



POSITION STATEMENT

Fishing

Our position

Fishing is a long-established and important activity in the Great Barrier Reef Marine Park. While fishing activities are regulated within the Marine Park, some fishing practices continue to have an impact on the Reef. The Great Barrier Reef Marine Park Authority seeks to ensure fishing is ecologically sustainable through an ecosystem-based approach and management actions that consider the cumulative impacts of fishing on all species and habitats of the Marine Park.

Position snapshot

Fishing is an important activity in the Great Barrier Reef Marine Park that provides valuable commercial, recreational and cultural benefits. Fishing is a source of income for Queensland coastal communities, and many residents and tourists go fishing for pleasure.¹ The Great Barrier Reef Marine Park Authority welcomes sustainable fishing in the Marine Park.

The *Great Barrier Reef Intergovernmental Agreement 2015*² outlines how the Australian and Queensland governments collaborate to ensure fishing in the Marine Park is managed in a way that protects and conserves the Reef, including its World Heritage values. The Australian Government, through the Authority, is responsible for implementing the *Great Barrier Reef Marine Park Zoning Plan 2003*³, which identifies where various activities, including fishing, are permitted. Approximately two-thirds of the Marine Park is open to some type of fishing.

The Queensland Government has primary responsibility for managing fishing in the Marine Park through its *Fisheries Act 1994*.⁴ This includes commercial licencing, setting of total allowable commercial catch, seasonal closures, and limits to the size and number of fish kept by recreational fishers. Compliance with rules and regulations helps to conserve fish stocks for current and future generations.

While fishing is regulated, some fishing practices continue to compromise the health and resilience of species and habitats within the Marine Park. Threats identified in the *Great Barrier Reef Outlook Report 2019* include over-fishing, incidental impacts on species of conservation concern, illegal fishing and injury or death of discarded catch.¹ Impacts are not fully understood due to a lack of data such as catch across fishing sectors.^{1,5} Improved information is needed to make timely, evidence-based decisions that address these threats and ensure fishing in the Marine Park is ecologically sustainable. This is critical given the declining health and resilience of the Reef due to pressures such as climate change, poor water quality, coastal development and, indeed, fishing.

The Authority considers the following principles important to improve fishing outcomes in the Marine Park:

- an ecosystem-based approach that considers the impacts of all fishing on species and habitats
- harvest strategies that achieve long-term ecological sustainability and the recovery of over-fished stocks
- improved monitoring data, including independent verification where possible, of commercial and recreational catch
- measures that ensure species of conservation concern are not threatened by fishing activities (by-catch mitigation)
- adaptive fisheries management that incorporates climate change impacts and other ecosystem changes
- a high level of compliance with fishing rules and regulations by commercial and recreational sectors.

The Authority values the contribution responsible fishers make to knowledge sharing and as role modelling for sustainable fishing to help protect the health of the Reef and improve the long-term outlook for fisheries. The Authority is managing the Marine Park to be more resilient to the threats it faces, including working with the Queensland Government to improve fisheries management in the Marine Park.



Enhancing compliance ©Commonwealth of Australia (GBRMPA), photographer: Th3rd Dimension Media

Issue: impacts from fishing remain

Fishing in the Marine Park targets a diversity of species, including fish, sharks, crabs, prawns, rock lobsters, squid, coral and sea cucumbers.

Fishers rely on a healthy and resilient marine ecosystem to support their activities. However, habitats and species of the Marine Park are under unprecedented pressure from the cumulative impacts of climate change, land-based run-off, coastal development and fishing.¹ *The Great Barrier Reef Outlook Report 2019* identified that fishing continues to negatively affect the health and resilience of the Reef through:

- incidental impacts on species of conservation concern
- over-fishing of some species
- illegal fishing
- impacts on discarded catch
- damage to habitats.¹

Queensland fish stocks are managed according to a set of rules and standards under the *Fisheries Act 1994*.⁴ Knowledge gaps in Queensland fisheries management include limited data on the status of some fish stocks and the impacts of fishing on discarded species, a lack of formal harvest strategies with fishery-specific targets, and ad hoc management of fishing impacts on the broader Reef ecosystem.^{4,5} While there are possession limits, total recreational catch, including discarded catch, is not capped and risks from recreational fishing (including charter fishing) are poorly understood.¹

Management of fishing in the Marine Park should, to the greatest extent possible, account for uncertainty in the information used to underpin decision making.



Fishing in the Great Keppel Island group ©Tourism and Events Queensland, photographer: Tom Strickland

Fishing in the Great Barrier Reef provides valuable social, economic and cultural benefits

Commercial fishing in the Marine Park is an important contributor to Australia's seafood industry and generates approximately \$104 million annually.³⁰

Fishing is also one of the most popular recreational and tourism activities in the Reef. Approximately 90,000 recreational fishing vessels are registered for use in the catchment and recreational fishing (including charter fishing) generates significant economic activity.^{30,7}

It is also an important part of Aboriginal and Torres Strait Islander customs and traditions. Declines in culturally significant species can affect the Indigenous heritage values of the Reef.¹ The Authority acknowledges the rights of Traditional Owners to fish and gather from their Sea Country as recognised in the *Native Title Act 1993*.³¹

Impact: sustainability concerns

Queensland fishing rules and regulations are in place across the Marine Park to conserve fish stocks for current and future generations. However, over-fishing has caused significant population declines of saucer scallop (*Amusium balloti*), east coast Australian snapper (*Pagrus auratus*) and pearl perch (*Glaucosoma scapulare*).⁶ There are also concerns for the future sustainability of black jewfish^{7,8} and some species of shark.^{9,10,11} While the stocks of some fisheries are considered sustainable, the status of many other species is unclear due to limited data.⁶ Over-fishing and illegal fishing can compromise the long-term sustainability of stocks and impact the resilience of the marine ecosystem.^{12,13,14}

Fishing of spawning aggregations is a concern, for example, spawning aggregations of Spanish mackerel have declined significantly due to targeted fishing.^{15,16} Loss of spawning aggregations results in declines at the population level through reduced recruitment of new fish into the stock.^{17,18}

Many species that are caught are discarded as they may not meet regulations or have no commercial, recreational or cultural value. Discarded fish are often injured or do not survive.^{19, 20} Data on the quantity, composition and survival rate of discarded species are limited. Discarded catch in commercial fisheries may be higher than the retained catch, particularly in trawl fisheries.¹ Further data is needed to better understand the conservation status of some species, such as deep water skates and rays caught by the eastern king prawn sector of the trawl fishery operating in deep water south from the Swain Reefs.^{21, 22}

Incidental catch of species of conservation concern

The Reef is a refuge for many threatened, migratory, iconic and at-risk species. These species of conservation concern include inshore dolphins, whales, dugongs, sawfish, sea snakes, marine turtles and some fish and sharks.¹

Species of conservation concern may be injured or killed by fishing activities. For example, the use of large mesh-nets in the East Coast Inshore Fin Fish Fishery is a high risk to species of conservation concern due to potential entanglements and death.³² Impacts may be underestimated even though mandatory reporting is in place.³³ Even low levels of mortality may significantly affect the rate of recovery and population status of these species.^{34,35,36} The Authority considers the incidental catch of species of conservation concern to be the most significant fisheries sustainability issue in the Marine Park.

Fishing activities can also cause physical damage to habitats in the Marine Park. For example, anchors and line fishing can directly damage live coral colonies and contribute to increased coral disease.²³ Trawling can remove or damage plants and animals on the seabed.^{22,24} These risks to the biodiversity of the Marine Park have been reduced by zoning and improved trawling techniques. However, further research is required to understand the impacts of fishing on some habitats. For example, the sensitivity of deep water habitats to trawling is a major knowledge gap.

Actions and outcomes: ecologically sustainable fishing practices

The Australian and Queensland governments are committed to addressing significant threats to the health and biodiversity of the Reef through the *Great Barrier Reef Intergovernmental Agreement 2015*², including ensuring fishing practices are sustainable. Under the *Fisheries Act 1994*⁴, the Queensland Government has direct responsibility for managing fishing in the Marine Park, subject to meeting the long-term protection and conservation objectives of the *Great Barrier Reef Marine Park Act 1975*.²⁵ All export and Australian Government managed fisheries are also subject to assessments through the *Environment Protection and Biodiversity Conservation Act 1999*²⁶ to ensure fisheries are ecologically sustainable.

Conserving the biodiversity and ecological integrity of the Reef for its long-term protection requires:

- identification and management of risks from fishing to all species and habitats of the Marine Park using an ecosystem-based approach
- management of fish stocks at biomass levels sufficient to build resilience
- total allowable catch limits that account for take from all fishing sectors.

Robust data (e.g. catch, effort, incidental catch) is required for effective fisheries management. The Authority has stated that catch limits for key commercial and recreational fish species should aim to achieve 60 per cent unfished biomass.^{27,28,29} Harvest strategies should guide management responses and take into account the likely impacts of climate change in establishing management arrangements.

Effective by-catch mitigation measures help ensure the impact of fishing on the broader ecosystem is sustainable, especially for species of conservation concern. Any high ecological risks must be identified and managed. Approaches may include setting limits for interactions, restrictions on the use of particular fishing gear, and spatial or temporal closures.

The *Queensland Sustainable Fisheries Strategy 2017–2027*⁵ (Sustainable Fisheries Strategy) proposes reforms to ensure fisheries resources are managed sustainably into the future. The Sustainable Fisheries Strategy aims to deliver key outcomes for the Marine Park and if fully implemented, would help address the fishing related threats identified in the *Great Barrier Reef Outlook Report 2019*.

Progress is being made with a compliant harvest strategy in place for the the Reef Line Fin Fish Fishery. Harvest strategies are also under development for other fisheries in the Marine Park.



Two Cairns Marine vessels head out to the Coral Sea
©Cairns Marine



A Green Zone is a ‘no-take’ area and extractive activities like fishing or collecting are not allowed without a permit.

Benefits of zoning and importance of compliance

The Great Barrier Reef Marine Park Zoning Plan 2003³ (Zoning Plan) provides for a range of ecologically sustainable recreational, commercial and research activities and the continuation of cultural practices. The Zoning Plan protects biodiversity in the Marine Park and enhances Reef resilience. No-take (green) zones have healthier ecosystems with less coral disease, fewer outbreaks of crown-of-thorns starfish, and fish and coral communities recover faster following impacts from cyclones and coral bleaching.³⁸ No-take zones can also contribute significantly to populations of species such as coral trout in areas that are open to fishing, through the export of larvae.^{38,39}

Illegal fishing in no-take zones undermines the effectiveness of zoning and fisheries management controls such as catch limits, which can have flow-on effects for the future sustainability of some stocks. Increased investment in the reef [Joint Field Management Program](#) has strengthened enforcement activities through enhanced in-park presence.

Compliance and stewardship

Compliance with fishing rules and regulations in the Marine Park is essential to support sustainable fish stocks. To limit illegal fishing, compliance activities across the Marine Park have been strengthened through increased investment and the implementation of electronic vessel monitoring systems on all commercial fishing vessels. Implementation of new technologies to independently monitor and validate catch and interactions with other species is important. Regulation of fishing together with complementary education and stewardship programs can achieve a balance between voluntary actions and enforcement to ensure fishing in the Marine Park remains ecologically sustainable and viable into the future.

The Authority's [Reef Guardian Fishers](#) program recognises commercial fishers who take voluntary actions to minimise the impact of their operations on the Marine Park beyond legislative requirements. The Authority also supports local councils and recreational fishers implementing voluntary codes of practice across the Reef. For example, in Rockhampton, recreational fishers pledged to maintain healthy fish stocks through sustainable fishing practices as part of the [Rockhampton Recreational Fishing Voluntary Code of Practice](#). At a time when the Reef is under increasing pressure, reducing the impacts of fishing and ensuring the long-term ecologically sustainable use of the Marine Park is crucial. There are actions that everyone can take to help ‘protect your patch’.

In summary

Fishing is a major activity in the Marine Park that provides important social, economic and cultural benefits. However, there are fishing related impacts that continue to negatively affect the Reef and its values. The Reef is under unprecedented pressure and its health and resilience is predicted to decline further. The Authority supports improved fisheries management through an ecosystem-based approach, complementary educational programs and environmental stewardship to reduce risks from fishing to the Marine Park.

This position statement is endorsed by the Great Barrier Reef Marine Park Authority Board. For the evidence underpinning this position statement, refer to the [Great Barrier Reef Outlook Reports 2019](#) and supporting references.

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