRLF was completed in 2006. It found impacts to the environment by the QCRLF to be negligible to minor. Fisheries Queensland developed the [Ecological risk assessment guideline](#) to assess ecosystem impacts of fishing activities. Future risk assessments will be undertaken in line with the guideline to reassess any current or new ecological risks that may arise in the fishery. ERAs can be undertaken more frequently if there are significant changes identified in fishery operations, management activities or controls that are likely to result in a change to previously assessed risk levels.

---

## Monitoring social and economic performance

The *Queensland Sustainable Fisheries Strategy: 2017–2027* outlines the target to set sustainable catch limits based on achieving maximum economic benefits of the resource, taken initially to correspond to around 60% of unfished biomass. This is to support the most economically efficient use of the resource, improve the fishing experience for all sectors (e.g. recreational fishing satisfaction) and promote a resilient system that can bounce back from other adverse environmental conditions (e.g. floods, cyclones and bleaching). The harvest strategy rules have been set up to maintain the stock to this target biomass level.

The following objectives and performance indicators will be used to monitor the social and economic performance of this fishery. The management options outlined are intended to provide some guidance on the options that could reasonably be considered alongside the decision rules if fishery trends are of concern.

**Table 3: Social and economic indicators for the QCRLF**

Objective	Performance indicators	Management options
Maximise economic performance of the commercial sector	Potential indicators to monitor include: <ul style="list-style-type: none"> <li>• catch per unit effort (average per day)</li> <li>• costs, earnings and net financial and economic profit</li> <li>• net economic returns, gross state product, gross value of production</li> <li>• quota sale and lease price</li> </ul>	Consider regulatory and non-regulatory options  Adjust management as needed  Options include minimum quota holding, latent effort review
Monitor the broader social and economic benefits of the fishery to the community	Potential indicators to monitor include: <ul style="list-style-type: none"> <li>• catch per unit effort (average per day)</li> <li>• fisher satisfaction (with their fishing experience – commercial and recreational)</li> <li>• Recreational fisher participation and economic information</li> <li>• percentage of quota/licences that are owned (rather than leased)</li> <li>• income generated (crew plus profit – gross value added)</li> <li>• proportion of catch sold locally</li> <li>• lobster prices</li> <li>• number of platforms / number of active licences / total capacity</li> <li>• community satisfaction (with their fisheries and the way in which they are managed).</li> </ul>	Consider regulatory and non-regulatory options  Adjust management as needed

## Data collection, validation and assessment

### Fishery-dependent data (self-reported)

Catch and effort data is obtained through commercial logbook returns and real-time landing reports. The catch and effort data required to determine the standardised commercial catch rate for key species are obtained from catch and effort logbook returns and vessel tracking data. The QCRLF logbook is available at [business.qld.gov.au](http://business.qld.gov.au). Charter operators also record catch information in logbooks, which is included as recreational harvest.

### Fishery-dependent data (independent validation)

All commercial fishing vessels are required to have vessel tracking systems installed and active on their vessels. Vessel tracking data is used to verify effort information reported in commercial fishing logbooks. As a quota-managed fishery, compulsory quota unload reports provide an accurate record of the catch. Queensland Boating and Fisheries Patrol undertake routine and intelligence-based at-sea and landing (unload) inspections to check compliance and validate reported information.

Surveys of recreational fishers at boat ramps and the statewide recreational fishing survey and Keen Angler Program logbook data help provide important information on recreational harvest.

### Scientific assessment of stock

No modelled stock assessment is currently available for the QCRLF. It is a priority under this harvest strategy to develop a modelled stock assessment for the commercial fishery area initially, and subsequently the full east coast stock. It is anticipated that this will enable a stock assessment to inform TAC-setting process at least biannually.

## Information and research priorities

Key information and research priorities have been identified in Table 6 to help meet the objectives of this harvest strategy. These will be updated as required.

**Table 4: Information and research priorities for the QCRLF**

Project description	Explanation of need	Priority	Funding sources
Modelled stock assessment	A new biomass estimate with associated TAC levels for achieving fishery targets	High	Industry
Explore collecting additional information (such as weight) to improve length-frequency data	Improve modelling of the stock	Medium	Industry
Improve understanding of recreational, charter and traditional harvest	Improve modelling of the stock outside the commercial fishing area	Low	Undetermined
Review source and sink profiling of Queensland lobster stocks	Better understand the genetic and spatial extent to improve modelling and management	Medium	Undetermined

## Schedule of performance monitoring, assessment and review

### Annual performance monitoring and assessment

The fishery’s performance will be monitored against this harvest strategy **annually**. This will include convening the tropical rock lobster working group to provide operational advice on the fishery’s performance and any matters that may need addressing.

The primary performance measure is spawning biomass, which will be used to review the TAC biennially, with a review of catch and effort data in intervening years. If a biomass estimate becomes available prior to the scheduled timeframe that indicates the TAC should be adjusted in order to meet the objectives of the fishery, then the TAC for that year should be reviewed.

While harvest strategies provide certainty and transparency in terms of management decisions in response to certain fishery information, there must also be flexibility to allow new information or changing circumstances to be appropriately considered. There may be instances in which a stock assessment may need to be available prior to, or delayed beyond, the scheduled date. Any change to the stock assessment schedule should be considered by the harvest strategy workshop and decided on by the chief executive based on the below conditions:

- If during the period between scheduled stock assessments the chief executive is concerned that a performance indicator (e.g. stock status, standardised commercial catch rate, total harvest) suggests the stock is not performing in a way that will achieve the target biomass level, the chief executive may decide that a stock assessment will be undertaken before the scheduled timeframe.
- If the chief executive is satisfied that (1) indicators for the stock suggest it is achieving, or rebuilding to, target biomass levels, and that there is a low ecological risk to the stock under the current management arrangements, or (2) if resourcing requirements prohibit the ability for an assessment to be delivered in the scheduled timeframe, the chief executive may decide that a scheduled stock assessment will be delayed.

**Table 5: Anticipated performance monitoring schedule for the QCRLF**

	Year 1 (2021)	Year 2 (2022)	Year 3 (2023)	Year 4 (2025)	Year 5 (2026)
<b>Monitoring and assessment activity</b>	Catch and effort monitoring	Modelled Assessment	Catch and effort monitoring	Modelled Assessment	Catch and effort monitoring
<b>Management activity</b>	Review of catch and effort data Bring forward TAC decision if needed	Review of TAC Declaration made if required	Review of catch and effort data Bring forward TAC decision if needed	Review of TAC Declaration made if required	Review harvest strategy Reset reference points and TAC if required

## Harvest strategy review

This harvest strategy will remain in place for a period of five years, after which time it will be fully reviewed in accordance with the *Fisheries Act 1994*.

The harvest strategy may be subject to further review and amendment as appropriate within the five-year period if any of the following circumstances arise:

- there is new information that substantially changes the status of a fishery, leading to improved estimates of indicators relative to reference points
- drivers external to management of the fishery increase the risk to lobster stock/s
- a new recreational harvest estimate becomes available that suggests the defined sectorial catch shares may have been set incorrectly or may be unrepresentative
- it is clear the harvest strategy is not working effectively and the intent of the *Queensland harvest strategy policy* is not being met.

For more information on the processes for amending harvest strategies, refer to the [Queensland harvest strategy policy](#).

## Acronyms and definitions

Acronym/term	Definition
<b>Biomass</b>	Total weight or volume of a stock or component of a stock (e.g. spawning stock biomass would refer to all adult (reproductively mature) fish in a population)
<b>Biomass at maximum economic yield (<i>B<sub>mey</sub></i>)</b>	The average biomass that corresponds to maximum economic yield
<b>Biomass limit reference point (<i>B<sub>lim</sub></i>)</b>	The point beyond which the risk to the stock is regarded as unacceptably high
<b>Biomass target (<i>B<sub>targ</sub></i>)</b>	The desired biomass of the stock
<b>By-product</b>	Any part of the catch that is kept or sold, but is not the target species By-product makes some contribution to the value of the catch in a fishery but less than that of key commercial species
<b>Catch-per-unit-effort</b>	The number or weight of fish caught by a unit of fishing effort Can be used as an index of relative abundance or indicator of change in the fishery
<b>Ecological risk assessment (ERA)</b>	An assessment process that evaluates the relative risk posed by fishing on species, habitats and communities within a fishery
<b>F</b>	Fishing mortality
<b><i>F<sub>targ</sub></i></b>	Fishing mortality target
<b>GBRMPA</b>	Great Barrier Reef Marine Park Authority
<b>Individual transferable quota (ITQ)</b>	Amount of catch or effort allocated to an individual fisher or company
<b>Maximum economic yield (MEY)</b>	Sustainable level of harvest that allows net economic returns (profit) to be maximised
<b>Maximum sustainable yield (MSY)</b>	The maximum average sustainable annual fishing mortality that can occur on a stock over an indefinite period under prevailing environmental conditions
<b>QCRLF</b>	Queensland crayfish and rock lobster fishery
<b>SAFS</b>	Status of Australian Fish Stocks
<b>Total allowable catch (TAC)</b>	The harvest limit set as an output control on fishing for all fishing sectors
<b>Total allowable commercial catch (TACC)</b>	The harvest limit set for the commercial fishing sector usually achieved through setting TACC, but sometimes through input controls