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Net Gains

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1. Executive Summary

In 1981, the Great Barrier Reef was declared a UNESCO World Heritage Area in recognition of its 'Outstanding Universal Value.' However, the Reef's health is adversely affected by an array of anthropogenic threats, including climate change, poor water quality, predation by crown-of-thorns starfish, invasive species, industrial development, and commercial gill net fishing. As a result, in 2021, UNESCO recommended inscribing the Reef on the List of World Heritage in Danger. A joint UNESCO-IUCN Reactive Monitoring Mission carried out in 2022 identified a number of key threats and corresponding priority actions aimed at reversing the Reef's declining health and improving its resilience to climate change.

Phasing out commercial gill net fisheries operating within the World Heritage Area was identified as a 'high priority' recommendation by the Reactive Monitoring Mission. Currently, commercial net fishing is allowed in over 62% of the Great Barrier Reef Marine Park, which is part of the World Heritage Area. These net fisheries are inadequately monitored, despite posing a 'high risk' to populations of protected marine megafauna, including marine turtles, dugongs, dolphins, and sawfish. Moreover, commercial net fisheries are characterised by an ageing workforce, increasing management costs, and competition from a growing sustainable aquaculture industry.

There are myriad ecological, economic, and cultural benefits to ending commercial gill net fishing in the Great Barrier Reef World Heritage Area. Reducing bycatch and mortality in gill nets allows protected marine megafauna to recover and perform their ecological roles. High functional diversity also allows important habitats, such as coral reefs and seagrasses, to be more resilient to the effects of climate change and invasive species. Healthy ecosystems are a keystone of Queensland's multibillion-dollar tourism sector, supporting a variety of businesses, including whale watching, scuba diving, water sports, and charter fishing. Net-free zones have been shown to increase fish sizes and populations along the Queensland coast, drawing recreational fishers to the region and boosting local economies. In Rockhampton, Council-led reform of recreational fisheries has attracted funding for expansion and improvement of public infrastructure. For Traditional Owners with deep cultural connections to the Reef and its biodiversity, the phase-out of commercial gill net fisheries could create opportunities to pursue Indigenous-led conservation and tourism initiatives for the continued management of their Sea Country.

Finally, a just and equitable transition from gill net fishing presents an opportunity to switch to more sustainable fishing methods and scale up Australia's growing aquaculture industry. Fishers could pursue aquaculture and be incentivised and supported to produce seafood that generates lower chemical and greenhouse gas emissions, such as bivalves and seaweeds. Production of these taxa aligns with the demonstrated need for Australian industry to reduce emissions and limit climate change impacts on the Reef.

2. The Great Barrier Reef: a World Heritage Area under threat

Australia's iconic Great Barrier Reef is the world's largest coral reef system.

Stretching over 2,300 kilometres along the Queensland coast, the Reef supports an incredible array of wildlife, including globally significant populations of marine turtles, dugongs, inshore dolphins, migrating whales, sharks and rays, and over 1,600 species of fish. In 1981, the Great Barrier Reef was designated a UNESCO World Heritage Area in recognition of its 'Outstanding Universal Value' (Figure 1). However, the Reef's health and resilience are threatened by rising global temperatures, crown-ofthorns starfish, invasive species, poor water quality, destructive fishing, and other anthropogenic threats. As a result, in 2021, UNESCO recommended inscribing the Reef on the List of World Heritage in Danger. Before the listing could be confirmed, a Reactive Monitoring Mission[1] was carried out in 2022 to assess Australia's progress towards the Reef 2050 Plan, identify further threats, and recommend urgent actions. Improving the sustainability of commercial and recreational fisheries was identified as warranting additional consideration. These findings align with those of the 2019 Great Barrier Reef Outlook Report, which stressed the need for significant interventions to reduce fishing impacts on the Reef's biodiversity.[2]

Contrary to public perception, the World Heritage Area is not fully protected from extractive activities. Commercial gill net fisheries (comprising N1, N2, and N4 licences) are permitted to operate in over 62% of the Great Barrier Reef Marine Park,[3] overlapping with important habitats for vulnerable marine species. In particular, large mesh gill net fisheries in the East Coast Inshore Fin Fish Fishery pose a 'high risk' to 10 marine megafauna species by causing entanglement, injury, and drowning.[4]

Queensland's gill net fisheries are not closely monitored, and data from fishers' logbooks are known to be unreliable, especially for protected species.[5] Moreover, there is no fisheries independent monitoring program, resulting in very limited information about bycatch or fishing effort.[6] Despite widespread recognition of the damaging effects of gill nets,[7] the Queensland Government grants over 240 licences that permit the use of gill nets in the Marine Park—including in designated Dugong Protection Areas.[8]

In 2021, commercial gill net fisheries operating on Queensland's east coast caught an estimated 761 turtles, 1,348 sawfish, 22 dugongs, and 22 dolphins.[9]

One of the 'high priority' recommendations (Recommendation P10) of the UNESCO-IUCN Reactive Monitoring Mission was for Australia to phase out destructive gill net fishing in the Great Barrier Reef World Heritage Area.

The report indicated this could be accomplished by purchasing or retiring all gill net licences and establishing net-free zones "in areas of high conservation value for protected species." With the Commonwealth Government committing to invest AU$1.2 billion in projects to improve Reef health and management,[10] an opportunity exists to safeguard the Reef's outstanding universal value by permanently phasing out commercial gill net fishing in the World Heritage Area.

Figure 1: Commercial fisheries operate alongside globally-significant wildlife populations within the Great Barrier Reef World Heritage Area.

3. An uncertain future for gill net fisheries

Queensland's commercial fisheries caught over 15,600 tonnes of seafood valued at AU$157 million in the 2020-21 financial year.[11] The industry employs more than 3,400 Australians, with over 1,600 people working directly in fishing.[12] Commercial fishing is the largest extractive activity in the Marine Park, with about 8,000 tonnes of seafood harvested annually. However, its overall economic contribution is low relative to other sectors, generating approximately AU$104 million annually;[13] for comparison, the Queensland tourism industry is valued at AU$23 billion annually, with Reef-related tourism accounting for one quarter of total value.[14]

The Queensland commercial gill net fishery's catch, effort, and number of licences have been declining since the early 2000s.[15] Meanwhile, the cost of managing the fishery has risen and exceeds the revenue derived from licence and administration fees.[16] The majority of fishers in the East Coast Inshore Fin Fish Fishery are over 50 years of age and report that they can't fully earn a living from commercial fishing, which provides less than three quarters of their total income.[16] While commercial fishers indicate they are 'generally satisfied' with their lifestyle, over half identify negative mental health impacts from fishing, and three quarters of fishers would not encourage young people to choose a career in fishing.[16]

Commercial fisheries are also competing with high value returns from a growing aquaculture sector. In the 2019-20 financial year, aquaculture in Queensland generated more revenue than wild capture fisheries (AU$161 million and AU$156 million, respectively) despite producing roughly half as many fish as the wild-capture sector (9,500 tonnes and 16,900 tonnes, respectively).[17] Further, aquaculture produced 82% of Queensland's barramundi (2,904 tonnes worth AU$28.3 million) in 2019-20.[18] The ready availability of farmed barramundi has resulted in financial stress to commercial fishers in the past, with fishers unable to sell their catch to suppliers.[19]

In light of the declining productivity and sustainability issues in the commercial gill net sector, Queensland fishers should be supported to transition to more innovative, lucrative, and sustainable livelihoods. Such a transition would include funding to switch to less-damaging gears or enter the aquaculture industry, as well as support from regulatory bodies to trial new fishing methods (e.g. low bycatch barramundi traps).

4. Benefits of a net-free reef

Permanently phasing out commercial gill net fishing in the Great Barrier Reef World Heritage Area can deliver long-lasting ecological, economic, and cultural benefits (Figure 2).

There are many opportunities for Australia to demonstrate the benefits of transitioning away from gill net fishing. This report highlights the positive outcomes associated with phasing out commercial gill net fisheries and the many stakeholders who stand to benefit from doing so in the Great Barrier Reef World Heritage Area, including in priority habitats for threatened species (e.g. Dugong Protection Areas). It is evident that Australia must take prompt and decisive action to halt the degradation of the iconic Great Barrier Reef and to protect its Outstanding Universal Value for generations to come.

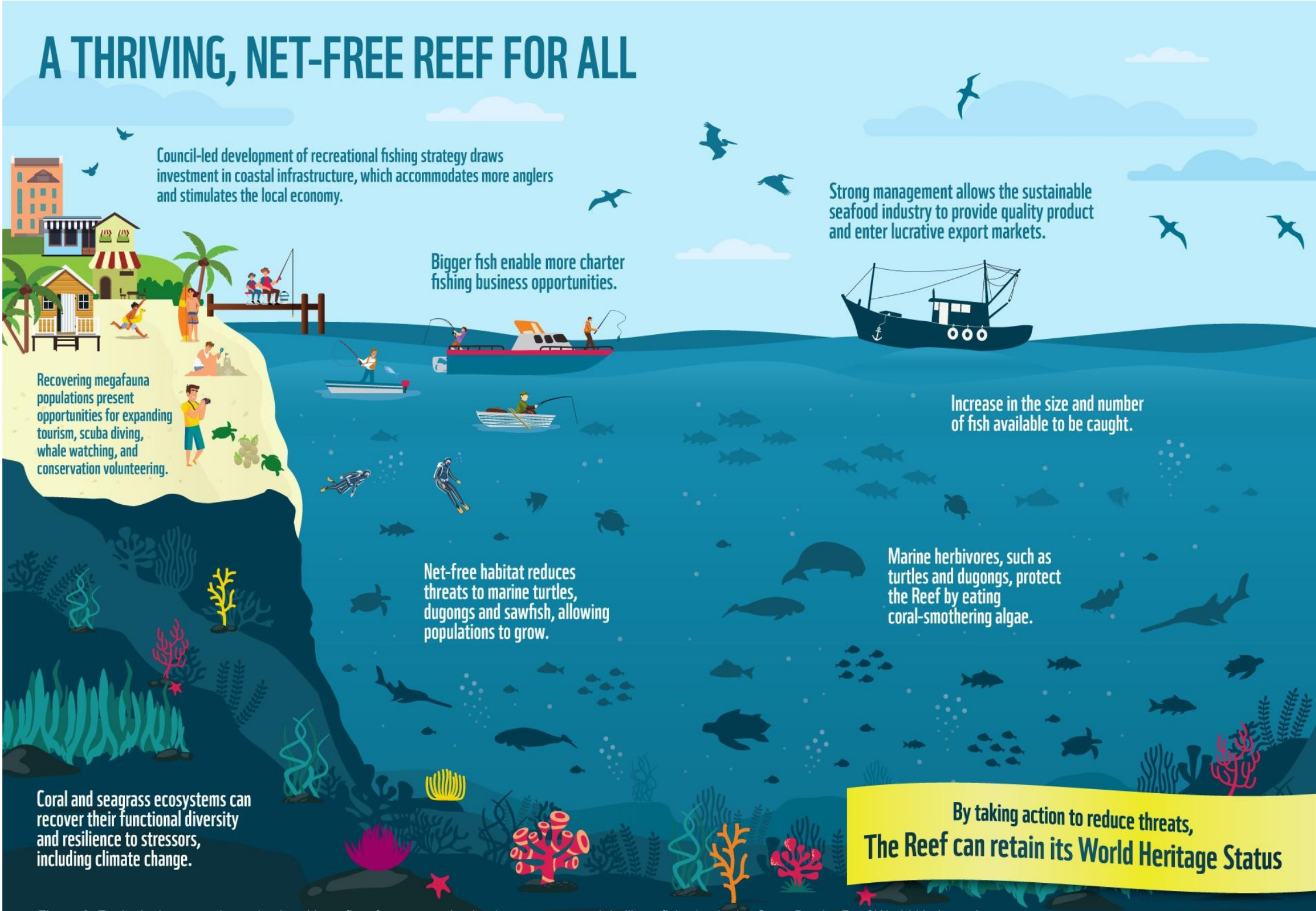


Figure 2: Ecological, economic, and cultural benefits of permanently phasing out commercial gill net fisheries in the Great Barrier Reef World Heritage Area

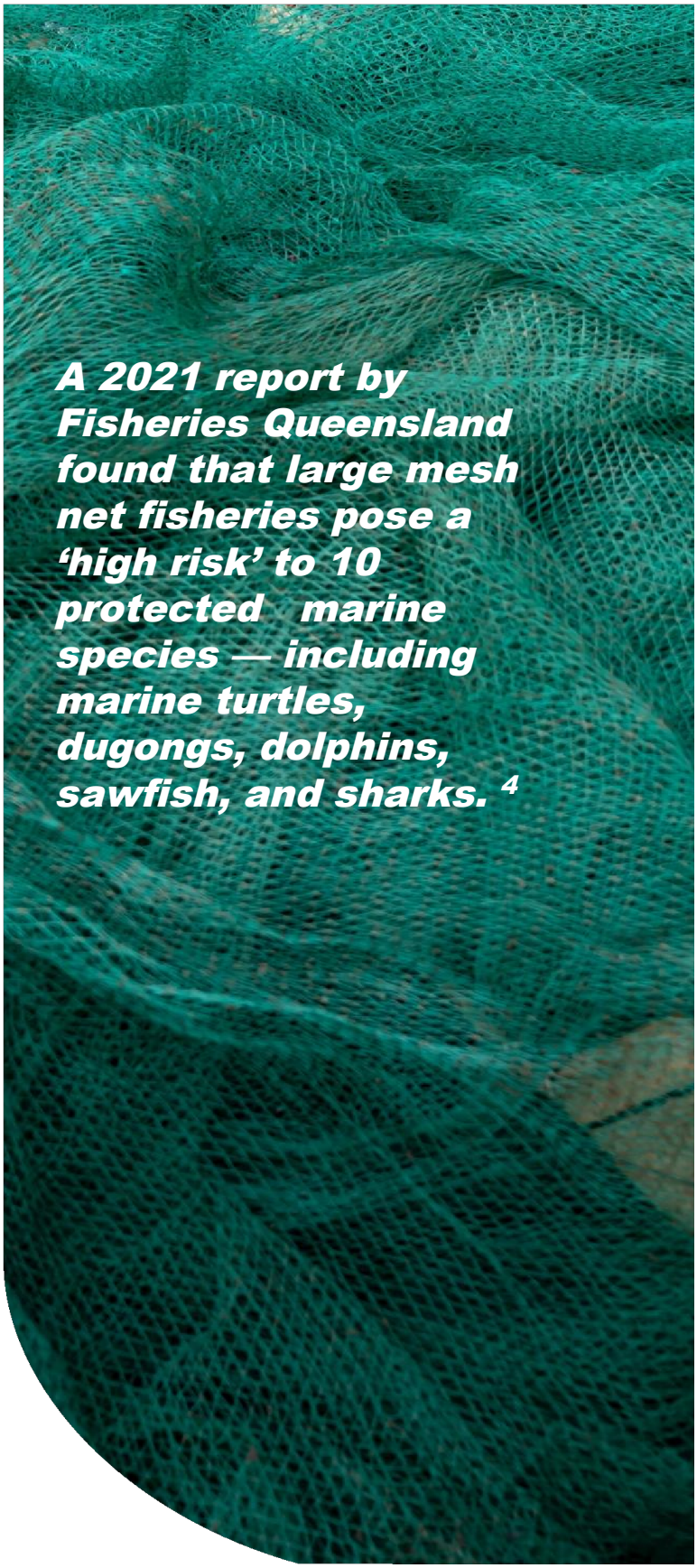
4.1 Benefits to biodiversity

4.1.1 Protected megafauna species

Commercial gill net fisheries operating in the Great Barrier Reef World Heritage Area interact with an array of non-target species, including protected turtles, dugongs, sawfish, and marine mammals. These long-lived species are highly susceptible to the effects of bycatch,[20,21] and mortality in gill nets has caused population declines across the globe.[22,23,24] To protect vulnerable marine megafauna, gill net fishing has been banned or restricted in India,[25] Mexico,[26] New Zealand,[27] and parts of the United States.[28]

Marine turtles have the highest estimated bycatch rate (82%) of all species of conservation concern interacting with the East Coast Inshore Fin Fish Fishery.[29] While a portion of these interactions occur in commercial fishing gears with very low mortality rates (e.g. tunnel nets), more than half of all interactions (67%) occur in gill nets.[29] Ceasing the use of gill nets in the Great Barrier Reef World Heritage Area could significantly reduce bycatch of species deemed to be at high risk of mortality in this gear, including loggerhead, green, and critically endangered hawksbill turtles.[4] Such an action is not without precedent: when the east coast loggerhead turtle population declined sharply due to unsustainable levels of mortality in Queensland's trawl fisheries,[30] the state government responded by mandating the use of turtle excluder devices (TEDs) in trawl fleets. Loggerhead bycatch subsequently decreased and the population is slowly recovering.[31]

Australia is one of the last remaining strongholds for sawfish, the world's most endangered elasmobranch family. Fisheries bycatch is the primary threat to sawfish in Australia, particularly in the inshore bottom trawl and gill net sectors.[32] It is widely recognized that sawfish numbers have decreased, and that fishing impacts are a key driver of these declines.[33] The inshore barramundi gill net fishery is of particular concern due to the lack of effective mitigation measures for incidental catch.[32]



Restrictions on gill net fisheries have led to positive ecological outcomes for marine wildlife, in Australia and internationally. Off Australia's southern coast, sea lion mortality in gill nets has decreased by 98% since the implementation of spatial closures and large-scale transfer to alternative fishing methods, such as longlines.[34] Sea lion pup numbers at important breeding sites along the coast are no longer declining and are beginning to stabilise, facilitating the population recovery of this endangered species. In California, banning gill nets has been instrumental in restoring harbour porpoises in Morro Bay; the population has grown by 9.6% per year since gill net fishing ended in 1989.[35] Similarly, the Hector's dolphin population of the Banks Peninsula, New Zealand, has grown by an estimated 6% since the decision to discontinue gill net fishing in 1988.[36]

Many marine species are migratory and utilize large areas for foraging, resting, and mating. However, many species are not adequately protected throughout the entirety of their habitats.[37] For instance, in the northern Great Barrier Reef, Raine Island supports the world's largest population of nesting green turtles.[38] While the island is a national park, green turtles also nest at multiple sites along the Queensland coast and thus need to be protected from bycatch threats across their whole distribution, not just portions of it.

4.1.2 Ecosystem resilience

Large mesh gill nets catch a variety of species, potentially reducing the functional biodiversity of ecosystems within the Great Barrier Reef. Coral reefs, mangrove forests, and seagrass meadows rely on species from all trophic levels to perform a variety of functions to regulate and maintain the ecosystem.[39] Low functional diversity reduces resilience, allowing the effects of stressors to be exacerbated by climate change. For instance, increases in sea surface temperature can facilitate rapid algal growth and coral bleaching.[40]

Removing fish biomass may render ecosystems more susceptible to colonisation by invasive species or outbreaks of pest species, such as the corallivorous crown-of-thorns starfish; one study found that fished reefs in the Great Barrier Reef Marine Park had up to three times more crown-of thorns than reefs in no-take areas.[41]

Without the pressure and impacts from gill net fisheries, ecosystems are able to rebuild their natural biodiversity and resilience. Along the west coast of Hawaii, fish biomass maintained or increased in marine protected areas (MPAs) where gill net and spear fishing was prohibited; MPAs without these restrictions saw a significant decrease in fish biomass within 10 years.[42] A permanent phase-out of net fishing would also reduce the prevalence of any lost or abandoned 'ghost nets', which have been found to indiscriminately kill marine wildlife in northern Australia and internationally.[43] Ghost nets also spread disease and cause structural damage to coral reefs,[44] further diminishing resilience to stressors such as bleaching events.

Ecosystems are further strengthened by having healthy populations of marine megafauna, which are threatened by incidental capture in gill net fisheries. Megafauna species connect ecosystems as they migrate between them, transporting nutrients,[45] and regulate the functional diversity of species within the trophic web.[46] Marine herbivores, such as marine turtles and dugongs, also maintain reef health by feeding on algae.[47] Green turtles and dugongs have been found to promote seagrass growth and resilience by stimulating new growth[48] and enhancing habitat connectivity.[49] Mitigating mortality of these species
in gill net fisheries should therefore be prioritised, as healthy seagrass meadows provide myriad ecosystem services, including protection of coastlines from erosion,[50] carbon sequestration,[51] improved water quality,[52] and provision of nursery habitat for commercially important fish species.[53]

4.2 Benefits to fisheries

4.2.1 Access to export markets

It is vital that commercial capture fisheries employ stringent standards of quality and sustainability in line with relevant regulatory measures, including catch monitoring schemes and harvest strategies. Failure to maintain these standards has cost the industry in the past: fishers in the East Coast Inshore Fin Fish Fishery lost the ability to export their catch when the Australian Government revoked the fishery's trade accreditation in September 2020.[54] The revocation was due in part to the fishery's failure to implement a monitoring program and collect data on fishery interactions with vulnerable marine species. Transitioning to more sustainable fishing practices—and receiving adequate government support to do so in compliance with regulations—is key to maintaining ongoing access to export markets and providing financial security for fishers.

Gill net catches tend to be of lower quality compared to line fisheries due to the longer soak times and associated poor animal welfare, depredation risk, and higher discard rates.[55,56,57] Australian fishers are increasingly turning to alternative capture methods in order to supply premium seafood products, which command higher prices in Asian markets: each year, Australian producers export AU$1.4 billion in high-value species such as rock lobster, tuna, abalone, and prawns.[58] Switching from gill nets to less damaging gear types would therefore benefit commercial fishers by increasing the quality and marketability of the product, provided sale prices were comparable or subsidies were put in place to protect fishers' incomes.

Furthermore, reducing impacts to iconic species is likely to improve public perception of commercial fisheries and secure their social licence to operate.[59] For instance, compared to gill nets, line fisheries tend to have lower interaction rates for vulnerable marine megafauna, such as turtles, dugongs, and dolphins.

4.2.2 Recreational fisheries

Recreational fishing is one of Queensland's most popular leisure activities, with more than 640,000 Queenslanders participating each year.[60] In 2015, the Queensland Government established net-free zones in three coastal areas within the Great Barrier Reef World Heritage Area: Cairns, Mackay, and Capricorn Coast (encompassing Rockhampton and the Fitzroy River). Since ceasing gill net fishing in these areas, many sought-after species, including barramundi and king threadfin, have increased in size, according to detailed fish tagging and size data collected by Infofish Australia (Figure 3). In the Fitzroy River section of the Capricorn Coast net-free zone, the average length of barramundi increased by 23% from 50.4cm to 61.9cm, and threadfin average sizes have increased by 24% from 63.1cm to 78.4cm.[61] Trophy-sized king threadfin (>1m in length) made up less than 2% of landings before the net-free zone was implemented, but now constitute a staggering 63% of threadfin catches.

The increase in trophy-sized king threadfin is indicative of enormous growth in the proportion of breeding females: like barramundi, king threadfin mature as males and then change sex to females at around 'trophy size'. Mackay and Cairns also saw improvements in fish sizes after the creation of their respective net-free zones, with the average length of barramundi in Mackay increasing by 13%, from 50.3cm to 56.9cm, and barred javelin average length increasing by almost 8%, from 31.0cm to 33.4cm. Larger fish produce more offspring than smaller ones,[62] and reducing mortality of large fish has been shown to boost population size.[63] The Fitzroy River, which is popular with recreational anglers, is already seeing the benefits of banning gill nets: in 2022, barramundi recruitment (the number of fish less than one year old) was the strongest since 1996, and golden snapper numbers have increased in the river.[61] Recreational fishers' satisfaction with fishing conditions has also increased since the creation of the net-free zones, with fishers enjoying improvements in the numbers and sizes of fish caught.[64]

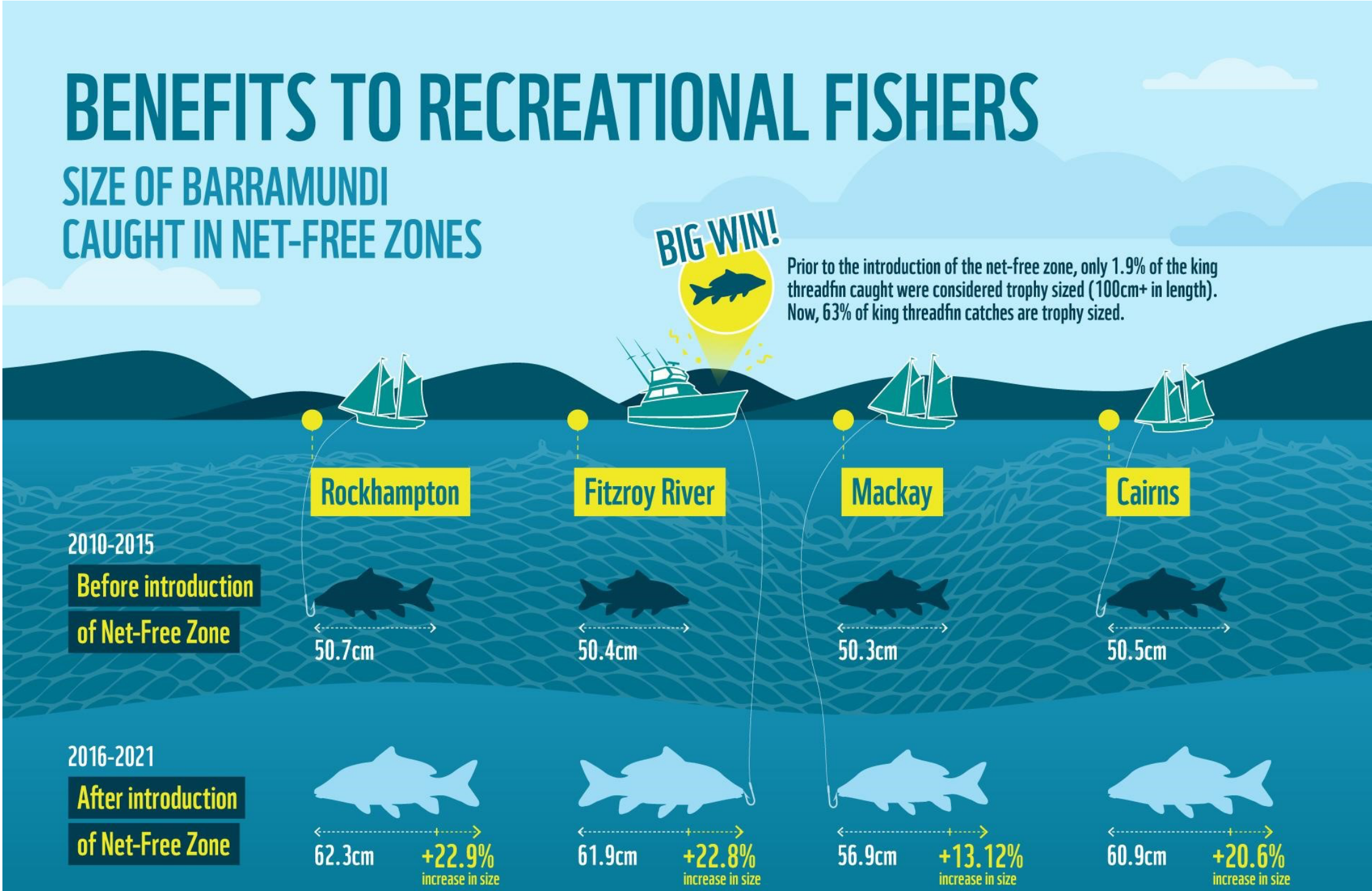


Figure 3: Barramundi size increase caught in existing net-free zones along the Queensland coast.

4.3 Benefits to economies and communities

4.3.1 Tourism and development

There is significant public support for phasing out commercial gill net fishing from the Great Barrier Reef World Heritage Area. When the Queensland Government announced the creation of three netfree zones in 2015, recreational fishers and local communities welcomed the announcement[65] and 90% of public submissions were in favour of creating net-free zones.[66]

Tourism in Queensland is worth up to AU$23 billion annually, a quarter which is from the Great Barrier Reef.[14] The recreational fishing sector plays a sizeable role in the tourism industry, with recreational fisheries in the state's major fishing regions representing an aggregate value of AU$788 million each year.[67] Tourism by recreational fishers provides a source of revenue for many coastal communities and local businesses. Improving the quality and sustainability of recreational fisheries has been shown to boost tourism, with the Fitzroy River receiving significantly more visiting anglers after the creation of the Capricorn Coast net-free zone.[61] The influx of visitors also prompted the creation of five local fishing charter tour businesses, expanding the local tourism offerings and bringing employment opportunities to the region.

The Great Barrier Reef is one of the world's most popular tourist attractions. Its contribution to the Australian economy is valued at AU$6.4 billion.[14]

Data from Infofish Australia suggests that areas with larger net-free zones experienced bigger tourism gains. This type of economic growth could potentially be replicated in other coastal towns and regions where net fishing is no longer permitted, with positive effects for local communities. Tourism opportunities could also potentially extend beyond recreational fishers to further capture the benefits of a net-free Great Barrier Reef, including scuba diving and other water activities, interactive wildlife experiences, and conservation volunteering. These industries would also benefit from recovering populations of marine megafauna, with tourists stating a higher willingness-to-pay for interactions with whales and dolphins, sharks and rays, marine turtles, and large fish.[68]

The creation of the three net-free zones in 2015 also catalysed investment in infrastructure, community engagement, and environmental management. The Rockhampton Regional Council adopted a Recreational Fishing Development Strategy in 2016 to guide the management of its local fisheries and define opportunities to "create a new tourism destination for Central Queensland."[69] The Council has since attracted several million dollars in government support to fund new jetties, pontoons, boat ramps, ecological monitoring programs, and community fishing groups.[70,71]

The Rockhampton Council also supported the introduction of an angler code of conduct, which introduces voluntary management interventions like limiting catches below current bag limits and further reducing the maximum size fish limit for fish to protect breeding females. To improve compliance and better manage the impacts of recreational fisheries, councils should work with relevant authorities to ensure that these codes are enforceable.

4.3.2 Traditional Owners

Traditional Owners have lived in Australia for more than 60,000 years and are the oldest continuous civilisation on Earth.[72] In Queensland, there are 70 Traditional Owner groups whose Sea Country overlaps with the boundaries of the Great Barrier Reef World Heritage Area. Many of these groups maintain strong cultural connections to the Reef and its wildlife, with species such as turtles, dugongs, sawfish, and barramundi considered totemic to certain clans or families.[73] Archaeological evidence shows that Traditional Owners maintained sustainable fisheries for thousands of years before Western colonisation.[74] Consequently, Traditional Owners, and their knowledge and practice of culture, play a vital role in maintaining the Reef's health.

In 2019, a WWF-led consultation with Traditional Owners in Far North Queensland documented significant support among certain groups for eliminating commercial gill net fisheries in their Sea Country.[75] Participants from Lama Lama,

Wuthathi, and Kuuku Ya'u (through Bromley Aboriginal Corporation) shared their concerns regarding the ecological impacts of gill net fisheries on their Country, such as bycatch of totemic species (e.g. turtles, sawfish) and nets left abandoned in the water.

Importantly, Traditional Owners should be able to decide which activities take place on their Country. Each of the Traditional Owner groups surveyed in the 2019 consultation expressed their interest in developing Indigenous-led tourism, such as bush camps and charter fishing operations, as long as these activities were managed carefully to minimise cultural and ecological impacts. Participants also pointed out that well-managed, sustainable fisheries could be a potential source of much-needed income for community members. Such activities might also include aquaculture and the expansion and innovation of traditional fishing methods, including culturally-significant fish traps that are thousands of years old.[76]

4.4 Benefits to Australia's future

4.4.1 Demand for sustainable seafood

Australian fisheries and aquaculture production is projected to be worth AU$3.7 billion by the 202324 financial year.[77] Despite rising domestic seafood consumption, more than 70% of seafood consumed in Australia is imported, primarily from Thailand, Vietnam, China, and New Zealand.[78] Recent surveys of Australian consumers indicate there are opportunities for the Australian seafood industry to profitably invest in improving fisheries sustainability. Australia's national science agency (CSIRO) estimates that the sustainability sector will grow by 3.6% per annum in the next decade,[79] with many Australians—especially those from younger generations—expressing a higher willingness-to-pay for produce that is local and has a transparent supply chain and origin.[80] Thus, investing in sustainable fishing practices should be prioritised to meet consumer demand in the future.

Transitioning from gill netting to more sustainable and innovative fishing practices will inherently improve the quality of seafood produced and generate interest from consumers and businesses looking for sustainable options. One Australian abalone producer, Rare Foods Australia, has expanded its sustainable green-lip abalone products to international markets and major hotel chains.[81] National supermarket Woolworths has announced its dedication to sourcing 100% of its own-brand seafood from sustainable operators by 2025.[82] This could provide an opportunity for major retailers to support consumers in choosing sustainable Australian seafood products. With global awareness and demand for 'ecoconscious' and sustainable products growing, businesses must improve their practices to keep up with new government standards and agreements to reduce national environmental impact.[83]

4.4.2 Opportunities in aquaculture

Aquaculture is the world's fastest-growing food production system.[84] Australian aquaculture has grown significantly over the past decade and now outperforms wild-capture fisheries by value, with aquaculture accounting for 56% of the value of Australian fishery production in 2020-21, but only 43% of its total volume.[85] Australia's aquaculture sector is forecast to increase by 11% to AU$2.29 billion in 2022-23.[77] By 2027, aquaculture is predicted to account for 64% of the value of total Australian fisheries production.[77] With the Queensland aquaculture sector now producing more barramundi than the state's capture fishery,[85] gill net fishers have an opportunity to pursue a variety of livelihood options within an expanding, more sustainable industry.

While aquaculture operations have varying degrees of ecological impacts (e.g. eutrophication, greenhouse gas emissions, feed production),[86] recent research indicates that these impacts are lowest for farmed bivalves, such as mussels, and seaweeds.[87] Australian aquaculture should be supported to prioritise production of these and other taxa that can be sustainably produced in each local context, in recognition of the ongoing need for Australian industry to reduce emissions and limit climate change impacts on the Reef.[88,8]

5. A sustainable and equitable transition

In light of the findings of the joint UNESCO-IUCN Reactive Monitoring Mission, the Queensland Government must take urgent action to reduce human impacts on the Great Barrier Reef World Heritage Area in order to maintain its Outstanding Universal Value. Based on the findings presented in this report, we recommend the Queensland Government strongly consider the following actions.

1. Commercial gill net fisheries operating in the Great Barrier Reef World Heritage Area should be phased out in accordance with the findings of the joint UNESCO/IUCN Reactive Monitoring Mission. To reduce impacts on protected marine megafauna and increase the resilience of the broader ecosystem, a phased approach could consider prioritising the purchase of licences active in critical megafauna habitats, including existing zones designated for conservation purposes (e.g. Dugong Protection Areas).
2. It is important that commercial gill net fishers (N1, N2 and N4 licences) be financially supported to transition away from gill nets to less harmful gear, or towards alternative livelihoods if they decide to leave the fishing industry. Whatever their choice, the transition must be equitable, transparent, and sustainable.
3. Fishers wishing to transition to the aquaculture sector should be financially supported to establish and expand production of species that minimise greenhouse gas emissions, water and land use, and feed inputs.
4. Switching from gill nets to alternative gears—including those targeting more sustainable species—may result in changes to catch per unit effort (CPUE) and catch composition, which directly affect the supply and price of seafood products. These effects should be investigated through a scoping study, with recommendations for relevant mitigation measures (e.g. subsidies) as appropriate.
5. Innovation in fishing gears and methods should be encouraged and supported by Fisheries Queensland as part of the implementation of the Queensland Sustainable Fisheries Strategy 20172027.
6. The phase-out of commercial gill net fisheries must be accompanied by improvements to existing management of commercial fisheries, including robust monitoring programs for bycatch and protected species, electronic monitoring, and other relevant measures.
7. Management and monitoring of recreational fisheries should be improved to ensure ecological impacts from this sector remain minimal, with recreational fishing strategies and codes of conduct established by all Councils within the World Heritage Area (see examples produced by Rockhampton Regional Council).
8. Traditional Owners should be empowered and supported to initiate processes to assess community willingness to support a phase-out of commercial gill netting, as well as the implementation of Indigenous-managed tourism and fishing activities on their Sea Country.

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