Great Sandy Marine Park Zoning Plan

DECISION REGULATORY IMPACT STATEMENT

JULY 2023

Queensland Government

Prepared by: Queensland Parks and Wildlife Service and Partnerships, Department of Environment and Science

The Department of Environment and Science acknowledges Aboriginal peoples and Torres Strait Islander peoples as the Traditional Owners and custodians of the land. We recognise their connection to land, sea and community, and pay our respects to Elders past, present and emerging.

The department is committed to respecting, protecting and promoting human rights, and our obligations under the Human Rights Act 2019.

July 2023

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1 Executive Summary

This Decision Regulatory Impact Statement (Decision RIS) outlines the Queensland Government's preferred policy position to update and remake the legislative framework for the management and conservation of the Great Sandy Marine Park (GSMP).

The comprehensive review of the Marine Parks (Great Sandy) Zoning Plan 2017 (the zoning plan), is a requirement of the *Statutory Instruments Act 1992* and has investigated whether the existing management arrangements:

- conform with contemporary marine protected area management principles
- adequately represent and protect the range of habitat types and protect threatened species that occur within the park
- comprehensively conserve the natural and cultural values while allowing for a range of sustainable uses (both recreational and commercial) to occur.

The review examined, and the Consultation Regulatory Impact Statement (CRIS) discussed, a range of proposed changes to the existing zoning plan that were centred around the following key themes:

- habitat protection
- resolving conflict in the designated Great Sandy Area waterways
- protection of threatened species and cultural values
- coastal management
- complementary management with national parks and declared Fish Habitat Areas
- the description of the outer boundary of the marine park, and
- addressing a range of administrative and compliance matters.

During the public consultation period (22 September to 22 October 2022) the Department of Environment and Science (DES) held over 40 stakeholder meetings and received 1245 online survey responses and 215 written submissions. Two of these written submissions were 'campaign form letters', generated by the Australian Marine Conservation Society (4056 letters) and the Queensland Seafood Industry Association (1066 letters) and one of the submissions was from the Great Sandy Alliance which represented the views of 26 organisations from the conservation and tourism sectors.

Extensive engagement with First Nations peoples' representative bodies (Port Curtis Coral Coast Trust Limited, Butchulla Native Title Aboriginal Corporation, Butchulla Aboriginal Corporation and Kabi Kabi Peoples Aboriginal Corporation) has occurred, as it is respectfully acknowledged that First Nations peoples have a strong and enduring connection to the land and sea Country within and in areas adjoining the marine park. This engagement is ongoing, where necessary, to allow aspirations for the management of sea Country to be further discussed. First Nations peoples' views have been incorporated in the design of the final zoning plan.

Analysis of the consultation feedback, commissioning of further specialist economic and technical advice and discussions across government have informed the final adjustments to the zoning and management changes that will be incorporated in the final zoning plan. The following key changes to the existing zoning plan will balance the imperative to ensure effective conservation measures that provide the foundation for ecosystem conservation and the sustainable recreation, economic and other social uses of the marine park:

- Changes in zoning to incorporate 12.8% of the area of the marine park in Marine National Park zones contributing to a total of 28.6% of the marine park in highly protected zones (Marine National Park and Conservation Park zones)
- Measures to protect vulnerable habitats, and cultural and amenity values (e.g. designated No Anchoring Areas, Go Slow Areas, No Motorised Vessel Areas and an area of no motorised watersports in Platypus Bay)
- Removal of the designated Great Sandy Area from Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet and associated prohibition of commercial large mesh gill nets and ring nets (operating under N1 and N2 fishery symbols) from these waterways
- Measures to increase protection of threatened species, including shorebirds, turtles, dugongs and grey nurse sharks (e.g. new and expanded Go Slow Areas, Seasonal Shorebird Closure Areas, an expanded Marine National Park zone at Wolf Rock)
- Zone changes to facilitate local government responses to increased threats of coastal erosion from climate change impacts.

Managing and mitigating the threats posed by the degradation of marine and terrestrial ecosystems is inherently complex, and often brings into conflict differing economic, environmental, and social imperatives. In arriving at

these legislative changes, the Queensland Government has considered the submissions made by user groups, assessed the technical and scientific data, and arrived at decisions that can be demonstrably assessed as being in the public interest.

Commercial fishers will be the most significantly impacted marine park users from the zoning and management changes. While the impacts to most commercial fisheries (i.e. trawl, pot, line and harvest) will be minor/moderate, the changes will result in the commercial gill net fishery losing access to significant areas of productive net fishing grounds within the marine park. This outcome is predicted to result in a reduction in the overall net catch from within the marine park by approximately 67%, with a value of approximately $1.7m (GVP) per year. The sustainability of large mesh gill nets as a commercial fishing method, particularly in relation to the entanglement risk that these nets present to threatened species, is an issue of increasing concern to the local and international community. This concern has recently resulted in an announcement by the Australian and Queensland governments to phase out the use of large mesh gill nets in the adjoining Great Barrier Reef World Heritage Area by mid-2027.

A cost benefit analysis (CBA) was commissioned to assess the additional economic value expected to arise from the removal of large mesh gill nets and ring nets from the designated Great Sandy Area waterways, as this is the zoning plan review decision that will be of greatest impact to the net fishery. The CBA compares only the additional value of fishing to commercial and recreational fishers and excludes the impacts on the resources they employ or use in fishing (as well as the additional value for further processors and consumers of that fish). On that basis, the CBA concludes that removing these nets will result in a net economic benefit for Queensland, with the benefits primarily driven by the increase in recreational fishing opportunities resulting from the removal of the nets.

While it is recognised that the impacts of the zoning and management changes to the commercial fishing sector will result in fishing businesses leaving the industry and associated job losses, and impacts to the post-harvest seafood sector, quantification of the impact in terms of these metrics has not been attempted, given considerable uncertainty over the businesses directly affected, their operations and how they would respond to the changes and the immediate impacts of the reduced catch. Industry consultation indicated the immediate impacts would be severe for some businesses (and those employed). There are also broader impacts associated with the net fishing changes on the Great Barrier Reef that are likely to have a material effect on some commercial fishers and the post-harvest seafood sector in the Great Sandy region.

The impacts to the commercial fishing sector and the post-harvest seafood sector will be addressed through a commercial fishery impact mitigation package. This package will be designed in collaboration with the Department of Agriculture and Fisheries (DAF) and the Queensland Rural and Industry Development Authority (QRIDA), and will consider the broader impacts associated with the Great Barrier Reef net fishing changes announced on 5 June 2023.

To further support the economic benefits from the revised zoning plan, enhance the region's enviable nature-based and recreational fishing lifestyle and to improve community access to enjoy the values of the park, the Queensland Government has also committed funding for additional recreational boating infrastructure and artificial reefs.

2 Background

This Decision Regulatory Impact Statement (Decision RIS) follows consultation that was undertaken between 23 September and 23 October 2022 on the 'Great Sandy Marine Park Zoning Plan Consultation Regulatory Impact Statement'. This Decision RIS provides an overview of the consultation process and options consulted on, a summary of the submission feedback received, and how that has informed the impact assessment and decisions that will be integrated into a final zoning plan to secure conservation outcomes that will safeguard the health of the GSMP, and broader environment it supports, for future generations.

In response to the feedback received in relation to the Consultation Regulatory Impact Statement (CRIS), DES revised the overall preferred approach to address key problems identified with the existing zoning plan. This Decision RIS provides an explanation of this final revised position, and an associated cost benefit analysis of its potential impacts on the environment, business and industry, the government, and the community.

Firstly however, this Decision RIS provides some context of the existing legislative framework, the issues the CRIS addressed, and the options presented in the CRIS.

2.1 Identification of the problem

In the lead up to the GSMP zoning plan review and in response to a 2019 Discussion Paper, DES received feedback from First Nations peoples, key stakeholder and user groups, scientists, local government, and the community on several problems in relation to the existing management arrangements including:

- inadequate habitat protection via representation in Marine National Park (MNP) zones
- conflict between fishing sectors in waterways, particularly those within the designated Great Sandy Area
- inadequate protection of threatened species and unique habitat types
- inadequate consideration and protection of cultural heritage sites and values
- the need for complementary management arrangements with those at the northern end of K'gari
- incompatible zoning to meet coastal management requirements to mitigate the impacts of climate change
- some marine park administrative and compliance matters.

2.2 Objectives of government action

In addressing these problems, the zoning plan review, consultation, and analysis has focussed on the following key objectives:

- Improving the existing network of zones to better reflect global biodiversity targets, meet contemporary marine protected area management principles for habitat protection and deliver an integrated zoning framework to balance conservation and use of the marine park.
- Addressing specific threats to habitat quality, integrity, and management in various locations throughout the marine park.
- Addressing conflict between fishing sectors in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet (the designated Great Sandy Area).
- Improving the protection and potential for long-term population recovery of threatened species and support state, national and international obligations.
- Protecting cultural values, respecting native title rights and recognising the responsibilities of First Nations peoples to Care for Country.
- Complementing the management of the marine park with existing declared Fish Habitat Areas (FHAs), adjoining National Parks and the K'gari (Fraser Island) World Heritage Area.
- Enabling the authorisation and/or undertaking of works at various locations within the marine park to address a range of coastal management issues.
- Ensuring the maximum penalties for offences reflect the environmental consequences of the offence.
- Ensuring the outer boundary is defined in such a way that the accuracy and awareness of the extent of the marine park is improved.

The preferred approach for the final zoning plan presented in this Decision RIS, aims to provide a legislative framework to meet the purpose of the *Marine Parks Act 2004,* the objectives listed above and to ensure developments proposed and activities that occur within the multiple use marine park are ecologically sustainable and do not lead to unacceptable loss of environmental quality.

In doing so, the Queensland Government is committed to respecting, protecting and promoting human rights. Under the Queensland *Human Rights Act 2019*, the Queensland Government has an obligation to act and make decisions in a way that is compatible with human rights and, when making a decision, to give proper consideration to human rights.

In particular, the *Human Rights Act 2019* recognises that Aboriginal peoples and Torres Strait Islander peoples hold distinct cultural rights (section 28). Among these rights are the right to enjoy, maintain, control, protect and develop identity and cultural heritage, language, kinship ties, and distinctive spiritual, material, and economic relationship with the land, territories, waters, coastal seas and other resources. Changes to be included in the final zoning plan engage the cultural rights of First Nations peoples. The final zoning plan will recognise the native title rights and interests of Traditional Owners under section 211 of the Commonwealth *Native Title Act 1993*, including any activity involving the traditional use of marine resources.

2.3 First Nations peoples and their connection to land and sea Country in the Great Sandy Marine Park

There are six groups of First Nations peoples with a connection to the waters identified as the Great Sandy Marine Park. This is an enduring and sacred connection that spans tens of thousands of years of history; it continues today and will continue into the future. Inherent to this connection, is the responsibility of First Nations peoples to Care for Country. Over hundreds and thousands of years, traditional custodians have managed and conserved land and sea Country. The land and sea Country within the Great Sandy Marine Park has significant natural and cultural values, which intertwine and interconnect to form a rich cultural landscape that consists of all the land and waters, the air, the sky, the flora and fauna and people. These values can be physical (tangible) and non-physical (intangible). The marine park provides a legislative and management framework that can significantly assist the future conservation of culture and values.

Within areas of the marine park, connection to Country is additionally recognised through three determinations of native title, a registered native title claim and a Traditional Use of Marine Resources Agreement (TUMRA) (Figure 1). The traditional Country of the Bailai, Gurang, Gooreng Gooreng, Taribelang Bunda peoples is located from the Burrum River north and is recognised through a native title Determination. The Registered Native Title Body Corporate (RNTBC) for this Determination works closely with, and is represented by, the Port Curtis Coral Coast Trust. A TUMRA applies over the adjoining Port Curtis Coral Coast Sea Country within the marine park.

Butchulla Country, recognised across two native title Determinations, includes K'gari, the Great Sandy Strait and the adjacent mainland from the Burrum River in the north down to Double Island Point in the south. Butchulla Aboriginal Corporation is the RNTBC for the Butchulla People #2 Determination Area that includes K'gari, while the Butchulla Native Title Aboriginal Corporation (BNTAC) is the RNTBC for the Butchulla People Land & Sea Claim #2 Determination Area that extends over the Great Sandy Strait and around K'gari. This Determination recognises areas of exclusive native title over some tidal areas.

There is an active native title claim from the Kabi Kabi Peoples Aboriginal Corporation that includes an area at the southern extent of the marine park.

Engagement with all First Nations peoples' representative bodies has occurred as part of the zoning plan review, to understand and incorporate the knowledge, priorities and perspectives of First Nations peoples in the development of the final zoning plan. The views of the Bailai, Gurang, Gooreng Gooreng, Taribelang Bunda peoples, the Butchulla people and the Kabi Kabi peoples have been incorporated in the design of the final zoning plan which seeks to conserve Country for the future. The Queensland Government expresses deep appreciation to the traditional custodians of land and sea Country within the marine park for their advice and knowledge sharing through the review process.

Engagement with the traditional custodians of the marine park is ongoing. It is acknowledged that these partnerships will continue into the future, to develop marine park management outcomes that effectively integrate and improve protection of cultural values.

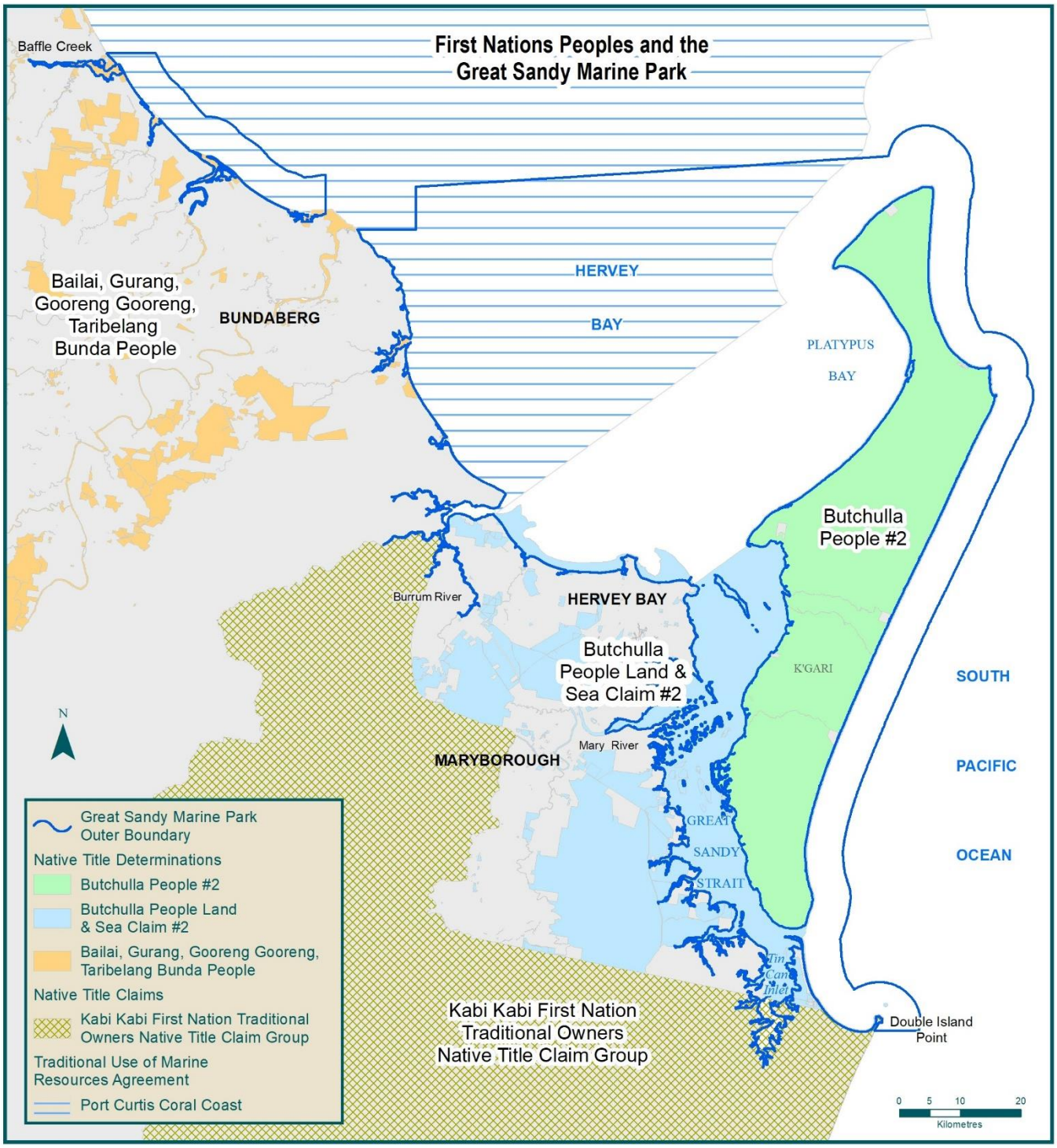

Figure 1. First Nations peoples with a connection to the Land and Sea Country of the Great Sandy Marine Park.

3 Options presented in Consultation RIS

3.1 No change

Under the Queensland Treasury guideline - 'The Queensland Government Guide to Better Regulation' - the option of maintaining the 'status quo' must be considered. A number of options were identified and considered against the 'base case' of no change to the existing zoning plan provisions in order to develop a preferred approach to address the identified problems and improve the effectiveness and efficiency of the zoning plan at conserving the marine environment within the GSMP. These options and preferred approaches were presented in the CRIS and are outlined below.

3.2 Options presented

A number of problems were identified with the existing zoning plan based on government priorities, recommendations of the Scientific Reference Group (SRG) and feedback, received prior to and during the zoning plan review from First Nations peoples' representative bodies, stakeholders, and the public. Many of the problems are not mutually exclusive and require a holistic response to achieve the best outcomes for the marine park and its users. The problems and potential options to address them, including a preferred approach, were set out within the CRIS under the following key themes:

- Habitat protection
- Conflict in the waterways of the designated Great Sandy Area
- Protection of threatened species
- Protection of cultural and amenity values
- Management of Platypus Bay to complement K'gari management
- Coastal management and alignment with declared Fish Habitat Areas
- Offence penalties and a range of other amendments
- The description of the marine park boundary.

Proposals developed to address these problems (Table 1) generally require a regulatory change and/or will have a regulatory impact. An impact analysis comparing the costs and benefits to the existing management situation (i.e., the management arrangements that apply under the existing zoning plan) was provided, based on quantitative (where data was available) and qualitative assessment measures.

Table 1. Objectives of government action for the problems identified with the existing zoning plan and options considered in the CRIS to address problems, including the preferred option (bold text) incorporated and presented in the draft zoning plan.

Objective	Problem	Options considered in the CRIS; preferred option (bold text) was incorporated in the draft zoning plan
Theme: Habitat protection		
Improve the current network of zones to better reflect global biodiversity targets, reflect contemporary marine protected area management principles and more effectively deliver a zoning framework that balances conservation and use.	Current zoning not providing adequate habitat representation, reflecting global biodiversity targets or meeting contemporary marine protected area management principles.	1. No change. 2. Change zoning to include 8.3% of the area of the marine park in MNP zones with supporting changes to other zones. **3. Change zoning to include 12.8% of the area of the marine park in MNP zones with supporting changes to other zones.** 4. Change zoning to include 20.6% of the area of the marine park in MNP zones with supporting changes to other zones.
Address specific threats to habitat quality, integrity and management in various locations throughout the marine	Sensitive habitats at two sites at Point Vernon and one site in Platypus Bay at risk of anchoring impacts.	1. No change. 2. Establish MNP zones over the three sensitive sites. **3. Establish designated No Anchoring Areas over the three sensitive sites.**
	Benthic habitats in the lower reaches of the Mary River impacted by beam trawling.	1. No change. 2. Phase out beam trawling in the lower reaches of the Mary River after 5 years.

Objective	Problem	Options considered in the CRIS; preferred option (bold text) was incorporated in the draft zoning plan
park.		**3. Immediately remove beam trawling in the lower reaches of the Mary River.**
	Habitats in the Great Sandy Strait impacted by commercial bloodworming.	1. No change. 2. Phase out commercial bloodworming from the Great Sandy Strait after 5 years. 3. **Immediately remove bloodworming in the Great Sandy Strait.**
	Conservation Park (CP) zone boundaries at the mouths of Coonarr, Coongul, Awinya and Wathumba Creeks not effectively accommodating dynamic coastal processes.	1. No change. **2. Extension of the CP zone boundaries beyond the creek mouths.**
Theme: Conflict in the waterways of the designated Great Sandy Area		
Address conflict between fishing sectors in Baffle Creek, Elliott River, Burrum River system, the Great Sandy Strait and Tin Can Inlet (the designated Great Sandy Area waterways).	Community confidence in the marine park's management being eroded because of ongoing conflict between fishing sectors, and concern from a broad section of the community, regarding the social and ecological impacts of commercial net fishing within these waterways.	1. No change. 2. Remove designated Great Sandy Area and prohibit all commercial netting from the CP zones within the Great Sandy Area waterways. **3. Remove designated Great Sandy Area and prohibit only commercial netting with large mesh gill nets and ring nets from the CP zones within the Great Sandy Area waterways.**
Theme: Protection of threatened species		
Improve the protection and potential for long term population recovery of threatened species and support state, national and international obligations.	*Shorebirds* Disturbance of shorebirds within the marine park impacting on the success of their recovery.	1. No change. **2. Apply park-wide provisions to protect shorebirds from disturbance.** **3. Establish new designated area (Seasonal Shorebird Closure Area) that seasonally closes access to four highly significant roost sites (Moon Point, Maaroom, Boonooroo and Cooloola).**
	Grey Nurse Sharks Critically endangered grey nurse sharks in the Wolf Rock area are ranging more extensively than was originally understood and are not effectively protected from fishing-related injury and mortality by the extent of the existing Wolf Rock MNP and Buffer zones.	1. No change. 2. Expand the Buffer zone and maintain extent of the existing MNP zone. **3. Expand the MNP zone and remove the Buffer zone.**
	Turtles, dugongs and dolphins Use of some types of commercial fishing nets in core habitats for threatened species present a high risk of entanglement and mortality to a range of threatened species.	1. No change. 2. Prohibit all commercial netting from the CP zones within the Great Sandy Area waterways. 3. **Prohibit only commercial netting with large mesh gill nets and ring nets (which present the highest risk to threatened species) from the CP zones within the Great Sandy Area waterways.**
	Dugongs and turtles Core turtle and dugong habitat not effectively recognised and protected by the current zoning.	1. No change. 2. Upgrade zoning adjacent to Mon Repos from Habitat Protection (HP) zone to MNP zone. **3. Upgrade the zoning adjacent to Mon Repos from HP zone to CP zone.** **4. Expand the size of two existing MNP zones in southern/central Hervey Bay to better protect seagrass and key turtle and dugong feeding and transit areas.**

Objective	Problem	Options considered in the CRIS; preferred option (bold text) was incorporated in the draft zoning plan
	Turtles Existing designated Turtle Protection Area adjacent to the internationally significant Mon Repos nesting beach not adequately protecting inter-nesting turtles from interactions with trawlers.	1. No change. 2. Replace the current designated Turtle Protection Area (that extends approximately 1.8km offshore) with a HP zone that extends to approximately 5km offshore. **3. Extend the boundary of the current designated Turtle Protection Area from approximately 1.8km to approximately 5km offshore and retain the existing prohibition on trawling in this area from 1 November to 31 January.**
	Dugongs and turtles Existing network of Go Slow Areas is not providing adequate coverage of shallow turtle and dugong habitats in high vessel traffic areas to protect these threatened species from vessel strike.	1. No change. **2. Establish one new and expand eight existing Go Slow Areas, modify the Go Slow Area rules to prohibit motorised water sports within these areas, convert the existing Sandy Cape Go Slow Area to year-round and exempt surf life-saving activities along the Woongarra Coast from Go Slow Area rules.**
	Turtles Existing designated Mon Repos Area that prohibits vessels, swimming, and fishing on and adjacent to the Mon Repos turtle nesting beach between 6pm and 6am during the period 15 October and 30 April, to prevent disturbance of nesting turtles, does not provide adequate protection for the entire turtle nesting season.	1. No change. **2. Amend the provisions of the designated area to prohibit people from the designated area between 6pm and 6am unless they are part of a ranger-led tour and extend the duration of the designated area for an extra month to 31 May to better align with the nesting season.**
Theme: Protection of cultural values		
Protect cultural values, respect native title rights and recognise the responsibilities of First Nations peoples to Care for Country.	*Carland Creek* First Nations peoples concerned that vessel wash and noise are impacting on the cultural values of Carland Creek (southern end of Tin Can Inlet).	1. No change. **2. Establish a Go Slow Area for natural and cultural values.** 3. Rely on the proposed expansion of the MNP zone in this waterway to reduce vessel use, as prohibition of fishing and collecting will likely reduce vessel activity in the waterway.
	Searys and Cooloola Creeks First Nations peoples concerned that vessel traffic and associated noise within Searys and Cooloola Creeks is impacting on the high cultural values of these waterways and interfering with the delivery of important cultural practices.	1. No change. **2. Establish a designated No Motorised Vessel Area that would prohibit the use of a motorised vessel or vehicle in the area.** 3. Rely on the proposed expansion of the MNP zone in this waterway to reduce vessel use, as prohibition of fishing and collecting will likely reduce vessel activity in the waterway.
	Designated Fish Trap Areas Five existing designated fish trap areas at Booral are not comprehensively protecting the fish traps and associated cultural values in this area.	**1. Combine the five separate areas into one spatially defined area that encompasses all five existing Fish Trap Areas.**
Theme: Management of Platypus Bay to complement K'gari management		
Complement the management of the marine park with existing FHAs and adjoining National Parks and the K'gari (Fraser Island) World Heritage Area.	Currently no management arrangements in the zoning plan to complement the adjacent national park management objectives for the remote, north-western coastline of the K'gari (Fraser Island) World Heritage Area and provide similar opportunities for peaceful enjoyment of the similarly remote adjoining area of Platypus Bay.	1. No change. 2. Establish a designated No Motorised Vessel Area in north-eastern Platypus Bay. **3. Establish a new type of designated area to prohibit motorised watersports and the taking off and landing of fixed wing aircraft and helicopters in north-eastern Platypus Bay.**
Theme: Coastal management and alignment with declared Fish Habitat Areas		

Objective	Problem	Options considered in the CRIS; preferred option (bold text) was incorporated in the draft zoning plan
Enable authorisation and/or undertaking of works at various locations within the marine park to address a range of coastal management issues.	Current extent of CP zoning adjacent to urban areas is impacting on the delivery of coastal management works to address the impacts of climate change (e.g. beach nourishment) and improve access at identified transport nodes. In some locations the CP zone also conflicts with Fish Habitat Area (FHA) management and results in inconsistent management of private development between the two forms of marine protected area.	1. No change. 2. Amend the 'entry or use with permission' provisions for CP zones. **3. Implement a package of location specific zoning downgrades, modifications to management arrangements and amendments to FHAs.**
Theme: Maximum penalties for offences		
Ensure maximum penalties for offences reflect the environmental consequences of the offence.	Several maximum penalties prescribed for zoning plan offences do not reflect the impact that the offence may cause on the natural or cultural values of the marine park and are low in comparison with penalty amounts for similar offences under other legislation.	1. No change. **2. Increase maximum penalties for some offences.**
Theme: Description of the marine park outer boundary		
Ensure the outer boundary is defined in such a way that the accuracy and understanding of the extent of the marine park is improved.	Current method of defining the outer boundary is based on reference to a low resolution statutory plan that: does not accurately reflect the extent and complexity of the tidal land and waters in various estuaries that were intended to be included within the marine park as per the original intent for declaration; is difficult to interpret from management and compliance perspectives; and is inconsistent with the boundary description method used for the other State marine parks.	**1. Redefine the outer boundary of the marine park using a contemporary written 'metes and bounds' description.**
A range of other minor amendments to the zoning plan were also proposed to improve clarity, remove obsolete provisions, reduce unnecessary regulatory burden, improve complementarity with the management of other State marine parks and address flow on effects for other proposed zoning plan changes.		

4 Final Position

Consultation summary and outcomes

During the public consultation period, information about the draft zoning plan was distributed via traditional media, social media, newspaper and online advertising, email, posters, stickers and flyers, potentially reaching more than 1.5 million people and generating more than 21,000 visits to the consultation website. More than 443,000 of this audience was within the GSMP local communities of Fraser Coast, Bundaberg, Gympie and Tin Can Bay.

DES held over 40 stakeholder meetings, and received 1245 online survey responses and 215 written submissions. Two of these written submissions were 'campaign form letters', generated by the Australian Marine Conservation Society (4056 letters) and the Queensland Seafood Industry Association (1066 letters) and one of the submissions was from the Great Sandy Alliance which represented the views of 26 organisations from the conservation and tourism sectors.

Independent analysis of the consultation feedback (see Appendix 13 for the Consultation Report, and Snapshot of Consultation Outcomes in section 4.1), commissioning of further specialist economic and technical advice, and discussions across government have informed the final adjustments to the zoning and management changes that will be incorporated in the final zoning plan. These changes to the existing zoning plan will balance the imperative to ensure effective conservation measures that provide the foundation for ecosystem conservation and the sustainable recreation, economic and other social uses of the marine park.

Except for the proposal to allow commercial tunnel netting to continue within the CP zone of the Great Sandy Strait, all of the preferred management options proposed in the draft zoning plan and discussed in the CRIS were supported by most respondents (with modifications suggested in some cases).

All of these preferred management options (some with modifications to reduce impacts or to further enhance their conservation outcomes) will be integrated into the final zoning plan (refer to section 4.1). Despite the consultation identifying limited support for the continuation of commercial tunnel netting in the Great Sandy Strait and Tin Can Inlet, the final zoning plan will allow tunnel netting to continue within this waterway. This decision considered the lower risk that this net fishing method presents to threatened species and its value in supporting continued seafood supply of inshore fin fish for public purchase, especially given the recently announced phasing out of gill nets from large sections of the Queensland Coast (see section 5.2.5 for more detail).

Assessment criteria for proposed modifications to the preferred options presented in the CRIS
To promote a consistent and transparent approach to assessing proposed modifications to the options presented in the CRIS by stakeholders, assessment criteria were applied. The assessment criteria, informed by the Office of Best Practice Regulation (OBPR) RIS requirements, and are set out below:

a) Addresses the regulatory problem
This criterion assesses whether a proposed modification to the CRIS options represents the most effective response to the regulatory problem.

b) Evidence provided to support proposal
This criterion assesses whether a proposal is accompanied with evidence to justify a modification to the CRIS options. The evidence should also be able to support quantifying the costs and benefits of the proposed change.

c) Proposal is proportionate to the risk the issue presented
This criterion assesses whether the proposed modification to the CRIS represents a proportionate response to the regulatory problem. A disproportionate proposed modification would deliver an inefficient and ineffective regulatory response.

d) Supports efficient compliance and enforcement practices
This criterion assesses whether the proposed modification to the CRIS options will promote clarity in the regulatory framework for regulated parties and the regulator. Opaque regulatory requirements can be cumbersome and costly for regulated parties to comply with, and for regulators to enforce.

e) Represents a net benefit to the community, compared to the options in the CRIS
This criterion assesses whether the proposed modifications to the CRIS options will deliver a net benefit to the community, relative to the other options in the CRIS. If the proposed change represents a net cost, it is an inefficient regulatory option.

f) Promotes consistency with best practice approaches to marine park management and national and international obligations
This criterion reflects the commitment to designing and implementing policy that aligns with the best available scientific and expert evidence, compliant with national and international obligations and established best practice guidance for marine park management.

The Decision RIS presents the decision for the final zoning plan to address the key problems identified in the CRIS, including any modifications to the preferred approach presented in the CRIS (Table 1), informed by consultation feedback.

- Habitat protection (section 5.1)
- Conflict in the waterways of the designated Great Sandy Area (section 5.2)
- Protection of threatened species (section 5.3)
- Protection of cultural and amenity values (section 5.4)
- Management of Platypus Bay to complement K'gari management (section 5.5)
- Coastal management and alignment with declared Fish Habitat Areas (sections 5.6)
- A range of other amendments (sections 5.7)
- The description of the marine park boundary (sections 5.8).

Given a single solution can solve multiple problems and conversely, a single problem may require multiple solutions, these themes should not be read in isolation.

4.1 Snapshot of consultation outcomes and recommendations for Final Zoning Plan

Theme	Proposed change (Preferred option identified in the Consultation RIS)	Overall consultation outcome	Recommendation for Final Zoning Plan
Habitat protection	Change zoning to deliver 12.8% of the area of the marine park in MNP zones with supporting changes to other zones.	**Supported but contentious**	Progress proposed zoning network with modifications to some proposed zones to reduce impacts to marine park users and/or to improve habitat representation and protection.
	Establish three designated No Anchoring Areas.	**Supported**	Progress proposed No Anchoring areas with modifications to Gatakers Bay No Anchoring area and introduction of an exemption for commercial marine aquarium fish fishers.
	Prohibit beam trawling from lower Mary River.	**Supported**	Progress removal of non-conforming use provisions to prohibit beam trawling as proposed.
	Prohibit blood worming in Great Sandy Strait.	**Supported**	Progress prohibition of blood worming as proposed.
Conflict in the waterways of the designated Great Sandy Area	Remove commercial large mesh gill and ring nets from designated Great Sandy Area waterways (Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet).	**Supported but contentious**	Progress removal of large mesh gill and ring nets from CP zones in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet as proposed.
	Allow continuation of commercial tunnel netting in CP zone within Great Sandy Strait and Tin Can Inlet.	**Opposed**	Progress continuation of commercial tunnel netting in the CP zone within Great Sandy Strait and Tin Can Inlet.
	Allow continuation of set pocket netting in the Mary River.	**Supported**	Progress continuation of set pocket netting as proposed.
	Allow use of a maximum of 2 rods/lines per person with a combined total of 2 hooks in all CP zones.	**Supported**	Progress allowance of a maximum of 2 rods/lines per person with a combined total of 2 hooks in all CP zones as proposed.
Protection of threatened species	Introduce park-wide measures to protect shorebirds from intentional disturbance.	**Supported**	Progress park-wide measures to protect shorebirds as proposed.
	Introduce seasonal access closure periods at the significant shorebird roost sites of Maaroom, Boonooroo, Moon Point, and Cooloola (Tin Can Inlet).	**Supported**	Progress seasonal access closure periods at the four significant shorebird roost sites as proposed, with minor amendments to the Boonooroo closure area boundary to address concerns from local residents and the inclusion of some exemptions for local government, shorebird researchers and Traditional Owners with sea Country in the area.
	Expand the Wolf Rock MNP zone and remove the Buffer zone to protect areas of known and connected grey nurse shark habitat.	**Supported but contentious**	Progress expansion of Wolf Rock MNP zone and remove Buffer zone as proposed. The designated Grey Nurse Shark Area will be expanded to match the expanded MNP zone.
	Expand the network of designated Go Slow Areas to reduce the threat to turtles,	**Supported**	Progress expanded designated Go Slow Areas as proposed, including the proposed introduction of 6 knot speed limit, prohibition of motorised water sports

Theme	Proposed change (Preferred option identified in the Consultation RIS)	Overall consultation outcome	Recommendation for Final Zoning Plan
	dugong and dolphins from vessel strike.		in all go slow areas and the exemption for surf lifesaving patrols and training activities in the Woongarra Coast designated Go Slow Area.
	Increase the size of the designated Turtle Protection Area from 1.8km to 5km offshore from Mon Repos Beach.	**Supported**	Progress expanded Turtle Protection Area as proposed.
	Extend timing of designated Mon Repos Area by one month to protect late season turtle hatchlings.	**Supported**	Progress extension of timing of designated Mon Repos Area as proposed.
Protection of cultural values	Establish a designated Go Slow Area for natural and cultural values in the extended MNP zone in Carland Creek.	**Supported**	Progress expanded designated Go Slow Area for natural and cultural values in Carland Creek as proposed and designate an additional Go Slow Area for this purpose in the upper reaches of Wathumba Creek to address a request from the First Nations people.
	Establish a designated No Motorised Vessel Area in the extended MNP zones in Searys Creek and Cooloola Creek.	**Supported**	Progress establishment of the two designated No Motorised Vessel Area as proposed with an exemption for First Nations peoples.
	Combine the five separate designated Fish Trap Areas at Booral into a single spatially defined area.	**Supported**	Progress combining of the five separate designated Fish Trap Areas as proposed.
Management of Platypus Bay to complement K'gari management	Establish a designated area that would prohibit motorised water sports and the take-off and landing of aircraft, to protect amenity values in north-east Platypus Bay.	**Supported**	Progress establishment of designated no-motorised water sports area as proposed.
Coastal management and alignment with declared Fish Habitat Areas (FHA)	Implement a package of location specific zoning downgrades and amendments to FHAs at various locations to support coastal management works and to better align the FHA and marine park management.	**Supported**	Progress changes to zoning and FHAs as proposed, with modifications to the boundaries of the proposed downgrade areas at Dayman Spit, Gatakers Bay boat ramp channel, Poona and Tin Can Bay and additional zone downgrades (from CP zone to HP zone) at Toogoom and on the western side of Point Vernon. The Toogoom zone downgrade will be complemented by a downgrade to part of the Beelbi FHA from management A to management B.
Maximum penalties for offences	Increase maximum penalties for some offences.	**Supported**	Consultation with the Department of Justice and Attorney General is required.
Other zoning plan provisions – Material amendments	Amend non-conforming use provision for collection of aquarium fish at Little Woody Island MNP zone to restrict access to only fishers who can demonstrate a history of use of the site.	**Supported**	Progress non-conforming use provision for commercial collection of aquarium fish at Little Woody Island MNP zone and the application of the limited entry requirements as proposed.
	Introduce new notification requirements for maintenance	**Supported**	Progress a notification requirement but with a reduced pre-works notification timeframe from that

Theme	Proposed change (Preferred option identified in the Consultation RIS)	Overall consultation outcome	Recommendation for Final Zoning Plan
	dredging for navigational purposes.		proposed.
Marine Park Outer Boundary	Redefine the marine park outer boundary using a contemporary written 'metes and bounds' description.	**Supported**	Progress the contemporary written 'metes and bounds' boundary description as proposed. At the request of the Butchulla Native Title Aboriginal Corporation, extend the marine park boundary to include all tidal lands within parcels afforded exclusive native title rights in the Determination of the Butchulla People Land and Sea Claim #2.

A detailed summary of the consultation feedback and the Queensland Government's response for progressing changes to the final zoning plan is provided under each thematic section of this Decision RIS and a map showing the recommended final zoning network and designated area network is presented in Figure 2. For more details on the final zoning plan refer to the Appendices, and for the Consultation Report refer to Appendix 13.

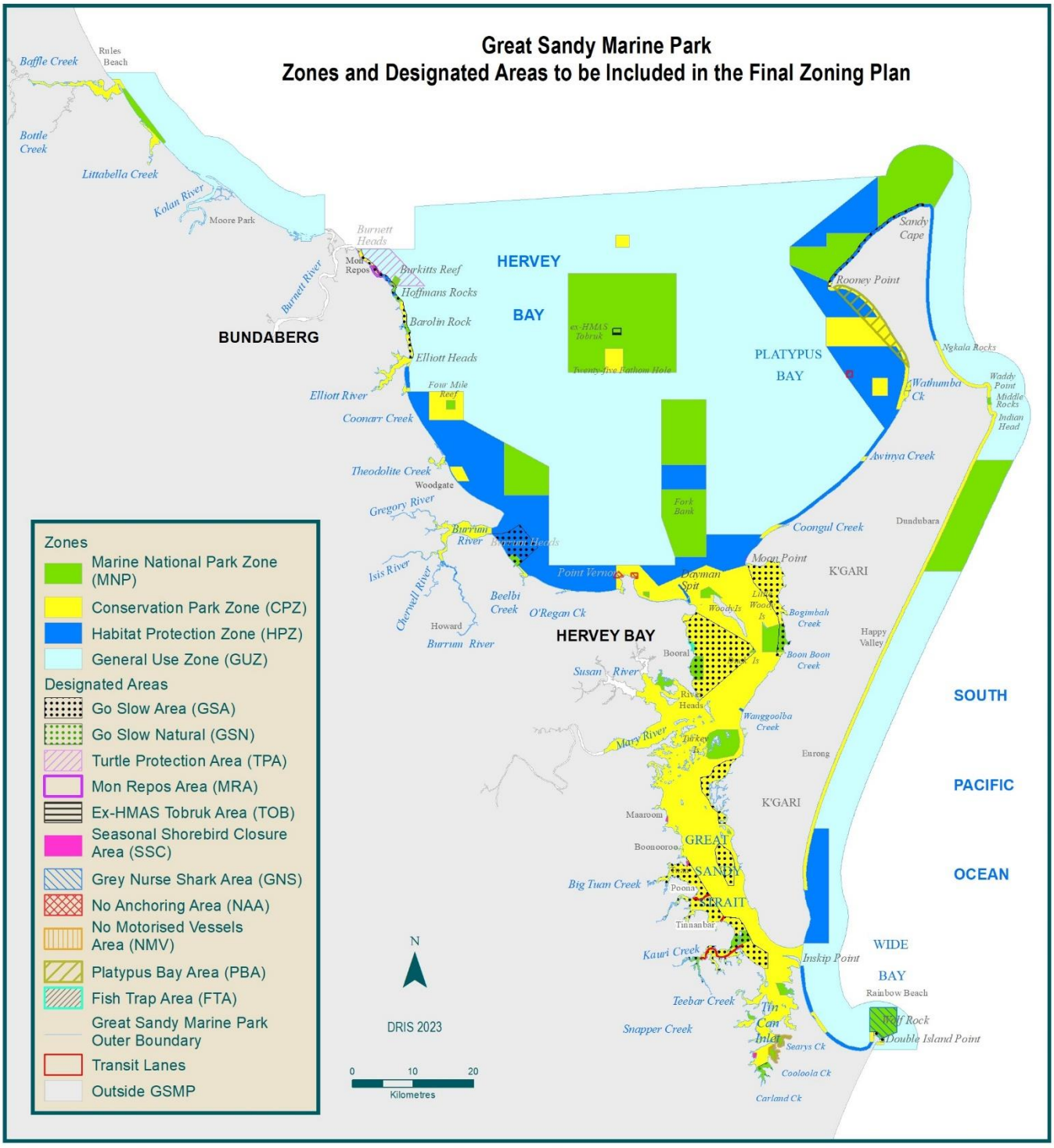

Figure 2. Great Sandy Marine Park Final Zoning Plan map.

4.2 Summary of impacts as a result of the Final Zoning Plan

The significant management changes to be included in the final zoning plan will result in substantial benefits for the conservation of the natural and cultural values within the marine park and will improve management of specific threats to fauna, support ecosystem resilience and address a range of specific issues of concern to the public. However, these conservation initiatives will also result in some corresponding negative impacts on existing uses conducted within the marine park, particularly some of the extractive uses.

The recreational fishing sector will experience localised loss of access to some valued fishing grounds, particularly resulting from the expanded MNP zone network. However, it is expected that these localised impacts will be more

than offset by the improved recreational fishery within Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet that will result over time from the prohibition of commercial netting with large mesh gill nets and ring nets within those waterways. The government commitment to fund the construction of additional artificial reefs and boating infrastructure within the marine park, combined with the spill-over affect from the additional MNP zones that will occur over time for some species, will further enhance the recreational fishery within the marine park. Overall, it is predicted that the recreational fishery within the marine park will be significantly enhanced as an outcome of this zoning plan review.

Commercial fishers will be the most significantly and directly impacted stakeholder group from the changes that will be included in the final zoning plan. Overall impacts to the trawl, crab, line and harvest fishing sectors are predicted to be low to moderate and will primarily result from reduced access to fishing grounds from the expansion of the MNP zone network and changes to other zones. Impacts to the net fishing sector however, will be more significant. In addition to impacts from the broadscale zoning changes, the net fishing sector will be impacted by the removal of the designated Great Sandy Area from the CP zones of Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet and the resultant prohibition of the use of large mesh gill nets and ring nets within those waterways.

Coincident with decisions regarding the final zoning plan for GSMP, the Queensland Government has announced its intention to phase out the use of large mesh gill nets from the Great Barrier Reef World Heritage Area by June 2027. This initiative addresses local and international conservation concerns regarding the impacts of these nets on threatened species and involves a broadscale fisheries licence buyout structural adjustment package for net and other fisheries.

While it is predicted that the final zoning plan will result in a range of impacts to the commercial fishing sector by reducing the area available for different fisheries, the adjustment of Queensland's fisheries that has been announced to support the phase out of the use of large mesh gill nets in the Great Barrier Reef, significantly affects the ability to isolate and apportion the primary driver of the impacts between these two significant change initiatives (especially in relation to impacts to the net fishery). Despite this complexity, for transparency, the impacts of the final zoning plan for the GSMP in relation to commercial fishing catch and value have been assessed without consideration of the major fisheries structural adjustment process underway along the east coast.

Overall, the combination of changes to be included in the final zoning plan is estimated to reduce the current commercial fishing catch across all fisheries within the marine park by approximately 35%, with this reduced catch having a value of approximately $2.5-3m (GVP) per year (noting that catch naturally varies from year to year). The majority of this impact, 79% by catch weight, will result from impacts on the net fishery (in particular to the large mesh gill net component of the net fishery).

The impacts to the commercial fishing sector and the post-harvest seafood sector will be addressed through a commercial fishery impact mitigation package which will also seek to avoid the potential for unsustainable fishing effort transfer. This package will be designed in collaboration with DAF and QRIDA, and will include consideration of broader impacts associated with the Great Barrier Reef net fishing changes announced on 5 June 2023 to ensure consistency between the two processes.

Impacts to other users of the marine park from the zoning plan changes are expected to be minor, with the nature-based tourism and charter sectors expected to become more secure as an outcome of the review.

5 The need for change

5.1 Habitat protection and an integrated zoning framework

Zoning plan review objective

Improve the existing network of zones to align with global biodiversity targets, better reflect contemporary marine protected area management principles, and deliver a more effective, integrated zoning framework that balances conservation and use.

5.1.1 Context

The marine environment is a complex and diverse system in which every species plays a part in maintaining its ecological functions. Biodiverse environments provide a wide range of goods (e.g. food, medicine, raw materials) and services (e.g. nutrient cycling, climate regulation, flood and storm protection, cultural heritage and identity) that sustain human life. Losses of biodiversity affect the productivity of ecosystems and weaken their resilience to

natural disasters and human-caused stressors. If biodiversity is not effectively protected from threatening processes, opportunities for cultural, recreational and commercial activities can be diminished.

To address the escalating loss of global biodiversity and increasing threats to species and ecosystems, the United Nations Convention on Biological Diversity (CBD) came into force in 1993 and has since been ratified by the overwhelming majority of countries (196 Parties) including Australia. The CBD is a legally binding commitment to conserve biodiversity, use its components in a sustainable manner, and equitably share benefits arising from its genetic resources. Under the convention, long-term targets are set under a global biodiversity framework which also provides guidance for setting national targets to protect biodiversity for future generations. The initial CBD global target of conserving 10% of oceans in protected areas by 2020 was recently superseded in an attempt to address the accelerating and dangerous loss of biodiversity, and restore natural ecosystems. The most recent CBD global target, adopted in 2022 by Australia and more than 100 other countries, is to - *ensure and enable that by 2030 at least 30% of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures*.

Protecting representative areas of all habitat types within marine protected areas is a well-established and precautionary approach to implementing international and domestic conservation targets and conserving marine biodiversity in general. This approach recognises that there is often incomplete knowledge of the habitat requirements of the many thousands of marine species, however by protecting representative areas of each known habitat type, it is assumed that the diversity of species inhabiting the area will also be protected. Habitat types can be mapped and used as the basis to maximise the conservation of biodiversity if a proportion of all mapped habitats are represented in highly protected areas such as MNP zones.

This concept underpins the basis of Australian and international best practice management principles for habitat and biodiversity protection in marine parks. These principles aim for a MNP zone network to be:

> **Comprehensive (C)**: ensures that the full range of habitat types (and other biodiversity features like species) found in the marine park are recognised at an appropriate scale and included in the MNP zone network
>
> **Adequate (A)**: ensures that enough area of a specific habitat type is protected to maintain the ecological viability and integrity of populations, species and communities and that natural processes will persist through time
>
> **Representative (R)**: ensures that the examples of the variety of marine biodiversity at all levels within the marine park e.g. genetic, species, habitat diversity as well as rare and threatened ecological communities / species and atypical areas e.g. spawning areas, nursery sites or breeding locations are included in the MNP zone network
>
> **Efficient (E)**: ensures that the above principles are met whilst minimising impacts and costs to marine park users.

These are known as the CARE principles and have informed the zoning plan reviews of the Great Barrier Reef and Moreton Bay Marine Parks.

An independent Scientific Reference Group (SRG) comprising experts (Appendix 1) from a range of disciplines established for the GSMP zoning plan review, developed recommended guiding principles (Appendix 2) through consideration of the CARE and other marine protected area planning principles, and the CBD global target.

An indicative habitat map for the GSMP was developed to support the review of the zoning plan, in particular the assessment of adequacy of the MNP zone network in relation to the CARE principles and SRG recommendations. Approximately 80 different biophysical data sources informed the identification of 23 habitat types (Appendix 3).

The SRG recommended that at least 30% of the area of each vulnerable habitat type within the marine park should be protected within MNP zones. Vulnerable habitat types are typically those that are easily disturbed or transformed by human actions and are slow to recover after disturbance. The SRG identified saltmarsh, mangroves, seagrass, coral, subtidal gardens, gastropod reefs, coffee rock, and deep holes and gutters as vulnerable. The SRG's guiding principles also recommended a minimum of 10% of the area of each remaining habitat type should be included in MNP zones, and these zones should be supported with complementary zoning, designated areas, and other integrated management arrangements that address specific threats and protect values within the marine park.

Several vulnerable habitat types are significantly under-represented in the existing MNP zone network in comparison to the habitat protection targets recommended in the guiding principles. For example, deep subtidal seagrass, gastropod reefs, and coffee rock are not represented at all within the existing MNP zone network.

5.1.2 Problem

The existing zoning plan for the GSMP does not adequately represent the 23 habitat types present in the marine park, and is not adequately addressing either the CARE principles or the zoning plan review's guiding principles developed by the SRG. Further, the zoning plan does not meet community expectations for a well-managed marine park.

The existing zoning arrangements place the marine park's biodiversity at risk. In particular, the existing zoning:

- incorporates only 3.9% of the area of the marine park in MNP zones which is well below current global targets
- does not represent and/or appropriately replicate and connect all habitat types in MNP zones
- constrains the ability to mitigate threats from, and build resilience to, climate change and other stressors to improve the quality and integrity of habitats
- compromises the maintenance or improvement of the essential goods and services that are provided from biodiversity.

With only 3.9% of the total area of the GSMP protected in the MNP zone network, this level of protection does not align with the CBD 2010 or 2030 global biodiversity conservation targets agreed to by the Commonwealth Government. In comparison, 16% of Moreton Bay Marine Park and 33% of the Great Barrier Reef Marine Park are included in MNP zones. In other jurisdictions with large, multiple use marine parks similar to Queensland, the percentage of marine park in zones equivalent to MNP zones range from 12 to 27.5% in NSW and 11 to 24% in Western Australia.

5.1.3 CRIS Options

The CRIS considered four options to improve the existing network of zones.

Problem	Option 1	Option 2	Option 3	Option 4
Existing zoning not providing adequate habitat representation, reflecting global biodiversity targets or meeting contemporary marine protected area management principles.	No change.	Change zoning to include 8.3% of the area of the marine park in MNP zones with supporting changes to other zones.	Change zoning to include 12.8% of the total area of the marine park in MNP zones with supporting changes to other zones.	Change zoning to include 20.6% of the area of the marine park in MNP zones with supporting changes to other zones.

The preferred option in the CRIS was to amend the zoning plan to include 12.8% of the total area of the marine park in MNP zones with supporting changes to other zones (Option 3).

5.1.4 CRIS Consultation Feedback

Overall, there was strong and broad support for the preferred zoning network presented in the CRIS. Most people who completed the online survey chose to respond to questions relating to this topic:

- 63% of 1143 survey respondents agreed with the proposed MNP zone network,
- 79% of 1058 survey respondents agreed with the proposed Conservation Park (CP) zone network, and
- 75% of 1053 survey respondents agreed with the proposed Habitat Protection (HP) zone network.

Those submissions and survey responses opposing the revised zoning configuration generally identified impacts to recreational and commercial fishing and a view that the existing zoning is sufficient, as their key reasons for their opposition.

The conservation sector and recreational users of the park were particularly supportive of the improved protection offered by the revised zoning network, although the conservation sector and one of the First Nations peoples' representative bodies have advocated for a greater proportion of the park being protected within MNP zones, to more comprehensively align with contemporary international protected area targets. The conservation sector also raised 'in principle' objection to any locations where the existing zoning was proposed to be downgraded, e.g. for coastal management purposes.

The proposed changes to the MNP zone network were the particular focus of the zoning related feedback. The primary recreational fishing representative body for the region and many fishing clubs were broadly supportive of the expanded MNP zone network, however concerns with the boundary alignment of some MNP zones were identified and alternative boundary alignments were recommended. Many individual recreational fishers raised

concerns with specific proposed MNP zones and the resultant loss of access to their individually valued fishing locations. Although a large proportion of respondents to the online survey agreed with the proposal to increase the protection of grey nurse sharks, significant concern was raised by the recreational fishing sector to the proposed extension of the MNP zone at Wolf Rock (CRIS MNP26) over The Pinnacles, due to the loss of this valuable recreational fishing location.

The spear fishing community was broadly concerned that the expanded MNP zones will impact their use of most of the accessible and safe inshore reefs. However, spear fishers were supportive of the proposed minor change to the southern boundary of the Hoffmans Rocks MNP zone (CRIS MNP05) which will allow this highly accessible nearshore area to become available for spear fishing and other forms of recreational fishing.

The commercial fishing sector was strongly opposed to the proposed expansion to the MNP zone network and many of the proposed changes to the CP zones and HP zones. The sector identified that these zoning changes, in combination with the other proposed zoning plan changes (e.g. prohibition of large mesh gill nets and ring nets from the designated Great Sandy Areas waterways), will significantly impact on their industry and the continued viability of the commercial fishers operating within the park. They identify that zone and other proposed changes would result in significant direct and indirect job losses, substantial regional economic impacts, a reduction in the availability of fresh local seafood for purchase by the public, and fishing effort transfer issues within those areas that remain open to commercial fishing. Some commercial fishers suggested boundary modifications to the proposed MNP zones and alternative locations for MNP zones that may reduce impacts on their individual fishing operations.

Some members of the community of Tinnanbar, located at the southern end of the Great Sandy Strait, raised major concerns for the proposed Cowra Point MNP zone (CRIS MNP23), which is located in close proximity to their township. They cite the loss of access to this sheltered area for recreational fishing, boating safety issues associated with accessing alternative locations, and impacts on tourism, property values and lifestyle as the basis for their concerns. Many community members proposed relocating the proposed MNP zone to the southern side of Kauri Creek as a more acceptable solution.

Feedback from First Nations peoples' representative bodies indicates they are broadly supportive of the improved protection of sea Country provided by the revised zoning network. However they did provide some suggestions of changes to individual zones and proposed some additional MNP zones. The Butchulla Native Title Aboriginal Corporation (BNTAC) have requested that the marine park include tidal sections, up to highest astronomical tide (HAT), of the lots within their Determination Area (Butchulla People Land and Sea Claim #2) where exclusive native title has been recognised and that the zoning of the adjoining marine park area be extended over these tidal sections.

5.1.5 Decision for Final Zoning Plan

Option 3 described in the CRIS, that includes 12.8% of the total area of the marine park in MNP zones with supporting changes to other zones will be included in the final zoning plan with some modifications as described in Table 2 to Table 5, and as shown in Appendices 4 and 5.

The tidal sections of lots within the Butchulla People Land and Sea Claim #2 Determination Area where exclusive native title is recognised, will be included in the marine park. and the adjoining marine park zoning will be applied to these areas. This results in Garrys Anchorage MNP zone, which is a tidal area of exclusive native title, remaining within the marine park. The Determination recognises other interests as they exist at the date of Determination, that continue to have effect and prevail over native title rights to the extent of any inconsistency, e.g. the subsisting public right arising under the common law, to fish and navigate; the rights of persons holding licenses, permits or authorities under state legislation, e.g. *Fisheries Act 1994*, *Marine Parks Act 2004* and any other rights of the State or Commonwealth such as public access to beaches, foreshores and waterways. It is not anticipated that including these areas of exclusive native title within the marine park will impact on marine park users. The areas generally consist of mangroves and saltmarsh at the upper extent of the tidal limit on island parcels (e.g. in the Great Sandy Strait) or on parcels adjoining the mainland and collectively make up a relatively small proportion of the total Determination Area within the marine park. It is acknowledged that non-exclusive native title is recognised over the majority of the tidal lands and waters in the Butchulla People Land and Sea Claim #2 Determination Area that is within the marine park.

5.1.6 Marine National Park (MNP) Zones

Based on the outcomes of the consultation, the MNP zone network presented as the preferred option in the CRIS, subject to modifications to individual MNP zones detailed in Table 2, will be included in the final zoning plan MNP zone network. These modifications maintain the total proportion of the marine park within the MNP zone network at 12.8% as was proposed in the CRIS. Overall, the proportion of the marine park within 'highly protected' zones (i.e.

MNP zone and CP zone combined) will be 28.6% - a marginal decrease from that proposed in the CRIS (28.9%). The MNP zone network in the final zoning plan will include eight new and 12 expanded MNP zones compared to the existing zoning plan.

All 23 habitat types that occur in the park are represented in the MNP zone network. The ten habitat types that are considered to be vulnerable by the SRG cover 41.7% of the total area of the marine park. In the final zoning plan, 15.6% of the total area of these vulnerable habitats will be included within the MNP zone network. Five of the ten vulnerable habitat types will have more that 15% of their total area protected in MNP zones.

Table 2 outlines the modifications to the MNP zone network that was presented as the preferred option in the CRIS that will be incorporated into the final zoning plan, and the justification for those modifications.

Due to these modifications and the overall suite of zone changes to be included in the final zoning plan, various zone identifier numbers and names have changed between the existing zoning plan, the CRIS, and the final zoning plan as presented in this Decision RIS. Appendix 11 provides a list of all zone types, zone identifier numbers and names that (i) will be included in the final zoning plan, (ii) were proposed in the CRIS, and (iii) are in the existing zoning plan.

Table 2. Modifications to the MNP zone network presented as the preferred option in the CRIS that will be included in the Final Zoning Plan.

CRIS MNP zone number and name	Proposal in CRIS	Key issues identified through consultation	Modification to be included in Final Zoning Plan	Justification
MNP01 - Near Baffle Creek	New MNP zone to protect a representative example of open coastal habitats in northern section of park.	Partial overlap with potential aquaculture site identified in the DAF Great Sandy Aquaculture Plan.	Establish the new MNP zone but with a revised offshore boundary that leaves a 500m buffer between the MNP zone and the boundary of the potential marine aquaculture site. Final Zoning Plan identifier MNP01 - Littabella	• As all forms of aquaculture are prohibited within a MNP zone, the boundary of the MNP zone as proposed in the CRIS required revision to avoid management incompatibility with the existing aquaculture plan. • The aquaculture site is identified as suitable for surface-line aquaculture (e.g. pearl oysters, mussels and scallops). This is a low impact form of aquaculture which, if developed at this site, will present a low risk to the adjacent, modified MNP zone. • The MNP zone, with its revised offshore boundary will still protect an extensive and representative example of the open coastal habitats in the northern section of the park.
MNP06 - North of Ngkala Rocks	New MNP zone to protect a representative example of high energy ocean beach and subtidal offshore sand habitat on the eastern side of K'gari.	Significant impacts on commercial beach worm, ocean beach net (K8 fishery symbol), marine aquarium fish and offshore trawl and line fishing areas and on recreational beach fishers and spear fishers.	Not establish this MNP zone, but as an alternative, enlarge CRIS MNP13- Offshore of Wyuna Creek to protect a similar area of subtidal offshore sand habitat (Note: This extension to CRIS MNP13 will not extend over the beach habitats as was proposed by MNP06 due to impacts on recreational fishing). The existing zoning (HP zone over the beach and General Use (GU) zone over the offshore habitats) will be retained within the footprint of the removed CRIS MNP06. Refer Appendix 4. Final Zoning Plan identifier - N/A as removed	• The area north of Ngkala Rocks was identified in the CRIS as the only potential area of ocean beach within the marine park that could reasonably be considered for protection within a MNP zone without causing significant impacts to the extensive recreational beach fishery that occurs along the park's ocean beaches. Despite the comparatively lower recreational beach fishing effort in this area, consultation feedback identified a range of other significant impacts from the proposed North of Ngkala Rocks MNP zone. These include: ○ This ocean beach area being a key commercial beach worming location that has remained productive when other beaches in the Teewah and K'gari regions have been damaged by severe weather events. As a significant proportion of beachworms sold around Australia are sourced from Teewah and K'gari ocean beaches, continued access to this location is critical to maintaining the national supply of beach worms for the bait market following significant weather events. ○ The proposed MNP06 would also remove access to a large portion of one of the two ocean beach areas on K'gari that are available for use by the commercial ocean beach fishery (K8) and to an area of nearshore reef habitat that is actively used by commercial marine aquarium fish and line fishers.

CRIS MNP zone number and name	Proposal in CRIS	Key issues identified through consultation	Modification to be included in Final Zoning Plan	Justification
				○ The offshore portion of the proposed MNP06 was recently opened to the stout whiting trawl fishery on a trial basis and the areas within, and to the north and south of, the proposed MNP06 have been confirmed as highly productive stout whiting fishing grounds. If established, the MNP zone would remove the ability to effectively trawl in the entire (potential) nearshore stout whiting grounds between Waddy Point and Sandy Cape. ○ A number of recreational fishers also objected to the loss of access to this valued beach fishing location and recreational spear fishers were concerned with loss of access to some nearshore reefs. • The wide range of values identified by stakeholders does confirm that the area within proposed MNP06 contains high and diverse ecological values, but also that this MNP zone could not be progressed without significant impact to a broad range of stakeholders. • There are also no alternative areas of high energy, ocean beach habitat between Double Island Point and Sandy Cape that could be included within a MNP zone and result in lesser impacts. • While no ocean beach habitat between Double Island Point and Sandy Cape will be included within MNP network as a result of this modification, the deeper, high energy habitats that also formed part of MP06 will still be represented in the MNP zone network through an expansion of proposed CRIS MNP13. • Overall, this modification reduces impacts, while still achieving the habitat representation targets in relation to the deeper, high-energy habitats. • This modification has been developed in consultation with DAF and informed by up-to-date commercial fishing catch and effort data.
MNP07 - Hervey Bay Paleochannel	New MNP zone to protect a representative example of deep water paleochannel habitats, reef	Recommendations for significant extension of the MNP zone to reflect the regional significance of the resilient seagrass	Establish new MNP zone and extend in all directions to incorporate additional areas of resilient seagrass habitat and to offset the reduced seagrass protection resulting from changes to MNP 11 –	• Recent seagrass monitoring following flood events during early 2022, that significantly impacted water quality within Hervey Bay, has indicated that the seagrass meadows in the northern section of Hervey Bay, in the vicinity of proposed CRIS MNP07 (Hervey Bay Paleochannel) were the most resilient to flood impacts and have become an important refuge area for marine turtles while other seagrass meadows are recovering.

CRIS MNP zone number and name	Proposal in CRIS	Key issues identified through consultation	Modification to be included in Final Zoning Plan	Justification
	habitats and seagrass.	habitats in this area.	Fork Bank and MNP10-Offshore Woodgate. Final Zoning Plan identifier MNP04 - Central Hervey Bay.	• Based on these findings, the conservation and recreational fishing sectors have advocated for greater protection of these resilient seagrass habitats in MNP zones • Extension of CRIS MNP07 will increase protection of these resilient seagrass habitats and offset the reduction in seagrass protection and representation resulting from the changes to CRIS MNP10 and 11. • The combination of changes to CRIS MNP07,10 and 11 will improve protection of resilient seagrass habitats, reduce impacts to the commercial fishing sector, and are also expected to reduce impacts to the recreational fishing sector.
MNP10 - Offshore Woodgate	Extension of MNP zone (MNP10) Offshore Woodgate - Habitat representation, particularly deep and shallow seagrass.	Impacts of proposed MNP zone extension on commercial (particularly blue swimmer crab) fishing area.	Retain existing MNP zone without extension. Expand MNP07 as an alternative by an equivalent area, to increase representation of resilient seagrass habitat. Final Zoning Plan identifier MNP 11 - Offshore Woodgate.	• The proposed extension of this existing MNP zone was focused on increasing representation and protection of seagrass habitats and protecting important to turtle and dugong habitats. • It was projected that the proposed extension to this zone would result in moderate impacts to the commercial blue swimmer crab fishery, however, consultation with commercial fishers suggested that the impacts would be greater than expected and that this proposed MNP zone extension had the potential to threaten the viability of the blue swimmer crab fishery within the region. • Further analysis of catch data has confirmed that approximately 11% of the State's current commercial catch of blue swimmer crabs is sourced from within the proposed MNP zone expansion area. This area is also a fishing ground for other commercial fisheries. • Recent seagrass monitoring following flood events during early 2022, that significantly impacted water quality within Hervey Bay, has indicated that the seagrass meadows in the northern section of Hervey Bay, in the vicinity of proposed CRIS MNP07 (Hervey Bay Paleochannel) were the most resilient to flood impacts and have become an important refuge area for marine turtles while other seagrass meadows are recovering. • Based on these findings, the conservation and recreational fishing sectors have subsequently advocated for greater protection of these resilient seagrass habitats in MNP zones. • Given the significant impacts to the commercial blue swimmer crab fishery that would result from the proposed extension of CRIS

CRIS MNP zone number and name	Proposal in CRIS	Key issues identified through consultation	Modification to be included in Final Zoning Plan	Justification
				MNP10, and that greater protection of the most resilient seagrass can be achieved through extension of CRIS MNP07, the proposed extension of CRIS MNP10 will not be progressed in the final zoning plan. • To offset the resultant reduction in seagrass representation and protection in the MNP zone network an extension of CRIS MNP07 by an equivalent area will be implemented.
MNP 11 - Fork Bank	Extension of MNP zone (MNP11) Fork Bank - Habitat representation of seagrass.	Impacts of proposed MNP zone extension on recreational line fishing areas and commercial blue swimmer crab fishing grounds.	Retain existing MNP zone (with the same boundaries as in the existing zoning plan) and modify the proposed extension area to remove a 4km wide strip at its southern end. The 4km wide strip between the two MNP zones will be HP zone. Expand CRIS MNP07 to by an equivalent area to offset this modification. Final Zoning Plan identifier MNP13 - Fork Bank, MNP09 - Southern Hervey Bay and HPZ11 - Northern Fork Bank.	• The proposed extension of this existing MNP zone was primarily focused on increasing representation and protection of seagrass habitats which are important to turtles and dugongs. • The recreational fishing representative body sought the removal of a 4km wide area from the southern end of the proposed extension area due to its significance for recreational fishing. • The same 4km wide area is also used by the commercial pot, net, line and trawl fisheries. • The removal of a 4km wide strip from the proposed MNP zone extension area and zoning of that area as HP zone will reduce impacts to recreational and some commercial fisheries but still prohibit commercial trawling from the area. A level of connectivity will be maintained between the two MNP zones. • To offset the resultant reduction in seagrass representation and protection in the MNP zone network, an equivalent area of seagrass will be added to CRIS MNP07 Hervey Bay Paleochannel.
MNP13 - Offshore Wyuna Creek	New MNP zone to protect a representative example of high energy subtidal offshore sand habitat on the eastern side of K'gari.	Minimal concern raised through consultation with this proposed MNP zone.	Establish new MNP zone and extend to the north and south to protect additional areas of subtidal offshore sand habitat. This will offset the reduction in representation and protection of this habitat type within the MNP zone network resulting from the removal of CRIS MNP06-North of Ngkala Rocks.	• The extension of this MNP zone is directly related to the removal of MNP06 North of Ngkala Rocks as proposed in the CRIS and will ensure that the total area of subtidal offshore sand habitat represented in the MNP zone network remains unchanged. • The extension areas have been developed in consultation with DAF and informed by up-to-date commercial fishing catch and effort data to minimise impacts to the offshore trawl fishery that occurs in this area. • The boundary of CRIS MNP13 is to be extended at both its southern and northern ends (rather than just one) to minimise impacts to the prawn and stout whiting trawl fisheries.

CRIS MNP zone number and name	Proposal in CRIS	Key issues identified through consultation	Modification to be included in Final Zoning Plan	Justification
			Final Zoning Plan identifier MNP12 - Offshore Dundubara.	

MNP16 - Woody Island	Extension of MNP zone (MNP16) Woody Island - More comprehensively protect coral reef habitat.	Impacts on recreational fishing, particularly given the accessibility of this location for small boat owners.	Extend MNP zone with a revised nearshore boundary adjacent to the north-western shoreline of Woody Island, to exclude a sand flat habitat that is a key site used by recreational sports fishers.
			
			Final Zoning Plan identifier MNP 16 - Woody Island.
				• Extending this MNP zone will improve protection of this area's coral reef habitat, as the existing MNP zone is small and does not reflect the shape or size of the reef.
				• This reef has the highest coral species diversity of any reef within the park (43 species of hard coral recorded), supports the largest area and highest cover of near threatened *Acropora digitifera* (IUCN red list of threatened species) and is historically one of the park's more resilient coral reef communities, despite its proximity to the Mary River mouth and frequency of flood impacts.
				• The reef (with the exception of the existing MNP zone) is a popular, productive and highly accessible recreational fishing area.
				• The recreational fishing sector representative body supported some extension to the MNP zone, but raised concern with the inclusion of the:
				  ○ shallow/intertidal sand flats adjacent to the north-western shoreline of Woody Island, and
				  ○ fringing reef area that extends down the north-eastern shoreline of Woody Island.
				• The sand flats are a valued sport fishing location, and fishers wish to retain some recreational fishing access to the natural fringing reef area adjacent to the north-eastern shoreline.
				• Removal of the sand flat habitat from the MNP zone will minimise impacts on recreational fishing without impacting on the primary coral protection purpose of the zone.
				• The reefs on the north-eastern shoreline will remain in the MNP zone as their removal would unacceptably fragment protection of this small reef system and introduce significant edge effects.
				• Simpson and Hardie Artificial Reefs are located within sheltered waters less than 10km from the MNP zone, and provide recreational anglers with a viable alternative reef fishing location.

MNP21 - Susan River	New MNP zone to protect a representative	Impacts on commercial mud crab fishers.	Establish new MNP zone with a minor modification to the boundary that adjoins the	• The boundaries of MNP21 (Susan River) have aimed to minimise impacts on commercial mud crab fishers, however due to the extensive nature of this fishery within the estuarine mangrove

CRIS MNP zone number and name	Proposal in CRIS	Key issues identified through consultation	Modification to be included in Final Zoning Plan	Justification
	area of upper estuarine mangrove dominated habitat.		main channel of the Susan River to enable commercial mud crab fishers to continue to set pots directly adjacent to the river bank. Final Zoning Plan identifier MNP21 - Susan River.	systems within the marine park, it was expected that some impact would be unavoidable. • Consultation confirmed that several commercial crabbers that use this area of the Susan River would be impacted by this proposed MNP zone. • Significant changes to the proposed MNP zone boundaries to further reduce impacts are not realistic. However, a minor modification to the MNP zone to realign the boundary that adjoins the main channel of the Susan River a short distance back from the river bank into the mangrove fringe, was identified as a practical method of reducing impacts. • This boundary realignment will allow crab fishers to continue their current practice in this location of placing their pot floats amongst the mangroves, which assists with preventing their pots from being swept away by the strong currents in the area. This minor change will support fishers to continue to pot in this productive area of the Susan River.
MNP23 - Cowra Point	New MNP zone at Cowra Point to protect a representative area of shallow estuarine habitats including a mangrove estuary complex within the southern Great Sandy Strait.	Loss of access to safe recreational fishing areas for the Tinnanbar community, with potential flow on impacts to local recreational fishing based tourism and property value.	Establish new MNP zone with modification to the shape and size to remove several creek areas from the MNP zone to allow for recreational fishing in these areas, and extend south. Final Zoning Plan identifier MNP24 - Cowra Point.	• A significant number of submissions to the consultation and a meeting with local residents highlighted the Tinnanbar community's major concerns with the proposed Cowra Point MNP zone (CRIS MNP23), located to the south of their township. • This MNP zone is proposed to protect an extensive mangrove estuary complex and also surrounds and protects a lot within the Butchulla People Land and Sea Claim #2 Determination Area that incorporates exclusive native title. • The Tinnanbar community expressed concerns that the proposed MNP zone would exclude them from accessing their closest, sheltered and productive waterways for recreational fishing, cause boating safety issues associated with forcing them to access alternative fishing locations, and impact on local tourism, property values and lifestyle. • Feedback to consultation suggested relocating the proposed MNP zone to the southern side of Kauri Creek may be a more acceptable alternative. • That alternative was considered but the southern side of Kauri Creek has lower habitat diversity and would not provide the

CRIS MNP zone number and name	Proposal in CRIS	Key issues identified through consultation	Modification to be included in Final Zoning Plan	Justification
				complementary benefit of also protecting the lot with Butchulla exclusive native title. • In an attempt to address community concerns, the MNP zone boundaries proposed in the CRIS have been modified to exclude the northern part of the proposed area closest to the Tinnanbar township, and in the south, to include some additional estuarine habitats adjacent to the northern mouth of Kauri Creek. • These modifications will result in the two northern creek systems closest to Tinnanbar remaining available for recreational fishing, the lot with Butchulla exclusive native title will still be protected, and the MNP zone will remain a viable size. • Although not tested through consultation, it is expected that the southern extension will not significantly impact marine park users, although a small number of recreational and commercial fishers may currently use the area from time to time.

5.1.7 Conservation Park (CP) Zones

Based on the outcomes of consultation, the CP zone network presented as the preferred option in the CRIS will be included in the final zoning plan, subject to the modifications to individual CP zones as detailed in Table 3.

A number of additional CP zone proposals were suggested by key stakeholders during the consultation period. Table 4 provides an overview of those additional CP zone proposals that will be included in the Final Zoning Plan.

Due to changes included in the final zoning plan, zone identifier numbers and names may have changed between the existing zoning plan, the CRIS, and the final zoning plan as presented in the Decision RIS. Appendix 11 provides a list of all zone types, zone identifier numbers and names that (i) will be included in the final zoning plan, (ii) were proposed in the CRIS, and (iii) are in the existing zoning plan.

Table 3. Modifications to the proposed CP zones presented as the preferred option in the CRIS that will be included in the Final Zoning Plan.

CRIS CP zone name and number	Proposal in CRIS	Key issues identified through consultation	Modification to be included in Final Zoning Plan	Justification
CPZ09 - Twenty-Five Fathom Hole	Existing CP zone.	Minimal concern raised through consultation.	Retain CP zone and extend to the south to align with the revised southern boundary of the surrounding MNP zone (CRIS MNP07). Final Zoning Plan identifier CPZ09 – Twenty-Five Fathom Hole and MNP04 – Central Hervey Bay.	• This CP zone protects a section of the Mary River paleochannel at Twenty-Five Fathom Hole. • Extension of CRIS MNP07 that surrounds this CP zone to increase representation of paleochannel deep water and resilient seagrass habitats in this area, necessitates this complementary modification to the southern boundary of the CP zone. • The revised southern boundary of the CP zone will align with the southern boundary of the extended MNP zone, thereby creating a logical CP zone boundary alignment to support public understanding and compliance.
CPZ14 - Four Mile Reef	New CP zone to buffer the proposed Four Mile Reef MNP zone and protect seagrass habitats.	Some impacts to commercial trawl, netting and pot fisheries.	Establish new CP zone with a reduction in size. Final Zoning Plan identifier CPZ14 - Four Mile Reef and MNP10 - Four Mile Reef.	• The size of the CP zone proposed in the CRIS will be reduced by modifying its northern and eastern boundaries to minimise the impact to commercial fisheries and integrate the boundaries of this CP zone with the revised boundary of the MNP zone offshore of Woodgate (new MNP11). • The modified CP zone will still effectively buffer and protect new MNP10 - Four Mile Reef, which is the only fully subtidal and deepest coral reef within the marine park. • This change will result in some deep subtidal seagrass no longer being protected in the CP zone, but this is necessary to create integrated and effective zone boundaries following the changes to MNP11 (CRIS MNP10). • As the proposed expansion to the MNP zone offshore of Woodgate (CRIS MNP10) will not be included in the final zoning plan, there is no requirement for the Four Mile Reef CP zone to buffer that zone.

Table 4. Additional CP zone proposed by key stakeholders that will be included in the Final Zoning Plan.

Stakeholder	Proposal	Justification
Recreational fishing representative body and the conservation sector	Additional CP zone over the north-western shoreline of K'gari and adjacent nearshore waters between Rooney Point and Wathumba Creek to better align the management of this area with the adjacent National Park/World Heritage Area and to prohibit commercial net fishing from these beaches. Final Zoning Plan identifier CPZ05 – Platypus Bay.	• This additional CP zone will upgrade the protection of the nearshore, western coastline of K'gari, providing greater protection for the remote area between Rooney Point and Wathumba Creek, and complementing the designated Platypus Bay Area where motorised watersports are prohibited. • The CP zone management better aligns with the management objectives of the adjacent K'gari (Fraser Island) World Heritage Area and this remote section of the Great Sandy National Park, than does the existing HP zone management. • The CP zone will extend approx. 500m into Hervey Bay and integrate with the Platypus Bay CP zone (CRIS CPZ06) and Wathumba Creek CP zone (CRIS CPZ13) proposed in the CRIS, creating one connected CP zone approximately 27km in length. • The CP zone will allow for only limited extractive use with commercial net fishing (other than bait netting) prohibited. • Commercial and recreational line fishers will be allowed to use a maximum of two rods/lines per person with a combined total of two hooks in CP zones.

5.1.8 Habitat Protection (HP) Zones

Based on the outcomes of consultation, the HP zone network presented as the preferred option in the CRIS, will be included in the final zoning plan subject to the modifications to individual HP zones as detailed in Table 5.

Due to changes included in the final zoning plan, zone identifier numbers and names may have changed between the existing zoning plan, the CRIS, and the final zoning plan as presented in the Decision RIS. Appendix 11 provides a list of all zone types, zone identifier numbers and names that (i) will be included in the final zoning plan, (ii) were proposed in the CRIS, and (iii) are in the existing zoning plan.

Table 5. Modifications to the proposed HP zone network presented as the preferred option in the CRIS that will be included in the Final Zoning Plan.

CRIS HP zone name and number	Proposal in CRIS	Key issues identified through consultation	Modification to be included in final zoning plan	Justification
HPZ02 - Northern K'gari	Part of new MNP zone – MNP06 North of Ngkala Rocks.	Impacts on commercial beach worm, ocean beach net, marine	Retain existing zoning plan HP zone boundaries on the north-eastern	• The boundary of HPZ02 - Northern K'gari on the eastern side of K'gari (north of Ngkala Rocks) will be retained as in the existing zoning plan.

CRIS HP zone name and number	Proposal in CRIS	Key issues identified through consultation	Modification to be included in final zoning plan	Justification
		aquarium fish and recreational beach fishers and spear fishers, within beach and nearshore section of proposed MNP zone.	side of K'gari, as proposed CRIS MNP06 is not being progressed. Final Zoning Plan identifier HPZ02 - Sandy Cape.	• The retention of the existing HP zone boundary is a direct result of removing the MNP zone (CRIS MNP06), as proposed in the CRIS, north of Ngkala Rocks.
HPZ08 - Burrum Heads	Boundaries of HPZ08 -Burrum Heads integrated with proposed boundaries of MNP10 - Offshore Woodgate and CPZ14 - Four Mile Reef.	No specific concerns with HP zone boundaries raised.	Amend HP zone to integrate with modifications to CRIS MNP10 - Offshore Woodgate and CRIS CPZ14 - Four Mile Reef. Final Zoning Plan identifier HPZ09 - Southwestern Hervey Bay.	• Modification of HPZ08 boundaries is a direct result of not progressing the proposed extension of CRIS MNP10 and the adjustment of the boundaries of the proposed CRIS CPZ14. • The boundary modifications to HPZ08 aim to integrate with other zone boundary changes in this area and deliver a logical boundary alignment that supports compliance by marine park users.
HPZ12 - Gatakers Bay	New HP zone (downgrade part of existing CP zone) to facilitate dredging for improved access to public boat ramp.	Department of Transport and Main Roads (DTMR) requested an offshore extension to HP12 to allow for works to increase channel depth.	Establish new HP zone and extend offshore. Final Zoning Plan identifier HPZ 14 - Gatakers Bay.	• CRIS HPZ12 was proposed over the footprint of the access channel leading to the Gatakers Bay public boat ramp, at the request of DTMR, to enable marine park approvals to be considered for future capital dredging works to deepen this channel. • The further extension to the offshore boundary of CRIS HPZ12 has been requested by DTMR following their analysis of up-to-date hydrographic survey information for the site, which has identified that dredging would be required to extend further offshore to deliver the desired channel depth.
HPZ13 - Dayman Spit	New HP zone (from downgrading part of existing CP zone) to allow for permit application to be considered for	The recreational fishing sector note the downgrading of the CP zone at Dayman Spit to HP zone would allow	Establish new HP zone at Dayman Spit and extend north. Exclude commercial net	• Fraser Coast Regional Council (FCRC) undertake a significant program of beach nourishment to maintain Hervey Bay foreshore beaches. • Accessing suitable sand to nourish these beaches is a logistically difficult and expensive challenge. • Dayman Spit is a large sand deposit located off Dayman Point that FCRC historically used as a source of sand for their beach nourishment program.

CRIS HP zone name and number	Proposal in CRIS	Key issues identified through consultation	Modification to be included in final zoning plan	Justification
	Fraser Coast Regional Council (FCRC) to extract sand from Dayman Spit to be used for local beach nourishment purposes.	commercial fishing in this zone. The conservation sector and First Nations peoples' representative bodies oppose any zone downgrades at this location.	fishing from this specific zone. Final Zoning Plan identifier HPZ17 - Dayman Spit.	• When the marine park was declared in 2006, Dayman Spit was included in the CP zone, the management of which prohibits sand extraction. • FCRC has sought a change to the zoning over part of Dayman Spit (i.e. downgrade from the current CP zone to HP zone) to allow for applications for sand extraction from the Spit to be considered. • The boundaries of HPZ13, proposed in the CRIS, were drafted based on limited information on the sediment characteristics of sand deposits within the different sections of Dayman Spit. • FCRC have subsequently undertaken a program of sediment sampling and analysis which has enabled the boundary of the HP zone to be modified to focus on the areas of the spit that are most likely to contain sand with the greatest suitability for beach nourishment. • The modification changes the shape of HPZ13 presented in the CRIS and increases its area by 0.4km^2. • Any proposal to extract sand from within this Dayman Spit HP zone will require a marine park permit and would be subjected to a detailed permit assessment process. • A specific provision will be included in the final zoning plan to exclude commercial large mesh gill nets and ring nets from the HP zone at this location. Further details are provided in section 5.6.
HPZ23 – Tin Can Bay	Area of HP zone adjacent to the township of Tin Can Bay.	Gympie Regional Council seek an extension to the proposed HP zone to enable them to seek permission to manage erosion issues.	Extend HP zone south along foreshore. Final Zoning Plan identifier HPZ27 - Tin Can Bay.	• The southern boundary of HPZ23 presented in the CRIS, extends only part way along the Tin Can Bay foreshore. • Gympie Regional Council have identified that there are significant existing and developing foreshore erosion issues occurring beyond the southern extent of HPZ23 that will require future management. • Extending this HP zone further south along the Tin Can Bay foreshore will enable Gympie Regional Council to apply for permissions to undertake works to more comprehensively manage the erosion issues along the entire Tin Can Bay foreshore.

CRIS HP zone name and number	Proposal in CRIS	Key issues identified through consultation	Modification to be included in final zoning plan	Justification
Additional HP zone – Fork Bank	Area proposed as MNP zone (MNP11) Fork Bank.	Impacts of proposed MNP zone on valued recreational and commercial fishing grounds.	Establish 4km wide strip of HP zone between the existing and proposed new MNP zone (Final Zoning Plan identifier MNP09). Final Zoning Plan identifier HPZ11 - Northern Fork Bank.	• The removal of 4km wide strip from the proposed Fork Bank MNP zone expansion and zoning of that area as HP zone will reduce impacts to recreational and most commercial fisheries in this area. • Zoning of this area as HP zone will prohibit commercial trawling from this area, which will protect the seafloor seagrass habitats from trawl impacts and retain a level of connectivity between the two parts of the MNP zone.
Various	Several proposed new HP zones and GU zones adjacent to development nodes and public infrastructure to facilitate works for coastal management and to align with declared FHA management arrangements.	DTMR, Fraser Coast and Gympie Regional Councils identified a range of minor modifications to the proposed HP zones, and requested three new HP zones be established to support their ability to address coastal management issues. The conservation sector raised concerns that downgrading CP zones to HP and GU zones erodes the quality of existing protected	Establish new HP zones (Toogoom, Point Vernon west) and extend the HP zone as proposed in the CRIS at Poona. Modify HP zones proposed in the CRIS to fully support Council's requirements. Final Zoning Plan identifiers HPZ15 - Beelbi Creek, HPZ16 - Point Vernon West and HPZ23 – Poona.	• Fraser Coast and Gympie Regional Councils are strongly supportive of the zoning downgrades from CP zone to HP zone to enable delivery of necessary and well-planned erosion management and climate change resilience works, however have requested some minor modifications to the HP zone boundaries proposed in the CRIS and the establishment of two new HP zones (at Toogoom and Point Vernon west) to ensure these zones fully support the Council's coastal management requirements. • The additional HP zone at Toogoom (Beelbi Creek) will enable marine park approvals to be granted for future upgrade of the existing erosion management infrastructure at the township of Toogoom, which is experiencing increasing erosion impacts. • An additional HP zone at Point Vernon West will enable approvals to be granted for management of existing erosion issues that are impacting on a public road on the western side of Point Vernon. • DTMR have advised of their intention to reinstate an access channel to the Poona public boat ramp which was originally approved and dredged in 1973 but that has infilled and not been maintained since the GSMP was declared. • Reinstatement of the access channel has strong support from the Poona community and DTMR have sought a zoning downgrade, from CP to HP zone, over the footprint of the channel to ensure that the required dredging works to reinstate the channel can be approved.

CRIS HP zone name and number	Proposal in CRIS	Key issues identified through consultation	Modification to be included in final zoning plan	Justification
		area standards, placing habitats and species at risk.		• The conservation sector's concerns regarding the cumulative impact of these zoning grades are acknowledged, however these downgrades are being implemented in specific defined locations and any proposed works in these downgraded zones will be subject to project-specific marine park permit assessment processes and the application of conditions to manage environmental impacts. Further details are provided in section 5.6 and Appendix 6.

5.1.9 Addressing global biodiversity targets

In the final zoning plan, the area of the marine park in highly protected MNP zones will increase from the current 3.9% to 12.8%. CP zones also contribute to habitat protection and associated biodiversity outcomes by minimising the impacts associated with coastal development and most forms of fishing. When CP zones are combined with the MNP zone network, the final zoning plan ensures 28.6% of the marine park is included in highly protected zones, which more closely reflects the intent of the CBD 2030 protected area-based targets.

5.1.10 Zone types and representation of habitats

Table 6 includes the total area of the marine park in each zone type, along with each zone type as a proportion of the total area of the marine park for the existing zoning plan, the preferred option presented in the CRIS, and for inclusion in the final zoning plan.

Note: All calculations of area relating to the existing zoning plan, the CRIS draft zoning plan, and the final zoning plan have been based on the revised outer boundary of the marine park that will form the base of the final zoning plan.

Table 6. Total area (km^2) included in each zone type, and each zone type as a percentage of the total area of the marine park.

Zone type	Existing zoning plan		CRIS draft zoning plan		Final Zoning Plan	
	Area (km^2)	% of total area of GSMP	Area (km^2)	% of total area of GSMP	Area (km^2)	% of total area of GSMP
MNP zone	241	3.9	792.5	12.8	793.1	12.8
Buffer zone	2.5	0.04	0	0	0	0
CP zone	902.8	14.6	1008.6	16.3	973.1	15.8
HP zone	466.7	7.6	623.3	10.1	634.5	10.3
GU zone	4565.1	73.9	3753.7	60.8	3777.5	61.1
Total	**6178.2**	**100**	**6178.2**	**100**	**6178.2**	**100**

The representation of each habitat type in each zone type is shown in Table 7, in the existing zoning plan, the draft zoning plan presented in the CRIS, and the final zoning plan. The area of marine park in each zone type is also shown as a percentage of the marine park's total area.

Figure 3 compares the representation of each of the ten vulnerable habitat types included in each zone type between the existing zoning plan, the draft zoning plan presented in the CRIS, and the final zoning plan.

Table 7. Great Sandy Marine Park habitat representation for Marine National Park (MNP), Buffer (BUZ), Conservation Park (CPZ), Habitat Protection (HPZ), and General Use (GUZ) zones for the existing zoning plan, the draft zoning plan presented in the CRIS, and the Final Zoning Plan (DRIS). Values are shown as percentages of the whole marine park.

		MNP			BUZ			CPZ			HPZ			GUZ		
	Marine Park Habitat type	**Existing**	**CRIS**	**DRIS**	**Existing**	**CRIS**	**DRIS**	**Existing**	**CRIS**	**DRIS**	**Existing**	**CRIS**	**DRIS**	**Existing**	**CRIS**	**DRIS**
1	Saltmarsh*	14%	15%	15%	0%	N/A	N/A	85%	84%	84%	0%	0%	0%	1%	2%	2%
2	Mangroves*	11%	11%	10%	0%	N/A	N/A	85%	84%	85%	0%	0%	0%	4%	4%	4%
3	Intertidal and shallow subtidal seagrass*	8%	16%	9%	0%	N/A	N/A	11%	16%	14%	25%	26%	28%	56%	42%	50%
4	Deep subtidal seagrass*	0%	16%	20%	0%	N/A	N/A	0%	2%	0%	0%	1%	1%	99%	81%	79%
5	Intertidal corals*	28%	49%	49%	0%	N/A	N/A	56%	44%	43%	16%	7%	8%	0%	0%	0%
6	Subtidal corals*	26%	38%	38%	0%	N/A	N/A	45%	44%	44%	16%	12%	12%	13%	6%	6%
7	Subtidal gardens*	3%	5%	5%	0%	N/A	N/A	50%	94%	94%	0%	0%	0%	47%	1%	1%
8	Gastropod reefs*	0%	100%	100%	0%	N/A	N/A	0%	0%	0%	0%	0%	0%	100%	0%	0%
9	High energy rocky headlands and platforms	9%	28%	13%	0%	N/A	N/A	73%	72%	72%	18%	0%	15%	0%	0%	0%
10	Low energy rocky shores and bars	10%	13%	12%	0%	N/A	N/A	84%	76%	76%	0%	4%	4%	6%	8%	8%
11	Boulder dominated rocky shores	17%	16%	16%	0%	N/A	N/A	37%	64%	64%	34%	20%	20%	12%	0%	0%
12	Subtidal rocky reef	18%	40%	40%	0%	N/A	N/A	28%	24%	24%	3%	3%	3%	52%	33%	33%
13	Calcareous platform	3%	39%	39%	0%	N/A	N/A	40%	37%	37%	13%	24%	24%	45%	0%	0%
14	Coffee rock*	0%	2%	2%	0%	N/A	N/A	41%	60%	60%	56%	35%	35%	3%	3%	3%
15	High energy sandy beaches	0%	8%	7%	0%	N/A	N/A	59%	59%	59%	14%	13%	15%	26%	19%	19%
16	High energy sandy bars	13%	43%	43%	0%	N/A	N/A	3%	3%	3%	31%	27%	27%	53%	27%	27%
17	Low energy sandy beaches and bars	4%	9%	8%	0%	N/A	N/A	73%	69%	70%	18%	18%	17%	5%	5%	5%
18	Claypans and mudflats	5%	11%	11%	0%	N/A	N/A	91%	81%	80%	1%	5%	5%	3%	4%	4%
19	Gravelly shores	4%	8%	8%	0%	N/A	N/A	91%	86%	86%	3%	3%	3%	3%	3%	3%
20	Low energy subtidal mud, sand or gravel	5%	7%	7%	0%	N/A	N/A	19%	21%	22%	6%	13%	13%	70%	59%	59%
21	High energy subtidal sand or gravel	4%	16%	16%	0%	N/A	N/A	3%	3%	3%	5%	6%	6%	88%	75%	75%
22	Deep holes & gutters (unconsolidated)	0%	11%	14%	0%	N/A	N/A	3%	4%	6%	0%	7%	7%	97%	78%	72%
23	Deep holes & gutters (consolidated)*	34%	86%	86%	19%	N/A	N/A	0%	0%	0%	0%	0%	0%	48%	14%	14%
		3.9%	**12.8%**	**12.8%**	**0.04%**			**14.6%**	**16.3%**	**15.8%**	**7.6%**	**10.1%**	**10.3%**	**73.9%**	**60.8%**	**61.1%**

* Vulnerable habitat type

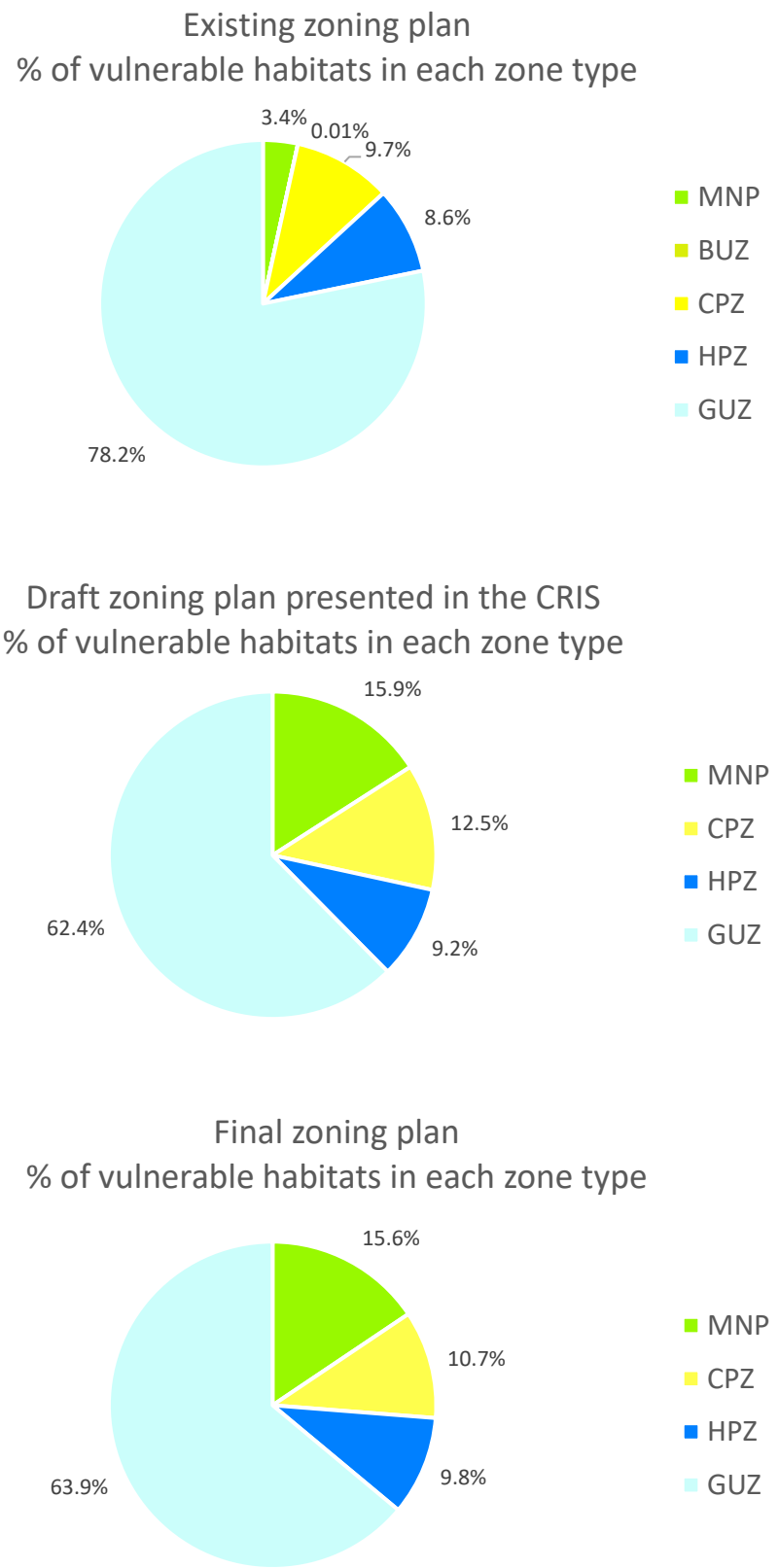

Figure 3. Percentage of the ten vulnerable habitat types of the Great Sandy Marine Park incorporated in each zone type in the existing zoning plan (top), draft zoning plan presented in the CRIS (centre), and Final Zoning Plan (bottom).

5.1.11 Damage to reef habitats from anchoring

5.1.11.1 Context

Three sites within the marine park have been identified as containing sensitive reef assemblages that are at particular risk of being damaged as a result of vessel anchoring. One site is located in Platypus Bay, and two sites are located near Point Vernon (Gatakers Bay and Gables Point). Dragging anchor chains and anchors dropped directly onto reefs can physically break corals and other structures that form part of the reef. The damage of fragile species such as branching corals and sea whips, and loss of reef structure can have a detrimental impact on local marine biodiversity, including the loss of unique species assemblages.

Both of the Point Vernon sites support coral communities that fringe the mainland coast, which is relatively rare in eastern Australian waters. These coral communities have existed in this location for thousands of years and have started to coalesce into larger reef structures. The fringing reef at Point Vernon is dominated in places by fields of *Goniopora spp* and large colonies of the family Faviidae and well developed *Turbinaria* assemblages. The area supports a high diversity of hard (over 30 species) and soft corals, including a high abundance of less common species. The site in Platypus Bay consists of an area of deep-water coral, sea whips and *Turbinaria* that provides habitat for a diversity of reef fish species.

The Point Vernon reefs are popular for vessel-based recreational fishers as they are sheltered from south-easterly winds and are easily accessible from a nearby public boat ramp. These attributes also make the reefs attractive to snorkellers and divers (including for some tourism operators). Use of these reefs is expected to increase as Hervey Bay's population grows over time with consequential increases in recreational boating, fishing and snorkelling in the Point Vernon area. The deeper reef area in Platypus Bay supports a variety of popular fish species and as such, receives high fishing use.

5.1.11.2 Problem

There are several popular sites within the marine park where sensitive habitats are at risk of being damaged from vessels anchoring. Anchor damage at these sites could significantly impact local marine biodiversity, unique habitats and species assemblages.

5.1.11.3 CRIS Options

The CRIS presented three options to protect sensitive natural and cultural values from anchor damage.

Problem	Option 1	Option 2	Option 3
Sensitive natural and cultural values are at risk of anchor damage.	No change.	Establish three Marine National Park zones.	Establish three designated No Anchoring Areas.

The preferred option proposal in the CRIS (Option 3) was to establish three relatively small No Anchoring Areas at Gatakers Bay (0.5km^2), Gables Point (0.8km^2) and Platypus Bay (0.8km^2) (see Appendix 7). Designated No Anchoring Areas can assist in the protection of sensitive reef species and habitats by prohibiting the use of all forms of anchors and are a management tool which directly targets the risk of anchor damage to sensitive habitats. This type of designated area is used in the Moreton Bay and Great Barrier Reef Coast Marine Parks.

5.1.11.4 CRIS Consultation Feedback

There was general support for increased protection of the three areas of reef habitats from anchor damage through the implementation of the proposed No Anchoring Areas.

The proposed No Anchoring Areas at Gatakers Bay and Gables Point and Gatakers Bay were the subject of most comments, with some stakeholders, including coral researchers and BNTAC, suggesting that these two areas should be enlarged to more comprehensively protect the full extent of coral in these areas.

Commercial marine aquarium fish (MAF) fishers raised concerns that the Gables Point and Gatakers Bay No Anchoring Areas would impact on their safe operation when undertaking their collecting activities in these areas. A small number of recreational fishers raised concern with the proposal, however the proposal is supported by the recreational fishing representative body.

5.1.11.5 Decision for Final Zoning Plan

Based on the outcomes of consultation, the three designated No Anchoring Areas as proposed in the CRIS, will be included in the final zoning plan, with the following modifications:

- Extension of the proposed Gatakers Bay No Anchoring Area (NAA02), by 0.4km^2 to the west and south, to more comprehensively protect the full extent of coral communities in that area and to incorporate an area of sensitive cultural value that also has the potential to be impacted by vessel anchoring (Figure 4).
- Implementation of an exemption to the No Anchoring Area requirements for licenced commercial MAF fishers, to allow these fishers to anchor within Gables Point (NAA03) and Gatakers Bay (NAA02) No Anchoring Areas while undertaking their collection activities. Conditions of the exemption will be developed in consultation with the industry and applied via an amendment to their marine park permit.

To reflect the decision to extend part of the boundary of Gatakers Bay No Anchoring Area (NAA02) to also protect an area of cultural value from anchor damage, the 'purpose' of a No Anchoring Area will be modified slightly from that proposed in the CRIS. The final zoning plan with identify the 'purpose' of a No Anchoring Area as, to 'protect sensitive natural or cultural values from anchor damage'.

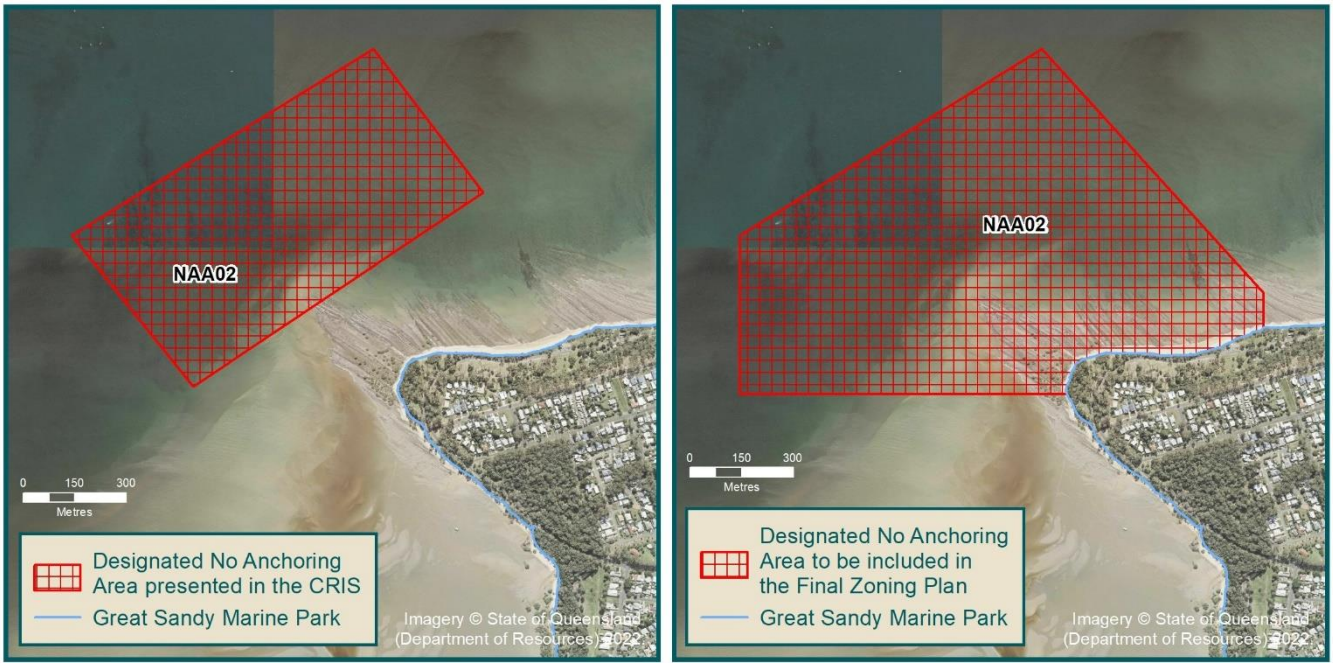

Figure 4. Preferred option for the Gatakers Bay designated No Anchoring Area proposed in the CRIS (left) and the enlargement of the area for the Final Zoning Plan (right).

5.1.12 Damage to habitats from beam trawling in the lower reaches of the Mary River

5.1.12.1 Context

Beam trawling, like other forms of bottom trawling, is a commercial fishing activity that involves significant interaction with, and disturbance of, seafloor habitats. A beam trawl consists of a rigid frame (i.e. a heavy tubular steel beam supported by steel beam heads at each end) to which a trawl net is attached, that is towed across the seafloor behind a fishing vessel. 'Tickler' chains attached at the mouth of the trawl net contact the substrate as the beam trawl moves along the seabed to trigger prawns to rise from the substrate where they are captured in the net.

The fishery is contentious in the community due to its physical interaction with benthic habitat and its capture of non-target species (by-catch). As a result of its physical habitat interaction, beam trawling (along with all other forms of trawling), is normally only allowed to be undertaken within GU zones of the GSMP and other marine parks in Queensland. However, the existing zoning plan includes a non-conforming use provision that allows beam trawling to also be conducted within part of the CP zone within the lower reaches of the Mary River and within the area extending one kilometre from the Mary River mouth, by persons who have continuously held a licence to operate in the beam trawl fishery in this area since the 31 August 2006. This provision was created when the marine park was established, to recognise the historic and ongoing beam trawl activity that occurred in this

location.

Beam trawlers in the Mary River target prawns, including banana prawns and greasyback prawns, which are sold for both human consumption and bait.

This 'non-conforming use area' forms part of the T6 beam trawl fishery area, prescribed under fisheries legislation, that extends from Double Island Point to the Burrum River. Beam trawling within the T6 beam trawl fishery area is significantly constrained by the existing marine park zoning, with much of the T6 area being within zone types that prohibit trawling. The T6 fishery area also includes some areas that are outside the boundary of the marine park and therefore are not subject to marine park management (e.g. areas upstream of the marine park boundary in the Mary River).

A 2019 report prepared by DAF (DAF 2019 Beam Trawl ERA Scoping Study) indicates that between 2006 and 2017 an average of only 29 days of beam trawl fishing per year were undertaken within the T6 fishery area and during the three year period from 2015 to 2017, no beam trawling at all was recorded from the T6 area. Over this 2006 - 2017 period, the number of T6 fishery symbols (i.e. the number of beam trawl operators licenced to operate in the T6 fishery area) reduced from 14 in 2006 to four in 2017. Based on current records there are still four T6 fishery symbols held by commercial fishers.

As the legislative (zoning plan) provisions of the non-conforming use area only allow for the area to be used by a person who has continuously held a beam trawl authority to operate in this area since 31 August 2006, the number of symbol holders to which it applies has, and will continue to, decline over time as fishery symbols are traded or relinquished. Currently only two of the four T6 fishery symbol holders appear to meet the non-conforming use criteria to operate in this area.

5.1.12.2 Problem

This non-conforming use provision was intentionally designed to 'phase out' beam trawling from the CP zone at the mouth of the Mary River area over time. It is likely that only two fishery symbol holders can lawfully trawl in this area and that only minimal trawl catch and effort is occurring in the area. Allowing beam trawling within part of a CP zone via this non-conforming use provision is a significant marine park management compromise, that based on recent use levels, is no longer justified. The zoning plan review provides an opportunity to remove this non-conforming use provision, permanently remove trawling-related habitat disturbance from the area.

5.1.12.3 CRIS Options

The CRIS presented three options to mitigate damage to habitats from beam trawling in the lower reaches of the Mary River.

Problem	Option 1	Option 2	Option 3
Beam trawling is a risk to benthic habitats and non-target species.	No change.	Time-bound transitional provision to phase out beam trawling in the lower reaches of the Mary River.	Prohibit beam trawling immediately in the lower reaches of the Mary River.

The preferred option in the CRIS (Option 3) proposed the current non-conforming use provisions for beam trawling be removed from the final zoning plan and noted that the standard provisions of the CP zone that prohibit trawling would apply.

5.1.12.4 CRIS Consultation Feedback

The consultation indicated the following sentiment from the community and stakeholders in relation to the preferred option:

- There is support for the prohibition of beam trawling from the lower reaches of the Mary River from the conservation and recreational fishing sectors.
- The commercial fishing sector opposes the prohibition of beam trawling in this area.

5.1.12.5 Decision for Final Zoning Plan

Based on the outcomes of consultation, the non-conforming use provision in the existing zoning plan which allows two commercial beam trawl fishers to operate in the CP zone at the mouth of the Mary River will be removed from the final zoning plan. As proposed in the preferred option in the CRIS, this change will be immediately effective when the final zoning plan commences.

The removal of beam trawling from the lower reaches of the Mary River provides conservation benefits by immediately removing habitat impacts associated with beam trawling from this highly protected CP zone of the marine park. This aligns with, but brings forward, the management intention for the existing zoning plan provisions, to ultimately discontinue the activity from this area of the marine park. By enabling the eligible impacted T6 symbol holders to access a commercial fishery impact mitigation package, the economic impacts to these affected fishers can be addressed at this time as opposed to these fishers losing access to this area with no mitigation if they were to relinquish, sell or transfer their T6 beam trawl symbol under the existing zoning plan provisions.

5.1.13 Damage to habitats from bloodworming in the Great Sandy Strait and Tin Can Inlet

5.1.13.1 Context

The collection of bloodworms for use as bait is undertaken by both recreational and commercial fishers. To find and extract bloodworms, fishers use spades and large forks to turnover or dig up seagrass beds and other intertidal habitats. Commercial bloodworm diggers will often build small, temporary bunds with the excavated sediment to slow the ingress of the tide to their digging site. Incoming tides eventually collapse these bunds and the sediment that they are constructed from redistributes across the intertidal flats. Although the extent of commercial and recreational bloodworming currently undertaken in the marine park is relatively limited, the activity has the potential to create high levels of disturbance to intertidal habitats, especially to vulnerable seagrass beds.

The standard marine park management prohibits commercial bloodworming in the highly protected zones (CP, Buffer and MNP zones) of the marine park and requires commercial bloodwormers to hold a permission to operate in HP and GU zones. Collection of bloodworms by recreational fishers can occur in GU, HP and CP zones, but is prohibited in Buffer and MNP zones.

5.1.13.2 Problem

The existing provisions of the designated Great Sandy Area over-ride the standard CP zone's prohibition of commercial bloodworming in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet and allow for the commercial harvest of bloodworms to occur within these waterways. This marine park management arrangement was originally introduced to support the commercial bloodworming sector. However, it has been largely ineffectual as Baffle Creek, Elliott River, large parts of the Burrum River system and parts of the Great Sandy Strait and Tin Can Inlet are also within the boundaries of declared FHAs, where the use of a digging implement, other than a yabby pump, to collect bait is prohibited under fisheries legislation (see Appendix 9 for declared FHA locations). This creates a situation where, although bloodworming can theoretically occur in the CP zones of the marine park in these waterways, the declared FHA management provisions prohibit the activity in most of these areas. The only part of the existing Great Sandy Area waterways where the provisions that allow commercial bloodworming to realistically occur is within those parts of the Great Sandy Strait and Tin Can Inlet that are not within a declared FHA. These provisions highlight a key difference and inconsistency in the management of bloodworming and habitat protection in the marine park and FHAs which the zoning plan review has sought to resolve.

Since the declaration of the marine park, catch records indicate minimal collection in the commercial bloodworm fishery within the marine park, with that collection primarily occurring in southern Great Sandy Strait and Tin Can Inlet. However, as bloodworms are a sought-after bait species, the potential for this effort to increase has been considered.

5.1.13.3 CRIS Options

The CRIS presented three options to mitigate the damage to habitats from bloodworming in the CP zone of the Great Sandy Strait and Tin Can Inlet.

Problem	Option 1	Option 2	Option 3
Commercial bloodworming can create high levels of disturbance to intertidal habitats including vulnerable seagrass beds.	No change.	Transitional provisions to phase out commercial bloodworming in the CP zone of the Great Sandy Strait and Tin Can Inlet.	Prohibit commercial bloodworming immediately in the CP zone of the Great Sandy Strait and Tin Can Inlet.

The preferred option in the CRIS (Option 3) proposed to prohibit commercial bloodworming immediately in the CP zone of the Great Sandy Strait and Tin Can Inlet.

5.1.13.4 CRIS Consultation Feedback

Consultation indicated that the proposal to prohibit commercial bloodworming from the Great Sandy Strait was supported by the conservation sector, but little comment was received from other stakeholders or community members.

5.1.13.5 Decision for Final Zoning Plan

Based on the outcomes of consultation, the existing zoning plan provision (a provision of the designated Great Sandy Area) that allows for the commercial collection of bloodworms within the CP zone of the Great Sandy Area waterways, will be removed in the final zoning plan along with the removal of the designated Great Sandy Area. This will prohibit the commercial collection of bloodworms from the CP zones within these waterways, and more specifically within the Great Sandy Strait and Tin Can Inlet where FHA management does not preclude the activity. While minimal commercial collection of bloodworms is currently occurring in the Great Sandy Strait, the prohibition of this activity protects the intertidal habitats, particularly seagrass meadows, from current and potential disturbance from commercial worm digging should the area be targeted for increased effort in the future.

This change aligns with declared FHA management and addresses the impacts of bloodworming in a highly protected zone type. In relation to the loss of a source of local bait, other forms of commercial bait harvesting within the marine park (e.g. yabbies, beachworms) are unlikely to be significantly impacted by the final zoning plan and therefore will still contribute to the local supply local of bait for recreational fishing. Affected commercial worm diggers will be able to access a commercial fishery impact mitigation package, noting that commercial catch records indicate that current catch and effort is minimal.

5.1.14 Protection of creek mouths subject to dynamic coastal processes

5.1.14.1 Context

Coonarr Creek south of Elliott Heads, and Coongul, Awinya and Wathumba Creeks on the western shoreline of K'gari are each recognised as ecologically significant waterways. This is reflected in their current status as CP zones.

The mouths of each of these creeks are subject to highly active coastal processes which result in their constant reshaping and at times, significant changes to the locations at which they discharge into Hervey Bay. At present the downstream boundaries of the CP zones in each of these creeks extend across each creek mouth, based on the location of those creek mouths when the marine park was declared in 2006.

As an example, the natural movement of the mouth of Coongul Creek has resulted in the CP zone boundary in this area no longer aligning with the current location of the creek mouth (refer to Figure 5, left hand image). This creates significant uncertainty in relation to the location of this downstream boundary for marine park users, which is highly undesirable from a marine park management perspective. CP zones are highly protected marine park zones which impose significant restrictions on some forms of commercial fishing and development related uses. As such, unclear or illogical boundaries for CP zones can result in complex compliance and enforcement issues.

Each of these small, relatively shallow creeks provide extensive habitat for mobile fauna (e.g. fish) during high tide periods, but there is often significant movement of this fauna out through the creek mouths as the tide recedes. While the CP zone provisions preclude the use of commercial fishing nets (with the exception of bait nets) within these zones, the current location of the downstream CP zone boundaries allow for commercial fishing nets to be lawfully used in close proximity to the creek mouths, potentially resulting in the comprehensive capture of these fish as they leave the protected waterways with the receding tide. While this situation may support efficient fishing outcomes, it is not effectively supporting the ecosystem protection that is intended to be provided by the CP zones within these creeks.

5.1.14.2 Problem

The current alignments of the downstream CP zone boundaries within these four creeks are not effectively accommodating the dynamic coastal processes that influence their mouths, are not logical which results in misunderstanding and compliance issues, and are not effectively supporting the marine park management of the ecosystem and conservation values within each waterway.

5.1.14.3 CRIS Options

The CRIS presented two options for protecting creek mouths subject to dynamic natural coastal processes.

Problem	Option 1	Option 2
Current CP zone boundaries at creek mouths not effectively accommodating the dynamic natural coastal processes causing compliance and management issues.	No change.	Extension of the four CP zones beyond the creek mouths.

The preferred option presented in the CRIS (Option 2) proposed extending the four CP zones beyond the creek mouths to ensure clear and logical zone boundaries that will improve compliance, enforcement and marine park management, and support conservation values.

5.1.14.4 CRIS Consultation Feedback

The results of consultation indicate there is broad support for expanding the existing CP zones in Coonarr Creek (CRIS CPZ15), and Wathumba Creek (CRIS CPZ13), Awinya Creek (CRIS CPZ17) and Coongul Creek (CRIS CPZ21) to protect the mouths of these creeks. There was, however, opposition to the extension to the CP zones at these four creek mouths from the commercial fishing sector.

Commercial fishers identify that the foreshore areas around these creek mouths are key commercial net fishing locations and that the loss of access to these areas will compromise the overall viability of much of the western foreshore of K'gari as a net fishing area.

5.1.14.5 Decision for Final Zoning Plan

Based on the outcomes of consultation, the CP zones in four creeks in the marine park will be expanded to protect the creek mouths in the final zoning plan. These changes extend the downstream CP zone boundaries within Coonarr, Coongul, Awinya and Wathumba Creeks offshore to a distance of approximately 500m from the creek mouths, and a suitable distance to the north and south of the existing creek mouths to accommodate longshore creek mouth movement over time. These boundary changes will ensure that the creek mouths and the coastal processes and ecological functions that occur at the junction of these creeks with Hervey Bay are entirely protected within the CP zones. By extending these CP zones, conservation of the ecosystem values within the CP zones of each creek is improved by removing the ability for commercial fishing nets to be positioned in close proximity to the creek mouths where these nets can directly and efficiently intercept fauna that is entering or leaving these waterways.

The selection of 'approximately 500m' as the offshore extent of these zones is consistent with the distance that has been applied for a number of other foreshore zone boundaries around the park. By defining each CP zone boundary with a series of coordinates this will provide a logical boundary that can be easily located, which supports improved public understanding of the boundary location and aids compliance.

Commercial fishers affected by this change will have to access a commercial fishery impact mitigation package.

Figure 5 shows the extent of the expanded CP zone at the mouth of Coongul Creek that will be included in the final zoning plan.

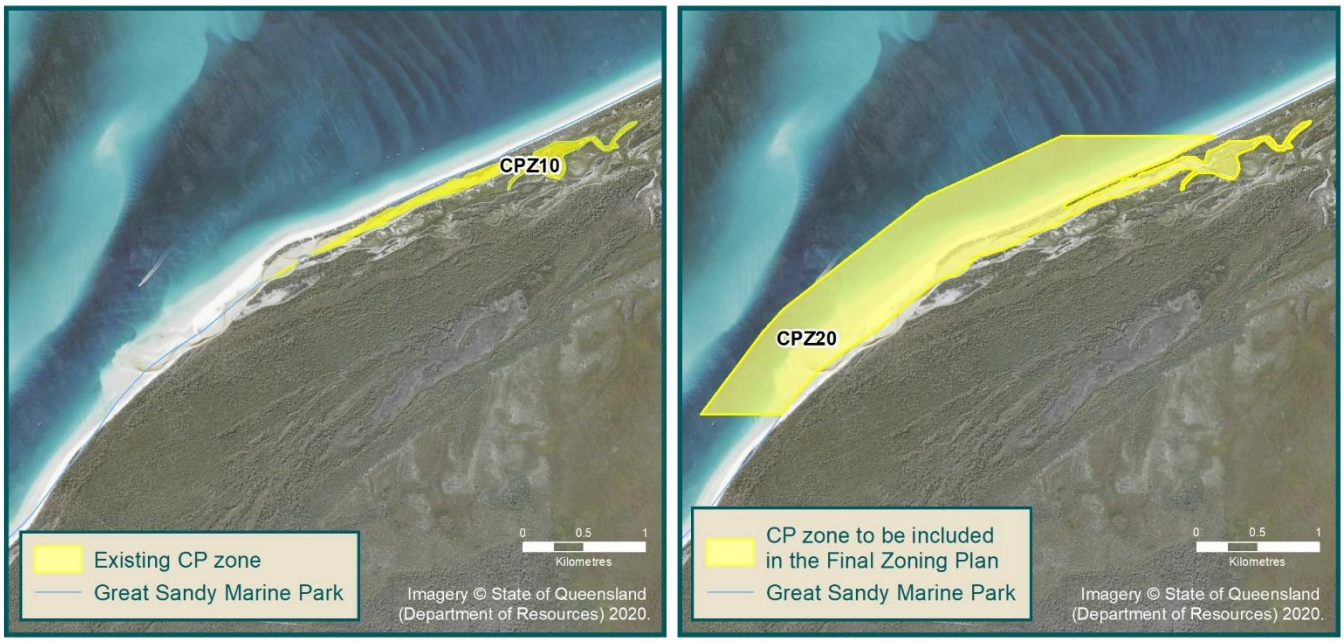

Figure 5. Existing boundary of the CP zone at Coongul Creek, western side of K'gari (left) and the CP zone for inclusion in the Final Zoning Plan (right).

5.1.15 Impact analysis of changes for inclusion in the Final Zoning Plan to improve habitat protection.

Sector	Costs	Benefits
ENVIRONMENT		
Marine biodiversity	Refer to cost for State Government.	The increase in MNP zones to 12.8% of the marine park is expected to increase species diversity and abundance, improve habitat connectivity, increase resilience of habitat types (including vulnerable habitat types) to deal with impacts from climate change and disturbance events such as floods, enhance the provision of valuable ecosystem services such as carbon sequestration, nutrient cycling and nursery areas for commercially and recreationally important fish species. Extending CP zone downstream boundaries to accommodate dynamic creek mouths in four waterways improves conservation of ecosystem values by removing the ability for commercial fishing nets to be positioned at creek mouths where they intercept a diversity of fauna entering or leaving these waterways. Designated No Anchoring Areas at Platypus Bay, Gatakers Bay, and Gables Point protect sensitive natural and cultural values and/or species from potentially damaging activities, contributing to the increased resilience of reef habitats.
Habitats	Refer to cost for State Government.	All 23 identified marine park habitat types are protected from disturbance in at least one MNP zone, with many habitat types protected in five or more MNP zones. The area of vulnerable habitat types protected in MNP zones is quadrupled, with 15.6% of the total area of vulnerable habitat types protected, and the area of all other habitat types protected in MNP zones is more than doubled, with 10.9% of these protected in MNP zones. The revised MNP network results in improved protection of: • an area of unique reef habitat at Four Mile Reef • key areas of shallow and deep subtidal seagrass throughout Hervey Bay, critically important for the survival of turtles and dugong • a unique and rare deepwater gastropod reef off the northern coast of K'gari at Ferguson Spit

		• the Mary River paleochannel deep water habitats in Hervey Bay, including deep subtidal seagrass and deep holes and gutters • stands of cannonball mangroves at the southern limit of their distribution in the Susan River • part of Double Island Point headland at Wolf Rock, a key geological feature of the marine park and 'anchor point' for the Cooloola sand mass • high energy sandy bar habitat at Breaksea Spit • areas of intertidal shorebird feeding habitat. In protecting a larger area of habitats within the marine park from extractive activities and physical disturbance, the revised zoning network promotes greater resilience of habitats against threats associated with climate change and other human induced impacts. Designated No Anchoring Areas at Platypus Bay, Gatakers Bay, and Gables Point protect sensitive natural and cultural values and/or species from potentially damaging activities. Prevention of damage to benthic habitats in both the lower reaches of the Mary River via removal of commercial beam trawling, and in CP zones in the Great Sandy Strait and Tin Can Inlet via removal of commercial bloodworming.
Threatened Species	Refer to cost for State Government.	Contribution to the population recovery of several threatened species such as grey nurse shark, dugong, marine turtles and shorebirds by protecting significant sites used for aggregating, resting, feeding, nesting or breeding. Protection of larger, representative areas of specific habitat types from threatening processes and minimising edge effects within MNP zones, will help maintain the ecological viability and integrity of populations, species and communities. Enhanced connectivity of MNP zones across the marine park aids species' ability to move between key habitats, supports movement of offspring and juveniles between habitats important in early life stages and allows genetic exchange between populations.
National and International Agreements	Refer to cost for State Government.	Improved reflection of international commitments for biodiversity protection targets to achieve improved biodiversity outcomes.

		Better supports the management of the Great Sandy Strait Ramsar site (Wetland of International Importance) and K'gari (Fraser Island) World Heritage Area.
COMMUNITY		
First Nations peoples	No assessable impact.	Increase in cultural identity, health and well-being resulting from better protection of cultural values and resources and improved connection to Country. The expanded MNP zone network provides improved protection of habitats that support culturally important resources and cultural sites in the intertidal zone from use impacts, e.g. shell middens. Recognition of the priorities and perspectives of First Nations peoples in the management of the marine park. Designated No Anchoring Areas at Platypus Bay, Gatakers Bay, and Gables Point protect sensitive natural and cultural values and/or species from potentially damaging activities.
Recreational fishers	The increase in the MNP zone network will remove an additional 8.9% area of the park available for fishing. Total proportion of the marine park in MNP zones, where recreational fishing is prohibited, will be 12.8% (793km^2). Impacts to recreational fishers from an expanded MNP zone network will be greatest in actively used recreational fishing and crabbing locations (e.g. Four Mile Reef, Woody Island, Myers Creek, sites near Wolf Rock and Turkey, Bookar, Walsh Islands complex). Fishing in designated No Anchoring Areas (Platypus Bay, Gatakers Bay, Gables Point) may require modifications that allow fishers to employ different fishing methods, with potential associated expenditure (e.g. purchase of an electronic outboard motor with a GPS spot lock function to hold position over reef areas or reduce risk of snagging on reef structure).	"Spillover" of species (larvae, juveniles and adults) from MNP zones to surrounding areas will benefit fishers (depending on location and species) with a greater abundance of some target species. Spillover benefits that provide improvements in species' catchability over time may offset the loss of areas for recreational fishing. The increased proportion of the park within CP zones (enlarged by approx. 1% (70km^2)) and the resultant exclusion of large mesh commercial net fishing from those new and expanded CP zones will reduce the competition for catch within those areas for recreational fishers.
Vessel users	Although small in total area (2.47km^2) designated No Anchoring Areas restrict the area where vessels can anchor at several locations (i.e. Platypus Bay, Gatakers Bay, Gables Point) in the marine park.	No assessable impact.

General community	No assessable impact.	Improved visitor and emergency services access to K'gari facilitated by zoning downgrade at Wanggoolba Creek. More snorkelling opportunities to view undamaged reef structure and associated fish and invertebrate communities protected in three designated No Anchoring Areas. Better understanding of zone boundaries as a result of modifications to the boundaries of some zones that result in more logical and easy-to-define boundaries and increase ease of compliance and enforcement, including at: • Hoffmans Rocks • mangrove islands of Turkey, Bookar, Walsh • four waterways where CP zones are being extended further downstream to accommodate dynamic creek mouths.
BUSINESS/INDUSTRY		
Commercial fishers	See section 6 for an assessment of the impacts resulting from the combination of changes to be included in the final zoning plan (i.e. not just those resulting from changes to improve habitat protection as zoning plan changes can have cumulative and synergistic impacts on commercial fishing).	"Spillover" of species (larvae, juveniles and adults) from MNP zones to surrounding areas will benefit fishers (depending on location and species) with a greater abundance of some target species. Spillover benefits that provide improvements in species' catchability over time may offset the loss of areas for different types of commercial fishing. Maintains access for two harvest fisheries (coral and marine aquarium fish) that would normally be prohibited by the standard MNP zone provisions at Woody Island and Little Woody Island. Access to a commercial fishery impact mitigation package See section 6.
Post-harvest seafood businesses	Reduces access to seafood for processing, value adding and sale. Reduces ability to meet market demand. Potentially impacts on business viability, particularly if alternative seafood product cannot be sourced. Potentially requires modification of processing plant and equipment to support processing and handling of alternate product. Loss of employment.	Access to business support through a commercial fishery impact mitigation package

Charter fishing	Expansion of MNP zone network could impact on charter fishing operations if their specific fishing sites are no longer accessible.	"Spillover" of species (larvae, juveniles and adults) from MNP zones to surrounding areas will benefit fishers (depending on location and species) with a greater abundance of some target species. Spillover benefits that provide improvements in species' catchability over time may offset the loss of areas for charter fishing. The increased proportion of the park withing CP zones (enlarged by approx. 1% (70km^2)) and the resultant exclusion of large mesh commercial net fishing from those new and expanded CP zones will reduce the competition for catch within those areas for charter fishers.
Hospitality industry	No assessable impact.	Long-term benefits from increases in nature-based tourism for accommodation providers, restaurants and other food outlets.
Tourism	Designated No Anchoring Areas restrict the areas in the marine park where tourism vessels can anchor. This could lead to some lost revenue if tourism activities requiring vessels to anchor were being undertaken in these areas.	Expected increase in tourism as a result of improved amenity from the increase in the MNP zone network. Enhancement of the natural values of the marine park that are prized by the community and regarded as a natural and commercial asset, thus providing a strong basis for nature-based tourism (e.g. snorkelling, diving, kayaking, wildlife viewing). More opportunity for tourism operators (e.g. snorkelling) to view undamaged reef structure and associated fish and invertebrate communities protected in three designated No Anchoring Areas. Promotion of nature-based recreation and tourism.
Wide Bay regional economy	The primary identified economic impacts are being addressed through a commercial fishery impact mitigation package.	Potential for the creation of new small businesses that support the local economy e.g. nature based tourism.
GOVERNMENT		
Local government	No assessable impact.	Changes to downgrade CP zones to HP zones in specific locations will: • facilitate works to protect sensitive foreshore areas, community assets and undertake beach nourishment in certain locations • facilitate maintenance of beach access tracks that enhance access for residents and visitors. Assist local governments to implement Coastal Hazard Adaptation Strategies under the Qcoast2100 program.

		Improve certainty for local government for development and conduct of coastal management works.
State government	Funding for resources to meet public expectations for a well-managed marine park. Overall, for implementation of the final zoning plan, establishment and first year operational costs are estimated to require an additional $3.5M with ongoing annual costs estimated to require an additional $1.5M. Implementation of measures relating to habitat protection and an integrated zoning network will contribute significantly to these costs.	Use of consistent legislation, zoning arrangements and terminology across Queensland marine parks, where appropriate, will provide a consistent, efficient and user-friendly approach to the management of Queensland's marine environment.

5.2 Conflict in the waterways of the designated Great Sandy Area

Zoning plan review objective

Address conflict between fishing sectors in Baffle Creek, Elliott River, Burrum River system, the Great Sandy Strait, and Tin Can Inlet (the designated Great Sandy Area waterways).

5.2.1 Context

Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet are all waterways that are universally accepted by researchers, land and water managers and the community as containing high ecological values. For example, the Great Sandy Strait is an internationally important wetland under the Ramsar Convention, includes part of the K'gari (Fraser Island) World Heritage Area and is proposed for consideration for inscription on the World Heritage list in its own right. The Burrum River, Great Sandy Strait and part of Tin Can Inlet form part of a Dugong Protection Area (DPA), declared in 1998 under fisheries and nature conservation legislation, in recognition of the habitat values that these waterways provide to this threatened species. Baffle Creek is one of the few major waterways in southern Queensland which is not regulated by a significant water impoundment structure and all four waterways contain extensive networks of declared Fish Habitat Areas (see Appendix 9).

In addition to their high ecological values, each of these waterways are also highly productive fishing grounds and have a long history of use by commercial, recreational and traditional fishers.

When the existing zoning plan was developed in 2006, deciding on suitable zoning arrangements for these waterways, that balanced both their fishing and habitat/ecological values, was challenging and was the subject of intense stakeholder debate.

The zoning solution implemented, and that currently exists, was to:

- select core habitats within some waterways and create MNP zones to provide those areas with the highest level of habitat protection and exclude all extractive uses, and
- create a customised management arrangement for the remaining areas of these waterways that utilises an underlying CP zone to provide a high level of protection for the ecological values, overlaid with a designated area (the Great Sandy Area) in combination with non-conforming use provisions. These override the standard CP zone restrictions in relation to fishing, allowing various additional commercial and recreational fishing activities to occur in these waterways.

Specifically, the designated Great Sandy Area currently allows commercial net fishing to occur where, except for bait netting, it would normally be prohibited by the underlying CP zone. Both commercial and recreational line fishers are allowed to use a maximum of three rods/lines per person with a combined total of six hooks, whereas the CP zone management would normally limit fishers to one rod/line and one hook. Commercial blood wormers and a small number of commercial yabby collectors are allowed to operate where they would also, normally be prohibited. A non-conforming use provision, which applies to the same CP zones as the designated Great Sandy Area, also allows commercial crabbers to use commercial quantities of crab pots (50 -100 per fisher, depending on individual fishing licence conditions), whereas without this non-conforming use provision, the underlying CP zone would render commercial crabbing unviable through its limit of four crab pots per person.

Consistent with the provisions (section 211) of the *Native Title Act 1993*, the exercise and enjoyment of native title rights and interests (including those relating to traditional hunting and fishing) is recognised within the marine park and not restricted by the zoning plan in any way.

The provisions of the designated Great Sandy Area that allow commercial net fishing within the CP zones in these waterways have been the particularly contentious component of these arrangements since the existing zoning plan was created. Conflict between the recreational fishing sector (supported by the conservation sector) and the commercial fishing sector regarding these provisions has not subsided over time and as a result, is eroding community confidence in the ability of the marine park's management to (i) achieve conservation outcomes for biodiversity including the protection of threatened species and (ii) separate incompatible uses and maximise opportunities for enjoyment and benefit from the marine environment.

Conservation-based concern regarding the risks that commercial fishing nets present to threatened species in the Great Sandy Area waterways is one of a number of issues that are driving the conflict. Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet all provide important habitats for threatened species and are consistently utilised by these species. The Great Sandy Strait is core habitat for dugong, turtles and two small resident populations of Australian humpback dolphins. Other threatened species (e.g. whale species) also frequent the Strait. Dugong and turtles are commonly found in the Burrum River system, particularly within the

lower reaches. Reports of dugong in the Elliott River and Baffle Creek are less common, but still occur, however these two waterways provide important habitat for turtles, particularly green turtles. A population of Australian humpback dolphins, separate from those in the Great Sandy Strait, frequently utilise the mouths and lower reaches of the waterways between Baffle Creek and the northern end of the Great Sandy Strait, including the Elliott and Burrum Rivers, as key feeding habitats.

Marine parks perform a key function in the protection of threatened marine species by providing a primary mechanism for delivering on-ground actions to address the requirements of state and Commonwealth threatened species legislation, address Australia's obligations under international threatened species agreements and implement species recovery plans. Conservation stakeholders are concerned that by allowing commercial net fishing to occur in the Great Sandy Area waterways, through this designated area, the GSMP is not delivering its threatened species protection obligations.

These concerns are supported by a recent level 2 ecological risk assessment of the large mesh net component (gill nets and ring nets) of the East Coast Inshore Fin Fish Fishery, conducted by DAF in 2021 (ECIF Large Mesh SOCC Level 2 ERA), that concluded that large mesh gill nets and ring nets present a higher risk of entanglement and mortality to a range of the threatened species that utilise the Great Sandy Area waterways, compared to other netting apparatus (e.g. bait nets, tunnel nets, set pocket nets).

However, these threatened species related concerns are only one component of a collection of issues that are driving conflict in relation to the current management of the Great Sandy Area waterways. Concerns, particularly from the recreational fishing sector, regarding the impacts that net fishing is having on the sustainability of fish stocks, catch allocation between the fishing sectors, and commercial netting not being the best use of the public fisheries resources in these waterways from a regional economic benefit perspective, are also key factors underpinning the conflict. While these are core fisheries management issues that are primarily the management responsibility of DAF through the administration of the *Fisheries Act 1994,* they are difficult to separate between management agencies if an integrated and broadly supported solution to the management of these waterways is to be achieved.

In summary, the recreational fishing sector, supported by key conservation groups and some community groups, is strongly advocating for the prohibition of commercial net fishing from the designated Great Sandy Area waterways with the impacts upon affected commercial fishers to be fairly mitigated. Whereas the commercial net fishing sector seeks to maintain their existing level of fishing access to these productive waterways.

5.2.2 Problem

The significant and ongoing conflict between the recreational fishing sector (supported by the conservation sector and a broad section of the community) and the commercial fishing sector, regarding the social and ecological (including threatened species) impacts of commercial net fishing within the Great Sandy Area waterways and the compatibility of netting with the existing highly protected management status of these waterways, is eroding community confidence in the marine park's management.

While there are a range of factors (conservation, fisheries management, social and economic) that underpin this conflict, many of which are not the core responsibility of DES, the management provisions of the designated Great Sandy Area are widely viewed by the community as the primary source of these issues and the resulting conflict. The sustained conflict is evidence of the failure of the current marine park management of these waterways to engender public support and deliver the purpose of the *Marine Parks Act 2004*, that is, the conservation of the marine environment, in a manner that effectively balances conservation and use.

5.2.3 CRIS Options

The CRIS presented three options to resolve the conflict between the recreational fishing and the commercial fishing sector in the designated Great Sandy Area waterways.

Problem	Option 1	Option 2	Option 3
Significant and ongoing conflict between the recreational fishing sector and the commercial fishing sector, regarding the social and ecological (including threatened species) impacts of commercial net fishing within the Great Sandy Area	No change to Zoning Plan.	Remove the designated Great Sandy Area and prohibit all commercial netting from the CP zones within the Great	Remove the designated Great Sandy Area but only prohibit commercial netting with large mesh gill nets and ring nets from the CP

waterways and the compatibility of netting with the existing highly protected management status of these waterways, is eroding community confidence in marine park management.		Sandy Area waterways.	zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet.

The preferred option (Option 3) proposed in the CRIS was to remove the designated Great Sandy Area but prohibit only the use of large mesh gill nets and ring nets from the CP zones in the existing designated Great Sandy Area waterways[1]. Under this preferred option, the following net fishing practices within these waterways were proposed to be retained:

- commercial netting using bait (small mesh) nets (N11 fishery symbol) in the CP zones, in accordance with the standard provisions that apply to this zone type, noting the general prohibition on the take of bream, whiting and flathead with a bait net in a CP zone within the GSMP would continue to apply
- the set pocket net fishery conducted only within the CP zone in the lower reaches of the Mary River
- the tunnel net fishery (N10 fishery symbol) conducted only in the CP zone within parts of the Great Sandy Strait and Tin Can Inlet, of which there are currently six fishers licenced to operate.

The designated Great Sandy Area provisions that allow commercial and recreational line fishers to use a maximum of three rods/lines per person with a combined total of six hooks were proposed to be modified to allow the use of a maximum of two rods/lines per person with a combined total of two hooks within these CP zones. This outcome was proposed to be implemented via a modification to the standard provisions for CP zones and therefore would apply uniformly to all CP zones across the park.

The preferred option also proposed the prohibition of commercial bloodworm harvesting from the CP zones within the Great Sandy Area waterways. The small-scale commercial yabby harvest fishery that is conducted within the CP zones in the Great Sandy Area waterways by the holders of fisheries authority numbers 1435 or 3464, was proposed to be allowed to continue via a new non-conforming use provision. As is the case with the current designated area provisions, this non-conforming use provision would not require these two authority holders to also hold a marine park permission, ensuring these yabby fishers retain their existing use rights without any additional regulatory burden.

The commercial crab fishery that currently occurs in the CP zones within the Great Sandy Area waterways under a non-conforming use provision was proposed to be allowed to continue. This would be authorised via a slightly modified non-conforming use provision that defines the area where the activity can occur and removes the current requirement for commercial fishers to also hold a marine park permission to crab within these waterways.

5.2.4 CRIS Consultation Feedback

Consultation indicated the following sentiment from the community and stakeholders in relation to this proposal:

- Overall, there was broad public support (e.g. 91% of 1127 survey responses) for the prohibition of commercial large mesh gill and ring nets from designated Great Sandy Area waterways, with the conservation and recreational fishing sectors being particularly supportive of the proposal. Many who supported the proposal indicated that tunnel netting should also be removed from the Great Sandy Strait.
- The commercial fishing sector, associated businesses and some seafood consumers strongly oppose the removal of commercial large mesh gill and ring nets from these waterways.
- There was little support for the retention of tunnel netting (i.e. only 21% of 1126 online survey respondents supported the proposal). While the online survey question regarding tunnel netting also incorporated a request for views on the proposed retention of set pocket netting within part of the Mary River, this form of netting received limited comment and it was apparent that tunnel netting was the primary focus of respondents' concerns.
- Strong support (e.g. 80% of 1097 online survey respondents) was offered across the commercial and recreational fishing sectors and across most of the community for the proposal to allow fishers to use a maximum of two rods/lines per person with a combined total of two hooks in all CP zones, instead of one

1. This prohibition of large mesh gill nets and ring nets was also proposed in the CRIS to apply to the upstream reaches of the Burrum River and the Cherwell River, that are currently CP zone and within the designated Great Sandy Area but that were proposed to be downgraded to HP zone as a preferred option as part of the proposed zoning plan changes in the CRIS (refer to Appendix 6).

rod/line and one hook only. However, there was some opposition to the proposal from First Nations people and conservation groups, who recommended a one rod/line and one hook limit be applied.

The strongest opposition to the proposed prohibition of large mesh gill nets and ring nets came from the commercial fishing sector. Commercial fishers suggest that there are no widespread community concerns with commercial fishing and believe that the notion of high conflict is largely unfounded and is being promoted by particular interest groups, simply to justify their objective to have commercial netting removed from these waterways. Commercial fishers also oppose the notion that fish stocks in these waterways are depleted or unsustainably fished by their sector and refer to DAF fish stock assessments to support that view. The sector also rejects the view that the gill nets that are predominantly used in these waterways (light gauge mullet and whiting nets) present a significant entanglement and mortality risk to protected species and believe there is little scientific evidence to support the level of risk identified in the CRIS in relation to their local net fishing practices. Commercial fishers suggest that encouraging additional recreational fishing effort will increase risks to threatened species from boat strike, as a direct result of the additional recreational vessels that will be encouraged to utilise the waterways. Across the commercial fishing sector, the proposal to prohibit large mesh gill nets and ring nets from the Great Sandy Area waterways is viewed as the key zoning plan change that will drive the most significant impact to their industry. The sector suggests this proposed zoning plan change will force many fishing businesses to leave the industry and result in significant direct and indirect job losses, fishing effort shift into other locations and/or fisheries within the park causing conflict and the potential for localised overfishing, substantial regional economic impacts, and a reduction in the availability of fresh local seafood for the public.

The commercial fishing sector also raised concern with the limited detail provided in the CRIS in relation to the proposed impact mitigation package. Some fishers suggested that, if the removal of the designated Great Sandy Area progresses, in addition to compensation for lost access to fishing grounds, the package needs to address losses from stranded assets (e.g. boats and fishing gear), and fishers working in fisheries that will be less directly affected by the changes (e.g. mud crabbing) identified that the package would need to comprehensively address and manage transfer of fishing effort into their fisheries.

Significant concern with the proposal was raised by seafood processors, retailers and consumers regarding the reduced availability of fresh local seafood. A number of local seafood processors/retailers suggest that the changes are likely to threaten the continued viability of their businesses and the local jobs that they support. Some processors highlighted the extent of economic stresses that could result from reduced availability of local product, such as being left to pay out long-term lease payments on expensive waterfront business premises that would no longer be required.

The views of First Nations people on the proposal varied. Some First Nations representative bodies indicated strong support for prohibiting commercial gill nets and ring nets from their sea Country, whereas others were non-committal regarding the issue. Some representative bodies also raised significant concerns with the promotion of additional recreational fishing effort within their sea Country, identifying its potential impacts from increased boating activity and the associated pollution that this may cause.

In relation to allowing commercial tunnel netting to continue within the CP zone in the Great Sandy Strait and Tin Can Inlet, and set pocket netting in the Mary River via non-conforming use provisions, the commercial fishing sector supports the continuation of these fisheries. However, a number of commercial fishers suggested that the light gauge mullet and whiting gill nets that are used locally and proposed to be prohibited from the Great Sandy Area waterways are a more environmentally and economically sustainable form of netting than tunnel netting and are less visually confronting for the general public.

The conservation and recreational fishing sectors view tunnel netting as a significant, destructive and industrial scale form of commercial net fishing and strongly promoted its prohibition from the CP zone within the Great Sandy Strait and Tin Can Inlet.

The proposal to retain the set pocket net fishery in the CP zone within the lower reaches of the Mary River was of considerably less concern to the public than the proposal to retain tunnel netting. The set pocket net fishery is limited to a very small geographic area, is a highly specialised fishing technique that specifically focuses on targeting prawns for human consumption and bait, and presents a low risk to threatened species. The conservation sector did suggest that ‘sunsetting’ of the existing licences should be considered, to remove this form of netting from the CP zone over time.

5.2.5 Decision for Final Zoning Plan

Since completion of the public consultation on the draft zoning plan in late 2022, the Queensland and Australian Governments have announced their intention to phase out the use of large mesh gill nets from the Great Barrier

Reef World Heritage Area by June 2027. Implementation of this initiative, to address local and international conservation concerns regarding the impacts of these nets on threatened species in the Great Barrier Reef, is also likely to result in some changes to the current fisheries management of net fishing within the GSMP.

While these emerging changes to the net fishery announced by the Australian and Queensland Government and the policy intent behind their introduction are relevant to the decision regarding how best to address the conflict in the designated Sandy Area waterways, the decision for the final zoning plan detailed below has largely been made independent of those emerging considerations and are focused on delivering the best outcome for the marine park.

Based on the consultation feedback, there is clear support across the community and from most stakeholders for the removal of large mesh gill nets and ring nets from the designated Great Sandy Area waterways as proposed in the CRIS. However, consultation also clearly confirmed that removing these nets will result in significant impacts to local commercial net fishing businesses that depend on these productive waterways for the majority of their catch and to a wide range of post-harvest businesses (seafood processors, retailers etc) who are also highly dependent on the catch from these waterways.

To further inform the decision, a cost benefit analysis (CBA) was commissioned (refer to Appendix 12) to assess the economic costs and benefits from removing large mesh gill nets and ring nets from the designated Great Sandy Area waterways. This CBA considers the value of fishing to commercial and recreation fishers over and above the resources used for that fishing, such as employed workers and fishing vessels for commercial fishers and time and costs for recreational fishers. The CBA indicates that the additional value to recreation fishers from removing these nets is greater than the value that would be achieved by the continuation of the use of these nets by commercial fishers and will result in a net benefit for Queensland. The benefits are primarily driven by increased recreational fishing opportunities that will result from the removal of the nets. These CBA findings hold for a range of assumptions relating to future commercial catch volumes, implementation options and other sensitivities included in the CBA.

Given the strong community support and CBA results in support of removing large mesh gill nets and ring nets from the designated Great Sandy Area waterways and the increasing concerns (including the recent concern at an international level) with the use of these nets in core habitats for threatened species, the prohibition of these nets from the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet will be included in the final zoning plan.

This decision, combined with the government's recent announcement of the phasing out of gill nets from the Great Barrier Reef by June 2027, are relevant to the final zoning plan decision regarding the retention of tunnel netting in the CP zone within parts of the Great Sandy Strait and Tin Can Inlet. While consultation on the CRIS demonstrated significant stakeholder and community objection to the proposed retention of tunnel netting within these waterways, the near-term prohibition of gill nets from most of the east coast of Queensland increases the dependence on alternative commercial net fishing methods that present a lower risk to threatened species, to provide continued seafood supply of inshore fin fish for public purchase. Tunnel netting is one of these lower risk net fishing methods, however it is a fishing method that is highly dependent on the presence of specific waterway structure and habitat features. The Great Sandy Strait and Tin Can Inlet are two of the very limited locations along the Queensland coast (the other being Moreton Bay) which have the specific attributes to support viable tunnel netting operations. Given the recent developments regarding the near-term prohibition of gill nets from much of the east coast and the resultant increased importance of the tunnel net fishery to support the continued seafood supply of inshore fin fish for public consumption, the use of tunnel nets within the CP zone in the Great Sandy Strait and Tin Can Inlet by up to six tunnel net endorsement holders will continue to be supported in the final zoning plan. This decision will also help to maintain a local supply of fish for the dolphin feeding program at Tin Can Bay.

Given the limited ecological risk presented by the Mary River set pocket net fishery, the general lack of concern with the fishery identified through the consultation, and the role the fishing method plays in providing locally sought after prawns for human consumption and bait, the final zoning plan will allow the existing set pocket net fishery to continue in the CP zone within the Mary River.

The broad support identified through the consultation for the proposal to allow line fishers to use a maximum of two rods/lines per person with a combined total of two hooks in CP zones within the Great Sandy Area waterways (and all other CP zones within the marine park), suggests that this is a balanced and logical change to the marine park management that is unlikely to result in significant impact to marine park users. This change will therefore also be included in the final zoning plan.

As such, the preferred option as presented in the CRIS to manage conflict in the waterways of the designated Great Sandy Area and detailed below, will be included in the final zoning plan:

- The designated Great Sandy Area will be removed.

- The use of large mesh gill nets and ring nets will be prohibited from the CP zones within the existing designated Great Sandy Area waterways.
- The use of large mesh gill nets and ring nets will be prohibited from the new HP zone within upstream reaches of the Burrum River and within the Cherwell River (Final Zoning Plan identifier - HPZ13), that is currently CP zone and within the designated Great Sandy Area, via a new zoning plan provision. This prohibition will also apply to the new HP zone (Final Zoning Plan identifier - HPZ17) at Dayman Spit (refer section 5.6.5).
- The use of commercial bait nets (small mesh) (N11 fishery symbol) will be allowed to continue within the CP zones within the Great Sandy Area waterways (and within all other CP zones within the park), in accordance with the standard provisions that apply to this zone type, noting that the existing general prohibition on the take of bream, whiting and flathead with a bait net in a CP zone within the GSMP will continue to apply.
- The use of commercial tunnel nets (N10 fishery symbol) in the CP zone within parts of the Great Sandy Strait and Tin Can Inlet (within the area shown in Figure 6), will be allowed to continue via a new non-conforming use provision for up to six tunnel net symbol holders.
- The use of commercial set pocket nets within the CP zone in the lower reaches of the Mary River (within the area shown in Figure 7), will be allowed to continue via a new non-conforming use provision.
- Commercial and recreational line fishers will be allowed to use a maximum of two rods/lines per person with a combined total of two hooks within all CP zones of the marine park.
- Commercial bloodworm harvesting will be prohibited from the CP zones within the Great Sandy Area waterways (refer to section 5.1.14).
- Commercial yabby harvesting by the holders of fisheries authority numbers 1435 or 3464 within the CP zones within the Baffle Creek, Elliott River, Burrum River and those parts of the Great Sandy Strait and Tin Can Inlet within the area shown in Figure 8 will be allowed to continue via a new non-conforming use. The final zoning plan provision will not require a marine park permission to be held by those fisheries authority holders.
- Commercial crab fishers will be allowed to continue to use commercial quantities of crab pots (in accordance with their *Fisheries Act 1994* licence conditions) within the CP zones within the Baffle Creek, Elliott River Burrum River and those parts of the Great Sandy Strait and Tin Can Inlet as shown in Figure 8, via a revised non-conforming use provision. The key revision to this provision is that it will not require a marine park permission to be held.

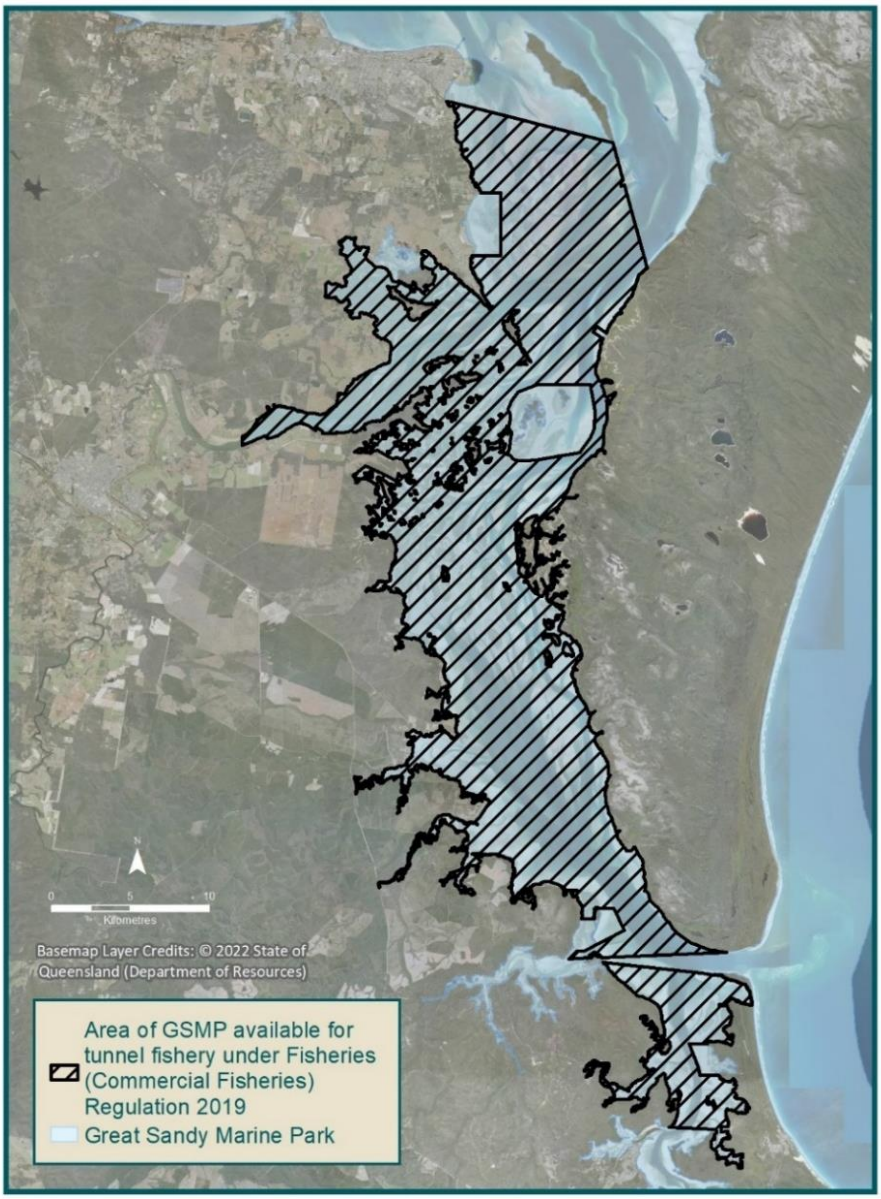

Figure 6. Area available for the tunnel net fishery within the Great Sandy Strait and Tin Can Inlet.

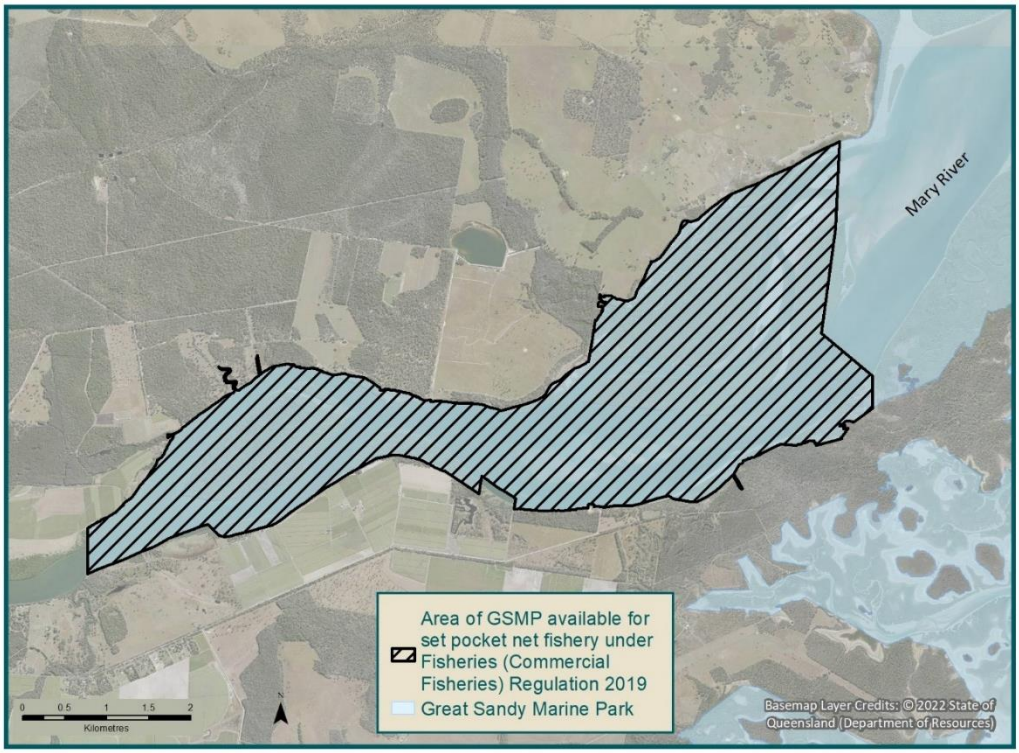

Figure 7. Area available for the set pocket net fishery within the Mary River.

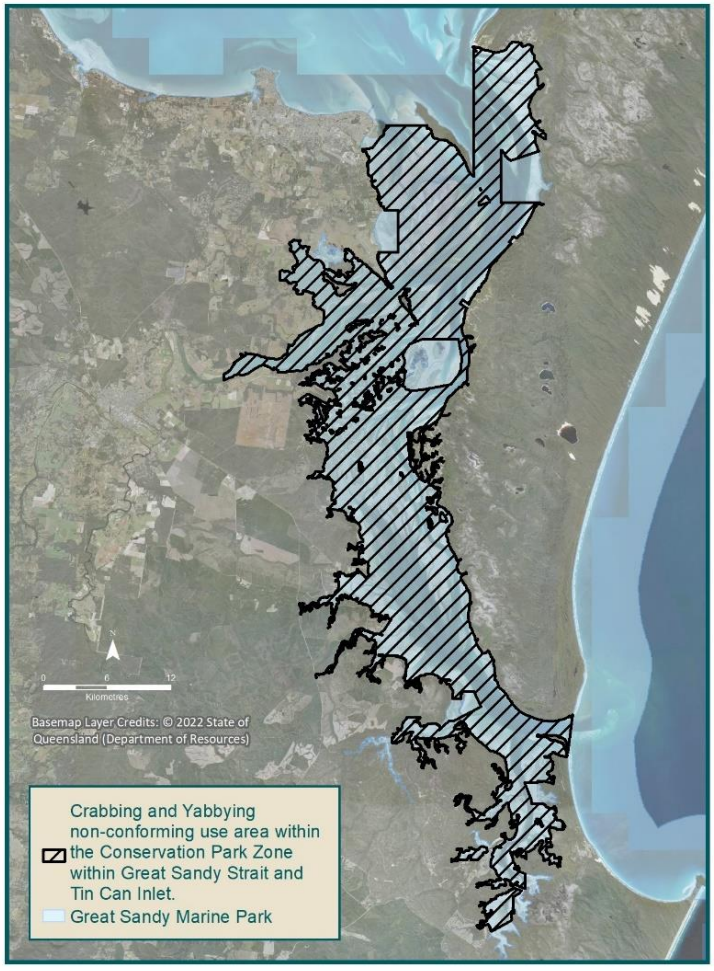

Figure 8. Non-conforming use area for commercial crabbing and yabby collection within the Great Sandy Strait and Tin Can Inlet.

5.2.6 Impact analysis of changes for inclusion in the Final Zoning Plan to resolve conflict in the designated Great Sandy Area waterways

Sector	Costs	Benefits
ENVIRONMENT		
Marine biodiversity	No assessable impact.	Retains an estimated 144 tonnes of fin fish within the ecosystem of the designated Great Sandy Area waterways each year. Supports a more natural functioning ecosystem within the designated Great Sandy Area waterways. Supports the sustainability of fish stocks and enhances the stocks of some fish species from a regional perspective.
Habitats	No assessable impact.	Reduces existing and potential increased disturbance to habitats from bloodworm harvest in CP zones in the designated Great Sandy Area waterways
Threatened Species	No assessable impact.	Removes commercial fishing apparatus (large mesh gill nets and ring nets) that poses the greatest risk of entanglement and mortality to threatened species in the CP zones of the designated Great Sandy Area waterways. Increases availability of food for some threatened species (e.g. dolphins) through reduced competition with the net fishery
National and International Agreements	No assessable impact.	Contributes to the population recovery of species subject to various International Conventions and Agreements to which Australia is a signatory. Assists in the delivery of management actions identified in threatened species recovery plans.
COMMUNITY		
First Nations peoples	No assessable impact.	Potentially increases economic opportunities from improved protection of the marine park's natural and cultural values. Improves protection of culturally significant species (e.g. turtles, dugong) within the designated Great Sandy Area waterways
Recreational fishers	Reduces maximum number of rods/lines and hooks a fisher can use for line fishing in the CP zone of Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet.	Retains an additional estimated 144 tonnes of fin fish within the ecosystem of the designated Great Sandy Area waterways each year, some of which will be species that will be directly targeted by recreational fishers. Likely enhanced recreational fishing success through reduced competition for catch with the net fishery within the Great Sandy Area waterways. Increases the maximum number of rods/lines and hooks a fisher can use from one rod/line and one hook to a maximum of two rods/lines per person with a combined total of two hooks in

		CP zones that were not part of the designated Great Sandy Area. Potential increased availability of target species that could increase fisher satisfaction, which is a major component in delivering secondary economic benefits. Improvement in fishers' satisfaction with their fishing activities could lead to improvements in their wellbeing.
Vessel users	No assessable impact.	No assessable impact.
General community	Significant reduction (by an estimated 52% or more) of the availability of fresh local fish sourced from the marine park for purchase. Reduces purchasing choice for consumers of fresh local seafood products. Impacts to the culture and identity of some of the small villages and communities that surround the waterways that have a history strongly associated with commercial net fishing.	Enhances the region's enviable nature-based and recreational fishing lifestyle. Enhances the natural values of the marine park that are prized by the community. CBA indicates that removal of the large mesh gill nets and ring nets from the designated Great Sandy Area waterways will result in a net economic benefit for Queensland.
BUSINESS/INDUSTRY		
Commercial fishers	Reduces the current commercial catch in the net fishery from the marine park by approximately 52% (144 tonnes) per year. Removes commercial bloodworm fishery from CP zones in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet. Financially impacts on fishing businesses (particularly those with a significant net fishing focus) to the extent that some will become unviable and will need to exit the commercial fishing industry. Results in direct loss of jobs for those working in the sector (e.g. deckhands) Results in financial hardship, stress, loss of identity and psychological impacts, particularly for generational fishers who are unable to fish and may need to leave the area to find alternative employment. See section 6 for an assessment of the impacts resulting from the combination of changes to be included in the final zoning plan (i.e. not just those resulting from changes associated with the removal of the designated GSA as zoning plan changes can have cumulative and synergistic impacts on commercial fishing).	Maintains some commercial fisheries that would normally be prohibited by the standard CP zone within the designated Great Sandy Area waterways. Specifically, these are: • Tunnel netting in the Great Sandy Strait and Tin Can Inlet • Set pocket netting in the lower reaches of the Mary River • Crabbing within the CP zones of the designated Great Sandy Area waterways • Yabbying within the CP zones in the Great Sandy Area waterways Access to a commercial fishery impact mitigation package for affected commercial fishers to address impacts. For some fishers who were already considering retirement or that were independently planning to leave the industry, the Impact Mitigation Package may provide a financially attractive outcome. See section 6 for a detailed assessment of impacts relating to the commercial fishing sector.
Post-harvest seafood businesses	Removes access to 144 tonnes of local seafood per year for processing, value adding and sale. Reduces ability to meet market demand. Potentially impacts on business viability, particularly if alternative seafood product cannot be sourced. Potentially requires modification of processing	Access to business support through a commercial fishery impact mitigation package

	plant and equipment to support processing and handling of alternate product. Loss of employment.	
Charter fishing	Reduces maximum number of rods/lines and hooks a fisher can use for line fishing in the CP zone of Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet. See section 6 for a detailed assessment of impacts relating to the recreational fishing sector.	Potentially creates new economic opportunities for charter fishing and associated tourism from the removal of the designated Great Sandy Area, in particular large mesh commercial gill nets and ring nets. Increases maximum number of rods/lines and hooks a fisher can use from one rod/line and one hook to a maximum of two rods/lines per person with a combined total of two hooks in CP zones that were not part of the designated Great Sandy Area.
Hospitality industry	Potentially decrease in availability of fresh commercially caught local seafood and reduction in purchasing choice for consumers. See section 6 for a detailed assessment of impacts relating to the commercial fishing sector.	Long-term benefits from increases in nature-based and recreational fishing tourism for accommodation providers, restaurants and other food outlets.
Tourism	Potentially reduces tourism associated with fresh local-caught seafood from fishing towns/wharves/ports/fish wholesalers, retailers and co-ops and community events such as the annual Hervey Bay Seafood Festival. See section 6 for a detailed assessment of impacts relating to the commercial fishing sector.	Enhances the natural values of the marine park that are prized by the community and regarded as a natural and commercial asset, thus providing a strong basis for nature-based tourism (e.g. snorkelling, diving, kayaking, wildlife viewing). Enhances opportunity for nature-based, recreational, charter and sport fishing tourism. Increases in tourism driven by improved recreational fishing opportunities and amenity from the removal of the designated Great Sandy Area.
Wide Bay regional economy	Potentially reduces regional economic benefits associated with loss of product for export and interstate markets. Potentially reduces tourism associated with fresh local-caught seafood from fishing towns/wharves/ports, fish wholesalers, retailers and co-ops. See section 6 for a detailed assessment of impacts relating to the commercial fishing sector.	Supports future economic growth of the region based on nature-based tourism, recreational, charter and sport fishing. Noting, the CBA indicates that removal of the large mesh gill nets and ring nets from the designated Great Sandy Area waterways will result in a net economic benefit for Queensland. Increases economic benefits for businesses that support the recreational fishing sector e.g. bait and tackle shops, chandleries. Supports the creation of new small businesses that support the local economy e.g. charter fishing, nature based tourism. Potentially increases recreational fishing tourism and associated business i.e. bait and tackle shops, fuel and accommodation providers, restaurants and cafes etc.
GOVERNMENT		
Local government	No assessable impact.	No assessable impact
State government	Funding of an impact mitigation package for commercial fishers and the post-harvest sector	CBA indicates that removal of the large mesh gill nets and ring nets from the designated Great

	impacted by the removal of the designated Great Sandy Area. Funding for resources to meet public expectations for a well-managed marine park. Overall for implementation of the final zoning plan, establishment and first year operational costs are estimated to require an additional $3.5M with ongoing annual costs estimated to require an additional $1.5M. A cost to government of approximately $35,000 annually to enforce the prohibition of large mesh gill nets and ring nets in these waterways. Funding of a Regional Economic Enhancement Package to provide support for: • affected commercial fishers to develop alternative business opportunities • retraining and employment support for affected commercial fishers. See section 6 for a detailed assessment of impacts relating to the commercial fishing sector.	Sandy Area waterways will result in a net economic benefit for Queensland. Addresses management actions identified in a number of national and international species management and/or recovery plans that Queensland and/or Australia is a signatory to.

5.3 Protection of threatened species

Zoning plan review objective

Improve the protection and potential for long term population recovery of threatened species and support state, national and international obligations.

5.3.1 Context

A threatened species is one that is at risk of extinction. For these species, the preventable mortality of even a small number of individuals can be significant to the maintenance of their population and to the success of their recovery. Marine parks perform a key function in the protection of threatened marine species by providing a primary mechanism for delivering on-ground actions to address the requirements of state and Commonwealth threatened species legislation, address Australia's obligations under international threatened species agreements and implement species recovery plans.

A number of nationally and internationally significant species rely on areas of core habitat within the marine park and spend all or part of their lifecycles in the park including migratory shorebirds, loggerhead and green turtles, dugong, grey nurse shark, Australian humpback dolphins, and the false water rat (water mouse). Globally, nationally and in Queensland, these species face a wide range of threats and are therefore listed on a range of conventions and agreements. The natural populations of these species have declined to the extent that they are listed as threatened species in state and Commonwealth legislation. Table 8 outlines the conservation status of the species that are known to reside in or regularly frequent the GSMP.

Table 8. Status of threatened species regularly present in the Great Sandy Marine Park.

Species (common name)	*Nature Conservation Act 1992* (Qld)	*Environment Protection & Biodiversity Conservation Act 1999* (C'wealth)
Curlew sandpiper	Critically endangered	Critically endangered
Great knot	Critically endangered	Critically endangered
Red knot	Endangered	Endangered
Lesser sand plover	Endangered	Endangered
Eastern curlew	Endangered	Critically endangered
Northern Siberian bar-tailed godwit	Endangered	Critically endangered
Australian painted snipe	Endangered	Vulnerable
Greater sand plover	Vulnerable	Vulnerable
Western Alaskan bar-tailed godwit	Vulnerable	Vulnerable
Beach stone curlew	Vulnerable	
Grey nurse shark	Endangered	Critically endangered (east coast population)
Loggerhead turtle	Endangered	Endangered
Leatherback turtle	Endangered	Endangered
Hawksbill turtle	Endangered	Vulnerable
Olive ridley turtle	Endangered	Endangered
Flatback turtle	Vulnerable	Vulnerable
Green turtle	Vulnerable	Vulnerable
Dugong	Vulnerable	
Australian humpback dolphin	Vulnerable	
False water rat (water mouse)	Vulnerable	Vulnerable
Illidge's ant-blue butterfly	Vulnerable	
Ecological community of subtropical & temperate coastal saltmarsh		Vulnerable

As a signatory to international conventions and agreements concerning protected species, habitats and ecosystems, Australia and therefore the State of Queensland has an obligation to implement policies and actions that reflect the objectives of these agreements. Of relevance to GSMP, these include the:

- Convention on Wetlands of International Importance (Ramsar Convention)
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
- Japan – Australian Migratory Bird Agreement (JAMBA)
- China – Australia Migratory Bird Agreement (CAMBA)
- Republic of Korea – Australia Migratory Bird Agreement (RoKAMBA).

Failure to meet these obligations can undermine global environmental protection efforts for the particular species and may result in censure from the international community for a lack of action, which could lead to a lack of community confidence in the government's management of threatened species.

Queensland also has an obligation to address relevant management actions identified in recovery plans or management statements prepared under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for listed threatened species. The SRG's guiding principles reflect these obligations and recommend that areas important for vulnerable life-stages of species are protected in MNP zones and that species, populations and areas of special interest are included in MNP zones. Failure to address current and emerging threats and implement actions identified in threatened species management documents may lead to the continued decline of species to potential extinction at a local, regional or national level. Scientific research conducted since the existing GSMP zoning plan was prepared indicates that the existing zoning and designated area arrangements are insufficient in providing protection to several species that utilise the marine park.

As well as implications for the species involved, insufficient levels of protection for threatened species and their habitats can affect the native title rights and interests of First Nations peoples whose cultural and spiritual beliefs and practices are closely linked with many of these species, especially turtles and dugong. In addition, the marine park's growing national and international reputation as a nature-based tourism destination presenting unique experiences with several threatened species such as turtle tours at Mon Repos, whale watching in Hervey Bay and diving with grey nurse sharks at Wolf Rock, relies on the improvement of the health, abundance and distribution of these species over time.

5.3.2 Migratory shorebirds

The GSMP provides important roosting and foraging habitat for both resident and migratory shorebirds, as well as nesting habitat for resident shorebirds. Most migratory shorebirds make an annual return journey of thousands of kilometres along the East Asian-Australasian Flyway that extends from breeding grounds in the northern hemisphere to non-breeding areas in the southern hemisphere, including across Australia. Between September and April, high numbers of migratory shorebirds from more than 20 different species visit the marine park. During this time the Great Sandy Strait alone supports over 20,000 migratory shorebirds, including species in internationally significant numbers, making this the second most important site for shorebirds along Queensland's east coast. The importance of the marine park to the lifecycle of more than 20 species of these shorebirds has been recognised by inclusion of the Great Sandy Strait as a Wetland of International Importance under the Ramsar Convention.

The existing zoning plan includes a designated Shorebird Roosting and Feeding Area which aims to minimise disturbance to shorebirds, particularly migratory shorebirds, from human activities and domestic animals. The designated area encompasses the entire Great Sandy Strait /Tin Can Inlet, and four small locations (each approx. 0.7km^2) at Gables Point Rocks, Coongul Creek, Moon Point Bank, and Pelican Bank. Within these areas a person must not:

- take a dog into the area unless it is controlled or restrained in a way that prevents the dog from causing excessive disturbance to shorebirds; or
- navigate a vessel, or drive a vehicle, through a group of feeding or roosting shorebirds; or
- land, or take off, in an aircraft through a group of feeding or roosting shorebirds; or
- cause excessive disturbance to shorebirds or their habitat.

To identify the marine park's significant roost sites, where birds congregate at high tide, data from the Queensland Wader Study Group and other sightings databases was used to assess site significance against four criteria. Criteria related to the abundance of shorebirds, diversity of species and the number of threatened species supported by a site.

A site was considered significant if it regularly supports one or more of the following:

- 1%* or more of the East Asian-Australasian Flyway (EAAF) population of a species
- More than 2,000 birds (migratory and resident)
- 15 or more species (migratory and resident)
- 0.1%* of the EAAF population of species listed as threatened under the EPBC Act or the *Nature Conservation Act 1992.*

**This number varies between species – refer to Hansen et al (2016) for information on population thresholds.*

This process identified 62 significant roost sites throughout the marine park from over 150 sites known to occur in the Great Sandy Region, with four sites meeting three of the four assessment criteria. These four roost sites, considered to be the most significant in the marine park, are located at Moon Point, Maaroom, Boonooroo and Cooloola (Tin Can Inlet) and all provide habitat for species that are declining throughout the EAAF.

5.3.2.1 Problem

Consistent with national trends, numbers of many migratory shorebird species are declining in the Great Sandy Strait, some by more than 10% per year. Globally, populations of the critically endangered eastern curlew and curlew sandpiper have decreased by 70-80% in the last decade. Loss and degradation of intertidal habitat in the Yellow Sea (China) has been linked to the significant decline of the EAAF population. However, actions taken locally to prevent disturbance to shorebirds and their habitat can assist in reversing the global declines of shorebird populations.

Disturbance is regularly recorded at almost half of the marine park's 62 significant shorebird roost sites. Under the current arrangements, no protection from disturbance is afforded to shorebirds that are feeding, nesting, roosting or transiting outside of the current designated area. Over one third (25) of the park's significant sites are located outside the current designated area. Additionally, the zoning plan affords no specific protection to highly significant sites, recognised as the most valuable in the marine park in terms of the abundance of birds, diversity of species and numbers of threatened species they support. Continuing under the current management regime places shorebird populations at higher risk of continued decline.

5.3.2.2 CRIS Options

The CRIS considered four options to improve management responsiveness to the threats posed to migratory shorebirds.

Problem	Option 1	Option 2	Option 3	Option 4
Shorebirds have no protection from disturbance while feeding, nesting, roosting or transiting outside of the current designated area. Over one third (25) of the park's significant sites are located outside the current designated area.	No change.	Apply park-wide provisions to protect shorebirds from disturbance.	Establish a new designated area (Seasonal Shorebird Closure Area) that seasonally closes access to highly significant roost sites.	Combination of options 2 and 3.

The preferred option in the CRIS was to (i) apply park-wide provisions to protect shorebirds from disturbance, and (ii) establish a new designated area, Seasonal Shorebird Closure Area, that seasonally closes access to highly significant roost sites (Option 4), and complement these with a change in the definition of shorebird to only include species in the order Charadriiformes.

5.3.2.3 CRIS Consultation Feedback

Consultation feedback indicated strong support from the community and stakeholders in relation to this topic:

- 85% of 942 online survey respondents agreed with applying park-wide provisions to protect shorebirds.
- 76% of 939 online survey respondents agreed with establishing a new designated area (Seasonal Shorebird Closure Area) that seasonally closes access to four highly significant roost sites at Moon Point, Maaroom, Boonooroo and Cooloola.
- No feedback was received on the proposal to change the definition of shorebirds.

The conservation sector and scientific community are particularly supportive, although support from recreational users and fishers, and tourism operators was also relatively high for both aspects of the changes proposed in the CRIS. The scientific community suggested that better protection of shorebird sites that extend outside the boundary of the marine park is also required, and raised concerns with disturbance of shorebirds from coastal development.

First Nations peoples' representative bodies supported the proposal but seek to maintain access to Country for Traditional Owners in the Seasonal Shorebird Closure Areas.

Those who objected to the Seasonal Shorebird Closure Areas were mostly recreational fishers who consider access closures to be an unnecessary measure and would like to maintain their unrestricted use of these areas, including at Moon Point and Boonooroo.

There was a suggestion to modify the boundary at Boonooroo to minimise impacts on local residents, and several suggestions for additional closure areas, e.g. Hook Point (K'gari) and O'Regan Creek (Hervey Bay).

5.3.2.4 Decision for Final Zoning Plan

Based on the outcomes of consultation, the final zoning plan will include:

(i) provisions to protect shorebirds from human-related disturbance (that currently apply within the Great Sandy Strait Ramsar site), throughout the marine park, and

(ii) Seasonal Shorebird Closure Areas at Moon Point, Maaroom, Boonooroo and Cooloola as proposed in the Consultation RIS, with a minor modification to the western boundary of the Closure Area at Boonooroo to minimise impacts on local residents (Figure 9).

In affording protection to significant roost sites and areas utilised by shorebirds within the marine park that are not currently protected, the park-wide disturbance provisions seek to assist in addressing the problem of continued decline in shorebird populations. As proposed in the CRIS, this management change will be complemented by an amendment to the definition of shorebird to only include species in the order Charadriiformes, a more meaningful and logical definition to aid public understanding and compliance with zoning plan provisions. The order Charadriiformes includes waders, gulls and terns that are dependent on the GSMP for a critical part of their life cycle, are seasonal migrants that depend on undisturbed feeding and roosting habitat, or species that breed locally.

The Seasonal Shorebird Closure Areas, a new type of designated area, recognise the four most valuable shorebird roost sites in the marine park in terms of the abundance of birds, diversity of species and numbers of threatened

species they support. The designated area restricts public access each year during critical times for shorebirds, i.e. from 1 September to 31 October (when birds arrive in the marine park depleted in energy from their migration) and between 1 March to 30 April (when birds need to gain weight for their return journey to the northern hemisphere). Exemptions to the access restrictions will apply in an emergency, and for local government undertaking pest control, recognised persons conducting bird counts, and First Nations peoples of the area.

A modification to the Boonooroo Seasonal Shorebird Closure Area, as proposed in the CRIS, that moves a section of the western boundary approximately 20m from property boundaries into the marine park, will allow residents to traverse the intertidal area adjacent to their properties during closure periods. Figure 9 shows the preferred option for the Boonooroo designated Seasonal Shorebird Closure Area that was proposed in the CRIS, and the modification to the designated area's western boundary that will be included in the final zoning plan. Appendix 7 provides a map of the designated areas that will be included in the final zoning plan, including each Seasonal Shorebird Closure Area.

Figure 9. Preferred option for the Boonooroo designated Seasonal Shorebird Closure Area proposed in the CRIS (left) and change to the western boundary to be included in the Final Zoning Plan (right).

5.3.3 Grey Nurse Shark

5.3.3.1 Context

Wolf Rock, near Double Island Point, is the most northern location of only four key aggregation sites for the critically endangered grey nurse shark in Queensland and the only known site in the GSMP. Wolf Rock is critically important to the viability of the Australian east coast population as it is the only known gestation site for pregnant females on the east coast. The east coast population of grey nurse sharks totals approximately 2000 individuals, with an estimated 400 grey nurse sharks (mature males and females) in the breeding population. Around half of the mature female sharks in the breeding population have been recorded at Wolf Rock. The grey nurse shark population is highly susceptible to low levels of human-induced mortality as this species reproduces at a late age (10-12 years) and has a low reproductive rate. Pregnant females have a gestation period of about 12 months and spend the majority of that time around Wolf Rock before departing to their pupping waters in New South Wales to give birth.

The existing Wolf Rock MNP zone has a radius of 1.2km from a central point at Wolf Rock, and a 300m wide Buffer zone around the MNP zone. The MNP zone protects grey nurse sharks from injury, disease and mortality caused by interactions with commercial and recreational line fishing gear, and also protects the habitat that is critical to the survival of the population. The size of this MNP zone was based on research at the time that found grey nurse sharks made excursions of up to 1.2km away from aggregation sites. While the MNP zone prohibits all forms of

fishing, the Buffer zone allows trolling for pelagic species to occur but excludes other forms of fishing.

Contemporary research indicates that grey nurse sharks aggregating at Wolf Rock undertake excursions beyond the boundary of the existing MNP and Buffer zones, through areas of connected habitat, often in the direction of The Pinnacles and other rocky structure adjacent to Wolf Rock. These excursions can last days or weeks before the shark returns to the central Wolf Rock pinnacle formations. Grey nurse sharks have been recorded at The Pinnacles and Round Rock, and around the base of Double Island Point.

Grey nurse sharks are currently at risk of mortality and injury from incidental catch by fishers when using areas of their known habitat outside of the MNP zone including The Pinnacles, Round Rock, and the base of Double Island Point. These sharks swallow fish whole and hence fishing hooks as well, instinctively targeting a fish that is retreating to deeper water after being hooked, resulting in sharks being hooked themselves. Therefore, trolling also poses a threat to grey nurse sharks. Fishers may not be aware they have hooked a grey nurse shark and perceive a 'bite off'. If sharks survive the initial injury sustained from being hooked, a large portion of these swallowed hooks end up in the shark's stomach and migrate through the digestive tract creating internal injuries that can cause the death of the shark. Hook ingestion can also result in malnutrition and wasting away which subsequently affects the reproductive potential of females, with flow on effects to the viability of the Australian east coast grey nurse shark population.

5.3.3.2 Problem

Critically endangered grey nurse sharks in the Wolf Rock area are ranging more extensively than was previously understood, undertaking excursions from, and utilising habitat adjacent and connected to, the existing Wolf Rock MNP and Buffer zones. As such, these grey nurse sharks are not effectively protected from the risk of mortality from accidental or incidental catch, as the extent of the existing Wolf Rock MNP and Buffer zones do not include the areas of known habitat. Any human-induced mortality can impede the recovery, and impact the viability of, the Australian east coast grey nurse shark population.

5.3.3.3 CRIS Options

The CRIS considered three options to improve protection of the grey nurse shark population.

Problem	Option 1	Option 2	Option 3
Grey nurse sharks are undertaking excursions from, and utilising habitat adjacent and connected to, the existing Wolf Rock MNP and Buffer zones, which puts these critically endangered sharks at risk from fishing-related mortality and injury.	No change.	Expand the Buffer zone and maintain extent of the Marine National Park zone.	Expand the Marine National Park zone (to include the base of Double Island Point, Round Rock, and The Pinnacles) and remove the Buffer zone.

The preferred option in the CRIS (Option 3) was to replace the existing Buffer zone and expand the Wolf Rock MNP zone and designated Grey Nurse Shark Area to include part of the base of Double Island Point and Round Rock, and The Pinnacles.

5.3.3.4 CRIS Consultation Feedback

Consultation feedback indicated strong support from many community members and other stakeholders in relation to this topic:

- 70% of 901 online survey respondents agreed with the expansion of the Wolf Rock MNP zone to incorporate the base of Double Island Point, Round Rock and The Pinnacles, and the removal of the Buffer Zone.

There was strong support for expanding the MNP zone to include the areas of known grey nurse shark habitat (The Pinnacles, Round Rock and the base of Double Island Point) from the conservation sector. Many recreational fishers agreed with the proposal and there was relatively high support from recreational users and tourism operators.

The Pinnacles was the site within the proposed extension of the Wolf Rock MNP zone that was most contentious. Concern with the inclusion of The Pinnacles was raised by both commercial and recreational line fishers. Recreational fishers who disagreed with the expansion of the MNP zone often noted the inclusion of The Pinnacles as the reason, due to the popularity of this site which is within easy access of Rainbow Beach. Some stakeholders

suggested the area over The Pinnacles should be changed to a Buffer Zone to allow for surface trolling (lure fishing). The recreational fishing sector suggests that trolling surface lures presents a low risk to grey nurse sharks, as these sharks do not 'rise' to take an artificial lure.

While some submissions objected to any change to the existing MNP zone, others did not oppose some extension to the MNP zone. Only a small number of submissions disagreed with the MNP zone incorporating Round Rock or the base of Double Island Point.

5.3.3.5 Decision for Final Zoning Plan

The expansion of the Wolf Rock MNP zone to incorporate the base of Double Island Point, Round Rock, and The Pinnacles, and associated removal of the existing Buffer zone, as proposed in the CRIS, is to be included in the final zoning plan. The expansion of the Wolf Rock MNP zone integrates recent scientific evidence on the spatial extent of grey nurse shark usage of this key habitat and its management, to improve protection of the critically endangered Australian east coast population of grey nurse sharks. The MNP zone importantly protects areas of known habitat that are connected with, and adjacent to, the existing MNP zone. The expanded MNP zone and removal of the Buffer zone eliminates the risk of injury and mortality from incidental capture by commercial and recreational fishers in areas known to be used by grey nurse sharks.

Despite some research suggesting grey nurse sharks do not interact with (unbaited) trolling gear, scientific experts and anecdotal evidence support the view that trolling (with lures) at the surface poses a threat to grey nurse sharks. These sharks come to the surface to gulp air and may not interact with an empty lure (without a fish) but will target a fish caught on a lure, with the lure then becoming embedded in the shark. Hence, the expansion of the MNP zone and the removal of the Buffer zone and with it the ability to troll in areas used by grey nurse sharks in the vicinity of Wolf Rock will decisively address any fishing related risks.

The Wolf Rock MNP zone, as the only known gestation site for the Australian east coast population, is vital to the maintenance and recovery of this species which is in critical danger of extinction. The MNP zone addresses recommendations in the *Recovery Plan for the grey nurse shark* (*Carcharias taurus*). The implementation of actions to protect species from extinction is enshrined in international biodiversity conventions and agreements, to which Australia is a signatory, and is fundamental to state and national nature conservation, environmental and marine park legislation.

The existing designated Grey Nurse Shark Area will be enlarged to match the MNP zone in recognition of the importance of habitats at Round Rock and The Pinnacles to grey nurse sharks. The expansion in size of the designated area aids in protecting vulnerable life stages of grey nurse sharks by protecting this species from disturbance by divers and their critical habitat from degradation.

The expanded MNP zone will likely result in an 'umbrella conservation effect' in that measures used to protect grey nurse sharks will also extend to other species utilising the same habitat, such as manta rays, leopard sharks, turtles and Queensland groper.

5.3.4 Marine turtles, dugong and dolphins

The marine park supports nationally and internationally important populations of threatened marine turtles, dugongs and dolphins. These species rely on areas of core habitat within the marine park during different stages of their lifecycle and for their survival. Addressing current and emerging threats to the viability of these populations requires specific management measures.

Protecting and connecting a range of habitats throughout the marine park that are critical to the survival of these threatened species, including nesting, inter-nesting, foraging, resting, courtship and breeding areas, ensures the availability of resources for species throughout their lifecycle. If habitats are lost permanently or regularly exposed to disturbance, the recovery of threatened species at a local level can be compromised. Protecting larger areas of habitat aids their resilience to future disturbance and climate change impacts and supports populations of threatened species.

Threats posed by fisheries are recognised globally as one of the most pressing threatening processes to marine megafauna populations. Incidental catch in large mesh gillnets can impact threatened species at a local and regional scale, with flow on impacts that can also affect global populations. In trawl fisheries, there are concerns for the health of female turtles which are in active physiological processes of egg production in inter-nesting areas and are exposed to stress from being caught in a trawl net despite the use of turtle exclusion devices (TEDs).

Vessel collision is also a major threat to air-breathing marine species, especially in shallow coastal waters and bays. Injuries inflicted from a propellor or from impact with a vessel's hull can result in severe injury or mortality. At

low tide, dugong and turtles occupy the edges of sandbanks and their adjacent deep-water areas. This is also where vessels travel on the low tide, which results in an increased risk of vessel strikes to these animals. A predicted 13% increase in the next 10 years in the size of the recreational boating fleet registered in the local government areas of the marine park also increases the risk of vessel interactions with these threatened species.

5.3.4.1 Context

Turtles

Six of the world's seven species of marine sea turtles utilise extensive areas across the marine park. For example, the Woongarra Coast provides significant nesting and inter-nesting habitat, much of the Great Sandy Strait is key turtle foraging habitat, and Sandy Cape is an important courtship and breeding area that also supports a small nesting population of loggerhead and green turtles. The estuaries, creeks and rivers along the western coastline of Hervey Bay including Baffle Creek and the Elliott and Burrum Rivers are frequented by green and loggerhead turtles that move into estuarine areas to forage for food. An individual turtle will occupy many habitats within an estuary for foraging.

Some turtles arriving in the marine park have undertaken migrations of up to 10,000km to reach their natal beaches and coastal foraging sites. Turtles have tight and long-term fidelity to foraging sites within the park, often travelling through other suitable foraging areas to reach their 'home' foraging site in the park. This long-term fidelity to 'home' sites demonstrates the importance of protecting 'home' habitats as, if displaced, turtles are unlikely to move to new foraging areas. Seagrass meadows throughout the park support foraging turtles and recent research indicates that large areas of shallow and deep seagrass habitats important to turtles and dugong in Hervey Bay are not protected in MNP zones. Surveys conducted after flood events in 2022 indicate the presence of areas of seagrass resilient to these floods, highlighting the need to include these areas in highly protected zones to ensure the availability of seagrass for threatened species after times of flood.

There is only one genetic stock of loggerhead turtles in the South Pacific Ocean with much of the nesting occurring on beaches of the marine park, especially along the Woongarra coastline. The beach at Mon Repos supports the largest number of nesting loggerhead turtles on the eastern Australian mainland and is one of the two largest rookeries for this species in the South Pacific Ocean. Successful breeding here is critical for the survival of this endangered marine turtle. The impact of disturbances to turtles, nests, hatchlings, and nesting sites can be detrimental to nesting and hatchling success and more broadly, to the sustainability of the global loggerhead turtle population. At Mon Repos, human activities and domestic animals can disturb and interfere with turtles, hatchlings and turtle researchers, and nesting sites can be impacted by extreme weather events exacerbated by climate change.

The nesting population of loggerhead turtles in the South Pacific Ocean declined from approximately 3500 females per year in the mid-1970s to approximately 500 by the year 2000, with the decline primarily attributed to mortality from by-catch in otter trawl fisheries of northern and eastern Australia. Given that the age at first breeding is 30 years, the number of adult turtles is still relatively low today because of the declining nesting population three decades ago. Recruitment into the adult female breeding population has declined by approximately 50% over the past two decades and ongoing studies conducted along the Woongarra Coast have shown an unexplained decline in the annual loggerhead nesting population over the three breeding seasons prior to 2020-2021. This decline highlights the need for management actions that reduce current and emerging threats throughout turtles' home ranges and key habitats.

Various pieces of legislation have prescribed management arrangements at Mon Repos for the purposes of conserving the marine turtle rookery, supporting public appreciation, and regulating public access for more than 30 years. However, the current zoning at Mon Repos does not adequately recognise or reflect the international importance of this marine turtle rookery. The waters adjacent to Mon Repos Beach are currently in a HP zone and as such are not listed as a Matter of State Environmental Significance (MSES) under the State Planning Policy as is the case with MNP and CP zones. State and local government authorities are only required to recognise the zoning status of areas listed as MSES when considering planning and development activities. Therefore, areas of the Woongarra Coast, critical for loggerhead turtles, are at risk of inadequate consideration in planning and development assessment.

Throughout the marine park, all species of turtle are at risk of being struck by vessels and entangled in fishing nets and crab pots while feeding in shallower water, disturbed by vehicles while laying their eggs on beaches, disturbed by domestic animals and artificial light while nesting, and at risk of interactions with trawlers in their inter-nesting habitat. Public concern regarding the impacts of commercial fisheries, especially large mesh gill netting, on turtles, is high. Go Slow Areas for vessels and other designated areas for turtles are spatially distributed around the marine park, however recent telemetry data demonstrates that turtles utilise habitat where there are currently insufficient or

no marine park management arrangements to assist in the protection of turtles.

For example, recent telemetry data shows that turtles are using inter-nesting habitat beyond the extent of the current designated Turtle Protection Area just prior to coming ashore to lay their eggs at Mon Repos. The one nautical mile wide trawling exclusion area was introduced in 2006 to address a turtle bycatch issue with the banana prawn trawl fishery. While Turtle Excluder Devices (TED) and associated by-catch reduction devices are compulsory in Queensland's east coast trawl fishery, disturbance and stress to turtles still occurs from interactions with trawl nets. This stress can result from turtles trying to actively 'outswim' the trawl net before tiring and struggling while endeavouring to escape via the TED opening.

Dugong

Dugongs are a species of high international biodiversity value, with Australian waters supporting most of the world's dugong population. As a signatory to the Bonn Convention and the associated Dugong Memorandum of Understanding, Australia has international obligations to conserve and manage dugongs and their habitats throughout their range in Australia. The marine park is approaching the southernmost limit of dugong distribution along the east coast of Australia, therefore, management of threats in the marine park is important in conserving this species. Dugongs are slow breeders, maturing between 10–17 years of age. Females reproduce every 3-7 years, which makes dugongs very susceptible to factors that threaten their survival including habitat loss, disturbance, injuries or mortality from vessel collisions and interactions with fishing gear.

The marine park's dugong population in 2016 was estimated at 2055 (±382). The mouth of the Burrum River, Great Sandy Strait, areas within Hervey Bay, and between Rooney Point and Sandy Cape at the northern end of K'gari supported the largest numbers and are of particular importance to dugong. Contemporary research shows dugongs make repeated return winter migrations across Hervey Bay to the warmer waters around Sandy Cape.

Dugongs are frequently found associated with seagrass beds and can consume up to 36kg of seagrass each day. Dugongs and their feeding trails have been observed in seagrass beds across the marine park including within the Burrum River estuary and within Baffle Creek. Reductions in the availability of seagrass due to flooding from extreme weather events has been identified as a key factor in the fluctuation of dugong population numbers in the park. Dugongs may delay breeding if there is a decline in food availability. Interim results from aerial surveys in late 2022 indicate the distribution of dugongs following the floods earlier that year was concentrated towards the middle, subtidal area of Hervey Bay where recent surveys also showed that the deep subtidal seagrass here was the most resilient to flood impacts. Zoning arrangements that protect seagrass habitats assist in ensuring the resilience of these dugong foraging areas that are important for the long-term survival of the species.

Dugongs, like turtles, are also at risk of vessel strike and incidental catch or entanglement in commercial fishing nets. Public concern regarding the impacts of commercial large mesh netting on this species is high, as once trapped within a net, the risk of the interaction ending in mortality is high, even with the use of net-attendance provisions under fisheries legislation. Vessel Go Slow Areas are spatially distributed around the marine park, however telemetry data demonstrates that dugongs utilise shallow-water habitat where Go Slow Areas are either not in place or are of a size inadequate to assist the protection of dugongs from vessel strike. The seasonal Go Slow Area at the northern end of K'gari does not provide adequate protection for dugongs or turtles from vessel strike as these threatened species utilise habitat in this area throughout most of the year.

Based on the 2016 population estimate, as few as nine human-induced dugong deaths per year can affect the long-term viability of the population. The significance of this number will be affected by other factors contributing to dugong mortality in any given year such as flood-induced seagrass loss, with climate change predicted to increase the frequency of these events. Therefore, any additional dugong death attributed to vessel strike or a form of commercial fishing such as large mesh gill netting, could impact the future survival of the local dugong population.

Australian humpback dolphins

Australian humpback dolphins are one of the resident dolphin populations in the marine park and are listed as vulnerable under Queensland's *Nature Conservation Act 1992.* Humpback dolphins are included on the IUCN Red List with their current population trend noted as 'decreasing' due to their occurrence in small, discrete populations. There is a substantial lack of data on this species at a national scale, hence why it is not currently listed as a threatened species under the EPBC Act.

Humpback dolphins mostly inhabit shallow coastal waters less than 15m deep, and are often associated with estuary mouths, mangroves and tidal channels. This species also uses habitats in proximity to rocky reefs, intertidal beaches and sandbanks. Fish and cephalopods such as bream, whiting, mullet, crabs, squid and octopus

are known prey of humpback dolphins and are also target species of commercial fisheries. Primary feeding habitat for humpback dolphins in the northern Great Sandy Strait population occurs within the Mary River estuary where feeding with the outgoing tide occurs daily. High commercial fishing effort (inshore large mesh gillnets and trawling) can impact on the availability of humpback dolphins' food sources in areas where commercial fishing and dolphin foraging overlaps.

The Great Sandy Strait contains two small geographically isolated communities of Australian humpback dolphins separated by the shallow area in the centre of the Strait near Sheridan Flats. Surveys conducted between 2004 and 2007 estimated each community had approximately 75 individuals and that there was little, if any, interaction occurring between the two populations. These populations show long-term and strong site fidelity to areas of the Strait. Recent research indicates the possibility of a third discrete population of approximately 20 dolphins that range between Baffle Creek and the Great Sandy Strait utilising mouths of estuaries and creeks for core foraging habitat.

Small, isolated dolphin populations such as these, with low reproductive rates, are vulnerable to extinction and humpback dolphins are vulnerable to a range of environmental and anthropogenic threats. Threats include bycatch in commercial large mesh gillnets especially those set in shallow waterways; incidental catch in shark control equipment; vessel strike; habitat loss and degradation; underwater noise; and poor water quality. The human-induced death of as few as one or two humpback dolphins per year in the Great Sandy Strait communities can affect the viability of these populations.

5.3.4.2 Problem

The existing zoning plan arrangements do not adequately provide protection of marine turtles, dugong and Australian humpback dolphins or the range of habitats they use throughout their lifecycle, from current and emerging threats. There are ongoing risks and potential for threatened species to have adverse interactions with fishing gear due to the continued use of commercial large mesh nets (gill and ring nets) in highly protected zones of the park. There is inadequate protection of core habitat areas for threatened species from disturbance in highly protected zones, and ongoing threats to turtles and dugong of injury or mortality from vessel strike due to insufficient areas of key shallow water habitats within designated Go Slow Areas. At Mon Repos, there are risks to turtles, nests and hatchlings from human activities and domestic animals, and from stress as a result of interactions with trawl nets in their inter-nesting habitat offshore of Mon Repos.

As these species are long-lived and, for example, turtles have a highly dispersed life history, they can be impacted by multiple threats that act simultaneously, at the same location, and continue across their entire life cycle. To achieve recovery of these threatened species, cumulative threats that could lead to a reduction in reproduction and jeopardise populations, need to be managed and mitigated.

5.3.4.3 CRIS Options

The CRIS contained a number of options to improve protection of turtles, dugongs, and dolphins and their critical habitats. The preferred options in the CRIS are shaded grey.

Problem	Option 1	Option 2	Option 3	Option 4	Option 5
Mitigate the risk of entanglement in commercial fishing nets.	No change.	Remove all commercial netting from the Great Sandy Area waterways.	Remove some commercial netting from the Great Sandy Area waterways.	Combination of part of option 1 and option 3.	N/A
Improve protection of turtle and dugong core habitat.	No change.	Upgrade the zoning at Mon Repos to MNP zone.	Upgrade the zoning at Mon Repos to CP zone.	Expand the size of two existing MNP zones.	Combination of options 3 and 4.
Improve protection of inter-nesting turtles.	No change.	Replace the designated Turtle Protection Area with a HP zone and extend.	Expand the existing designated Turtle Protection Area off Mon Repos.	N/A	N/A
Reduce the threat to turtles, dugong, and dolphins from	No change.	Establish and amend designated Go	N/A	N/A	N/A

vessel strike.		Slow Areas and rules.			
Reduce the risk to turtles from human disturbance at Mon Repos.	No change.	Change management arrangements in the designated Mon Repos Area.	N/A	N/A	N/A

Combined, these preferred options proposed:

- continued monitoring of commercial net fishing activities and improving knowledge of the risk of nets to threatened species
- removing some commercial netting (large mesh gill nets and ring nets) from the designated Great Sandy Area waterways (Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait, and Tin Can Inlet) to mitigate risk of threatened species entanglement as these nets pose the highest risk
- upgrading the existing HP zone at Mon Repos to CP zone in recognition of, and to protect habitat essential to the population of endangered loggerhead turtles, as well as vulnerable green and flatback turtles
- expanding two existing MNP zones (MNP04 Woodgate and MNP 10 Fork Bank) to protect shallow and deep water seagrass habitat important for turtles and dugong
- expanding the existing designated Turtle Protection Area off Mon Repos to include a larger area of inter-nesting turtle habitat
- establishing and amending designated Go Slow Areas and rules including:
    - amending the boundary/increasing the size of eight existing Go Slow Areas
    - establishing a new Go Slow Area at Reef Islands within the Great Sandy Strait
    - amending the Sandy Cape Go Slow Area to apply year-round
    - prohibiting motorised water sports in all Go Slow Areas
    - stipulating a maximum vessel speed of 6 knots
    - introducing a special management provision that exempts (with permission) persons conducting authorised surf life-saving activities along the Woongarra Coast from the Go Slow Area rules
- amending the designated Mon Repos Area provisions to prohibit people from the area between 6pm and 6am (unless part of a QPWS turtle tour or an authorised person conducting turtle conservation research/monitoring), and extending the duration that the provision applies by an extra month (between 15 October each year and 31 May the following year) to protect late season hatchlings from disturbance.

5.3.4.4 Mitigate the risk of entanglement in commercial fishing nets

5.3.4.4.1 CRIS Consultation Feedback

Refer to section 5.2.4 for discussion of the consultation feedback regarding the removal of commercial large mesh gill nets and ring nets from designated Great Sandy Area waterways (Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet) to mitigate the risk of commercial net entanglement for threatened species.

5.3.4.4.2 Decision for Final Zoning Plan

In the final zoning plan, the use of commercial large mesh gill nets and ring nets will be prohibited from waterways where the existing designated Great Sandy Area applies to mitigate the risk of commercial net entanglement for threatened species. Refer to section 5.2.5 for discussion of this decision.

5.3.4.5 Improve protection of turtle and dugong core habitat

5.3.4.5.1 CRIS Consultation Feedback

Refer to section 5.1 for discussion of the consultation feedback regarding the proposed expansion of two MNP zones (CRIS MNP10 Offshore of Woodgate & CRIS MNP11 Fork Bank) in western Hervey Bay to protect areas of core habitat for turtles and dugongs.

There was strong support from the conservation sector for the proposal to upgrade the zoning of the internationally significant turtle nesting and inter-nesting area at Mon Repos to CP zone (from HP zone) to ensure the appropriate recognition and protection of habitat important to the population of endangered loggerhead turtles, as well as

vulnerable green and flatback turtles. Many written submissions acknowledged the need for increased protection of core turtle habitat.

5.3.4.5.2 Decision for Final Zoning Plan

Refer to section 5.1 for discussion of the decision to modify the proposal presented in the CRIS to expand two MNP zones to protect areas of core habitat for turtles and dugongs. Refer also to Appendix 4 and Appendix 6.

In the final zoning plan, zoning at Mon Repos will be upgraded to CP zone and extend 500m offshore, covering approximately 3km^2 along the coast from Mon Repos north to Burnett Heads. The CP zone will incorporate Oaks Beach, which is a significant loggerhead turtle nesting beach with the second highest number of nests recorded along the Woongarra coast.

The CP zone will ensure core nesting and inter-nesting habitats for turtles will be protected from inappropriate land uses and development, as the CP zone will be considered in state and local planning schemes and during assessment processes as a Matter of State Environmental Significance under the State Planning Policy and the *Environmental Offsets Act 2014*.

The upgrade of zoning at Mon Repos will improve connectivity across the terrestrial and marine protected areas as the CP zone will directly adjoin the Mon Repos Conservation Park, noting that turtles nest above and below the highest astronomical tide and hence utilise habitat in both the marine park and the (terrestrial) Conservation Park.

The CP zone will prohibit commercial trawling (as per the existing HP zone), commercial net (except bait netting) and crab fishing, and recreational and commercial line fishers will be restricted to a maximum of two rods/lines per person with a combined total of two hooks. This change will eliminate the risk of incidental capture of turtles in commercial fishing nets and pots, although commercial net fishing and crabbing effort in this area is low. Impacted commercial fishers will have access to a commercial fishery impact mitigation package.

5.3.4.6 Improve protection of inter-nesting turtles

5.3.4.6.1 CRIS Consultation Feedback

Consultation feedback indicated very strong support from the community and stakeholders in relation to this topic:

- 89% of 1053 online survey respondents agreed with expanding the existing designated Turtle Protection Area off Mon Repos.

Many recreational users, the conservation sector, recreational fishers, and tourism operators indicated their support for expanding the Turtle Protection Area from 1.8km to approximately 5km off Mon Repos, and for retaining the existing prohibition on commercial trawling in this area from 1 November to 31 January. Those in the commercial fishing sector did not support the extension of the Turtle Protection Area, primarily as this increases the area where trawling is prohibited for those months during the turtle nesting season.

There was a stakeholder proposal to extend the Turtle Protection Area to Moore Park Beach to protect the large number of turtles that nest and inter-nest along this section of the coastline.

5.3.4.6.2 Decision for Final Zoning Plan

The expansion of the designated Turtle Protection Area to approximately 5km off Mon Repos Beach will be included in the final zoning plan. This change prohibits trawling for the same period as currently exists (between 1 November and 31 January) but from a larger area of turtle inter-nesting habitat. Turtles will be protected from stress inducing interactions with trawl nets and Turtle Excluder Devices during the critical egg production stage of their lifecycle. Research at Mon Repos shows an unexplained decline in recruitment of endangered loggerhead turtles into the nesting cohort. The expansion of the Turtle Protection Area, in removing the risk of turtle-trawl net interactions and thereby reducing stress on turtles in the inter-nesting area, could improve nesting success with flow on effects to turtle populations both regionally and internationally.

The commercial fishery impact mitigation package will address any impacts to affected trawl fishers, noting that fisheries data suggests that limited trawling is undertaken in these inter-nesting habitats during these months.

The Turtle Protection Area will not be extended to include Moore Park Beach at this time, as this area incorporates a highly productive nearshore prawn trawl fishery which coincides with the turtle nesting season.

Appendix 7 provides a map of the designated areas in the final zoning plan, including the Turtle Protection Area.

5.3.4.7 Reduce the threat to turtles, dugong, and dolphins from vessel strike

5.3.4.7.1 CRIS Consultation Feedback

Consultation feedback indicated broad support from the community and stakeholders in relation to this topic:

- 81% of 1057 online survey respondents agreed with establishing and amending designated Go Slow Areas and rules.

One First Nations peoples' representative body, the conservation sector, recreational users, recreational fishers and tourism operators are all very supportive of expanding the Go Slow Area network to incorporate shallow-water habitats important for threatened species, and amending Go Slow Area rules such as making the Sandy Cape Go Slow Area year-round rather than on the current seasonal basis.

While some commercial fishers agreed with the changes to the Go Slow Area network to reduce the risk of vessel strikes to threatened species, others were not supportive. Various reasons were given by the few respondents who disagreed, e.g., boat strikes are minimal, current Go Slow Areas are sufficient, and threatened species are not present in these areas.

5.3.4.7.2 Decision for Final Zoning Plan

All changes to the existing Go Slow Areas proposed in the CRIS will be included in the final zoning plan. Specifically, these changes are:

- Establishment of a new designated Go Slow Area at the Reef Islands in the Great Sandy Strait
- Adjustments to the boundaries and/or increase in size of the eight existing Go Slow Areas
- Amendment of the Sandy Cape Go Slow Area such that its provisions apply year-round, to better protect courting and breeding turtles and support a small nesting population of loggerhead and green turtles that utilise this area
- Prohibition of motorised watersports and application of a maximum vessel speed limit of 6 knots within all Go Slow Areas, to better protect turtles and dugongs from vessel strike.

Via a marine park permit, authorised surf life-saving activities along the Woongarra Coast will be exempt from the Go Slow Area rules to allow authorised surf life-saving patrols and training activities to be lawfully conducted in the Woongarra Coast designated Go Slow Area, maintaining this essential public service. The inclusion of conditions on a marine park permit will mitigate any environmental risks of conducting these activities.

Appendix 7 provides a map of the designated areas in the final zoning plan, including the Go Slow Area network.

5.3.4.8 Reduce the risk to turtles from human disturbance at Mon Repos

5.3.4.8.1 CRIS Consultation Feedback

Consultation feedback indicated very strong support from the community and stakeholders in relation to this topic:

- 87% of 1057 online survey respondents agreed with amending the provisions of the designated Mon Repos Area and extending the duration (to 31 May) to reduce disturbance of late season hatchlings.

Submissions that supported these changes at Mon Repos included the conservation sector, recreational users and recreational fishers.

5.3.4.8.2 Decision for Final Zoning Plan

Prohibiting the general public from the designated Mon Repos Area overnight between 6pm and 6am (unless part of a QPWS Turtle Encounter tour, or undertaking authorised research/monitoring activities) will be included in the final zoning plan and will allow the regulation of the total number of people on Mon Repos beach and around any one turtle or nest. This clarifies the existing management arrangement and complements the *Conditions of Entry* for Mon Repos Turtle Centre that limits public access to the Mon Repo Coast Track and beach. The risk of disturbance, interference and stress for nesting turtles and emerging hatchlings is expected to be reduced which aids protection of these threatened species. This change will enhance visitor experience for members of the public participating in Turtle Encounter tours.

The extension of the duration of the special management provisions for the designated Mon Repos Area by one month to 31 May, to protect late season hatchlings from human disturbance will be included in the final zoning plan. This change will provide conservation benefits for hatchlings emerging from nests late in the season and mitigates the risk of disturbance at a highly vulnerable time in their life cycle.

5.3.5 Impact analysis of changes for inclusion in the Final Zoning Plan to protect threatened species.

Sector	Costs	Benefits
ENVIRONMENT		
Marine biodiversity	No assessable impact.	Reduction in potential entanglement of threatened species in large mesh gill nets by removing these nets from CP zones in Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet (former designated Great Sandy Area waterways). Improvement in the overall ecological functioning of the former designated Great Sandy Area waterways, following removal of the use of large mesh gill nets. The expanded MNP zone at Wolf Rock will directly adjoin the Great Sandy National Park and provide ecosystem linkages across marine and terrestrial protected areas.
Habitats	No assessable impact.	Protection of key shallow and deep subtidal seagrass that are critically important for the survival of turtles and dugong through expansion of MNP zones in Hervey Bay. Expanding the MNP zone at Wolf Rock protects core habitats for the grey nurse shark and increases connectivity of protected habitats. The upgrade to CP zone at Mon Repos will protect areas adjacent to inshore fringing coral reef and rocky basalt foreshore habitat, including intertidal and subtidal corals habitat types along the Woongarra coastline of Hervey Bay.
Threatened Species	No assessable impact.	Contribution to the population recovery of threatened species such as grey nurse shark, dugong, marine turtles and migratory shorebirds by minimising disturbance from impacting activities and protecting significant aggregation sites used for nesting, roosting and/or breeding. Improved protection for shorebirds from disturbance in the marine park via extending the provisions that currently only apply within the Ramsar site, throughout the marine park. Preventing public access at the marine park's four most significant shorebird sites, when shorebirds are most vulnerable to disturbance, is expected to significantly reduce the frequency of disturbance at these four sites, increasing the likelihood of survival and preventing further decline in shorebird numbers.

		Improvement in the spatial extent of protection of grey nurse sharks in areas of known habitat, from injuries and mortality associated with incidental catch in commercial and recreational fisheries. An 'umbrella conservation effect' will likely result from measures used to protect grey nurse sharks and will extend to other species utilising the same habitat such as manta rays, turtles, eagle rays, leopard sharks, sea snakes and Queensland groper. Reduction in potential entanglement of threatened species in large mesh nets by removing these nets from CP zones in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet (former designated Great Sandy Area waterways), reducing the risk of mortality of threatened species. Refer to section 5.2 for discussion of this topic. With Mon Repos upgraded from HP to CP zone and recognised as a Matter of State Environmental Significance, the area covered by the CP zone will be considered in state and local planning schemes and during development assessment processes, ensuring protection of core nesting and inter-nesting habitat for turtles from inappropriate land uses and development. The upgrading of zoning at Mon Repos to CP zone will improve connectivity across adjoining terrestrial and marine protected areas, as the CP zone will directly adjoin the Mon Repos Conservation Park – noting that turtles nest above and below the level of HAT and hence utilise habitat in both the Mon Repos Conservation Park and the marine park. The new MNP and HP zone at Fork Bank (resulting from the modification of zoning of CRIS MNP11 from MNP to HP zone) and the new MNP in central Hervey Bay which incorporate and protect large areas of seagrass habitat will reduce disturbance (e.g. from trawling) and is expected to aid resilience of these habitats to disturbance events, e.g. floods and climate change impacts, which assists the long-term survival and health of seagrass to support populations of threatened species during such events. An increase in the size of some existing Go Slow Areas and establishing a new Go Slow Area in key feeding, resting and transit locations for turtles and dugong is expected to reduce the risk of vessel strike which can cause disease, injury and/or mortality to these species. In turn this is expected to contribute to long-term conservation outcomes for populations of threatened species.

		Australian humpback dolphins are also expected to benefit from vessels travelling slower in shallow water habitat. By prohibiting general public access on Mon Repos beach between 6pm and 6am during turtle nesting season (November to May), the total number of people on the beach and around any one turtle or nest can be regulated. This is expected to reduce the risk of disturbance, interference and stress for each nesting turtle and emerging hatchlings and improve research capacity. Extending the end date for the designated Mon Repos Area by one month to 31 May would ensure that late season hatchlings emerging from nests are not disturbed. Changes to the designated Mon Repos Area rules could result in improved long-term conservation benefits for turtles as nesting success may improve.
National and International Agreements	Refer to cost for State government.	Contributes to the population recovery of species subject to various International Conventions and Agreements to which Australia is a signatory. Assists in the delivery of management actions identified in threatened species recovery plans.
COMMUNITY		
First Nations peoples	No assessable impact.	Increase in cultural identity, health and well-being resulting from better protection of threatened species which are culturally important. Potential increase in economic opportunities from improved protection of threatened species.
Recreational fishers	The expanded MNP zones in Hervey Bay to protect seagrass foraging grounds for turtle and dugong, and the Wolf Rock MNP zone are expected to impact some recreational fishers as all fishing and collecting will be prohibited. To minimise potential impacts on rock fishers walking around the base of Double Island Point, the large and accessible rock platform at the northern tip of the Point is excluded from the Wolf Rock MNP zone. The upgrade of the HP zone at Mon Repos to CP zone is expected to have minor impact on shore and vessel-based recreational fishers as the maximum number of rods/lines and hooks per person will be reduced from three rods/lines and a combined total of six hooks, to a maximum of two rods/lines per person with a combined total of two hooks.	"Spillover" of species (larvae, juveniles and adults) from MNP zones to surrounding areas will benefit fishers (depending on location and species) with a greater abundance of some target species. Spillover benefits that provide improvements in species' catchability over time may offset the loss of areas for recreational fishing. Transit lanes incorporated in Go Slow Areas as necessary allowing vessels to access boat ramps without the need to travel off the plane or at speeds less than 6 knots.

	New or expanded Go Slow Areas may have a minor impact on recreational fishers' travel time and associated costs (fuel) per fishing trip. This could result in a decline in recreational fisher satisfaction with their fishing activities.	
Vessel users	New or expanded Go Slow Areas and restrictions on vessel use at the designated Mon Repos Area (to 500m offshore) extended by an additional month, may have minor impacts on vessel users' travel time and associated costs, and result in an increased sense of inconvenience for some recreational vessel users.	Transit lanes incorporated in Go Slow Areas as necessary allowing vessels to access boat ramps without the need to travel off the plane or at speeds less than 6 knots. Reduced risk of interactions with threatened species as a result of new or expanded Go Slow Areas.
General community	Impediments to access at seasonal shorebird protection areas especially in the small communities of Maaroom and Boonooroo and near the popular visitor location at Moon Point. No pedestrian access to Mon Repos beach between 6pm and 6am for seven months of the year unless the person is part of a QPWS Mon Repos Turtle Encounter tour impacts members of the public who currently use the beach and nearshore waters at Mon Repos between 6pm and 6am (e.g. for walking, swimming, fishing or boating). This impact is minimised by the availability of many other beaches and foreshore areas in the vicinity where access is not restricted, and the long held management measures in place through the Conditions of Entry at the Mon Repos Turtle Centre. A new regulatory impost in the requirement to obtain a marine park permit will impact providers of authorised surf life-saving activities if they wish to be exempt from the Go Slow Area provisions along the Woongarra Coast. Depending on the nature of conditions imposed on a permit, a cost may be incurred to ensure compliance with permit conditions.	Improved protection and conservation of threatened species that reside in or migrate to the marine park adds to the marine park's growing national and international reputation as a nature-based tourism destination. The marine park presents unique experiences with several threatened, yet iconic, species such as turtle encounter tours at Mon Repos, whale watching in Hervey Bay and diving with grey nurse sharks at Wolf Rock which all rely on the health, abundance and distribution of these species improving over time. By prohibiting general public access (and domestic animals) on Mon Repos beach between 6pm and 6am during turtle nesting season (November to May), the total number of people on the beach and around any one turtle or nest can be regulated, which is expected to reduce the risk of disturbance, interference and stress for each nesting turtle and emerging hatchlings, and thereby enhance visitor experience for those participating in QPWS Mon Repos Turtle Encounter tours (November to March). Changes to designated Go Slow Area provisions will allow authorised surf life-saving patrols and training activities to be lawfully conducted in the Woongarra Coast designated Go Slow Area, enhancing this essential public service.
BUSINESS/INDUSTRY		
Commercial fishers	Reduction in the area available for commercial fishing (of 13.5km^2) through the expansion of the Wolf Rock MNP zone would be expected to impact some commercial line (e.g. Spanish mackerel) fishers. To minimise potential impacts on the adjacent trawl fishery, the boundary alignment of the south-eastern portion of the expanded MNP zone has taken into consideration the area where trawling occurs.	Access to a commercial fishery impact mitigation package for commercial fishers "Spillover" of species (larvae, juveniles and adults) from MNP zones to surrounding areas will benefit fishers (depending on location and species) with a greater abundance of some target species. Spillover benefits that provide improvements in species' catchability over time may offset the loss of areas for commercial fishing.

	Potential loss of primary economic contribution from commercial net fishing including direct revenue, jobs, and business profitability from the removal of commercial large mesh netting in the designated Great Sandy Area to mitigate risk of entanglement of threatened species in commercial fishing nets. For further discussion of this topic, refer section 5.2. By upgrading the HP zone at Mon Repos to CP zone, most commercial fishing that can currently occur within the HP zone (netting, line fishing, crabbing) will be prohibited or restricted, resulting in a loss of income to commercial fishers who fish within 500m of the shore. The scale of this loss would be expected to be small as low levels of catch are reported in the fishery reporting grid sites that encompass this area. The impacts of this change on affected commercial fishers could require mitigation through an impact mitigation package, that would be expected to address the loss of access to these fishing grounds and potential effort transfer issues. Trawling that can currently occur in the area of the expansion of the Turtle Protection Area will be prohibited between 1 November and 31 January, affecting the income of commercial fishers. The scale of this loss would be expected to be small as low levels of catch are reported in the fishery reporting grid sites that encompass this area during this time. The impacts of this change on affected commercial fishers could require mitigation through the impact mitigation package that would be expected to address the loss of access to these fishing grounds and potential effort transfer issues. The individual or combined impacts of the changes included in the final zoning plan to protect threatened species are likely to be significant enough to require impact mitigation. New or expanded Go Slow Areas could negatively impact some commercial fishing activities as vessels are required to travel off the plane and at a speed of less than 6 knots. For example, crab fishers have limited time on the high tide to access potting areas in shallow locations. This impact has been reduced by limiting the size of the Go Slow Areas and locating them away from high use commercial fishing areas where possible. See section 6 for an assessment of the impacts resulting from the combination of changes to be included in the final zoning plan (i.e.	

	not just those resulting from changes to improve protection of threatened species as zoning plan changes can have cumulative and synergistic impacts on commercial fishing).	
Post-harvest seafood businesses	Reduces access to seafood for processing, value adding and sale. Reduces ability to meet market demand. Potentially impacts on business viability, particularly if alternative seafood product cannot be sourced. Potentially requires modification of processing plant and equipment to support processing and handling of alternate product. Loss of employment.	Access to business support through a commercial fishery impact mitigation package
Charter fishing	The expanded MNP zones in Hervey Bay to protect seagrass foraging grounds for turtle and dugong and the Wolf Rock MNP zone may impact charter fishing as all fishing and collecting will be prohibited. New or expanded Go Slow Areas may impact on charter fishers' travel time and associated costs (fuel) per fishing trip. This could result in a decline in charter fisher activities with potential flow on effects to related businesses.	"Spillover" of species (larvae, juveniles and adults) from MNP zones to surrounding areas will benefit fishers (depending on location and species) with a greater abundance of some target species. Spillover benefits that provide improvements in species' catchability over time may offset the loss of areas for charter fishing.
Hospitality industry	Potential decrease in availability of fresh commercially caught local seafood and reduction in purchasing choice for consumers.	Long-term benefits from increases in nature-based and recreational fishing tourism for accommodation providers, restaurants and other food outlets.
Tourism	Potential loss of tourism associated with fresh local-caught seafood from fishing towns/wharves/ports/fish wholesalers, retailers and co-ops and community events such as the annual Hervey Bay Seafood Festival.	Enhancement of the natural values of the marine park that are prized by the community and regarded as a natural and commercial asset, thus providing a strong basis for nature-based tourism (e.g. snorkelling, diving, kayaking, wildlife viewing). Expected increase in tourism as a result of improved recreational fishing opportunities and amenity from the proposed removal of the designated Great Sandy Area and increase in the MNP zone network. Enhanced enjoyment of Mon Repos beach for visitors on turtle tours through management of public access. Promotion of nature-based recreation and tourism.
Wide Bay regional economy	Refer section 5.2 for discussion on the costs associated with loss of commercial fishing in the marine park.	Potential for the creation of new small businesses that support the local economy e.g. charter fishing, nature based tourism.
GOVERNMENT		

Local government	No assessable impact.	Opportunities for promotion of nature-based lifestyle, recreation and tourism in the region.
State government	Funding for resources to meet public expectations for a well-managed marine park. Overall for implementation of the final zoning plan, establishment and first year operational costs are estimated to require an additional $3.5M with ongoing annual costs estimated to require an additional $1.5M. For discussion of the costs of mitigating the risk of entanglement of threatened species in commercial fishing nets, refer section 5.2.	Addresses management actions identified in a number of national and international species management and/or threatened species recovery plans that Queensland and/or Australia is a signatory to.

5.4 Protection of Cultural Values

Zoning plan review objective

Protect cultural values, respect native title rights, and recognise the responsibilities of First Nations peoples to Care for Country.

5.4.1 Context

Engaging with First Nations peoples who have a connection to the land and sea Country within the GSMP has been a foundational component of the zoning plan review process.

There are six groups of First Nations peoples with a connection to the land and sea Country within the GSMP – the Bailai, Gurang, Gooreng Gooreng, Taribelang Bunda peoples, the Butchulla people and the Kabi Kabi people. This connection and the rights and responsibilities of First Nations peoples to Care for Country have existed for tens of thousands of years and continue into the future.

The legacy of living in this Country over this time has resulted in significant cultural resources existing over and within the landscape for First Nations peoples. The marine park's significant natural and cultural values, intertwine and interconnect to form a rich cultural landscape that consists of all the land and waters, the air, the sky, the flora and fauna and people. These values can be physical (tangible) and non-physical (intangible) and include places or objects having anthropological, archaeological, historical, scientific, sociological, spiritual or visual significance or value, including significance or value of that kind under Aboriginal tradition and custom. In conserving the marine environment, the *Marine Parks Act 2004* also places an emphasis on protecting the resources within marine parks that are of cultural significance.

Recognition of the cultural importance of some sites within the marine park is currently provided through six designated Fish Trap Areas; one at Woody Island and five at Booral. The aim of these areas is to protect important sites by prohibiting anchoring and the removal of material from within these areas.

The management changes across the marine park that focus on improved protection of habitats and threatened species, align broadly with the aspirations to date of many First Nations peoples for the conservation of Country to ensure a sustainable future for all.

When the CRIS was released, engagement with First Nations peoples' representative bodies to identify and protect specific areas of cultural value in the sea Country of the Bailai, Gurang, Gooreng Gooreng, Taribelang Bunda (northern section of the marine park) and the Butchulla people (central and southern section of the marine park), as well as the Kabi Kabi people (far southern section of the marine park), was ongoing. Several changes for inclusion in the final zoning plan are presented below (in addition to those discussed in the CRIS) that were outcomes of this ongoing engagement with First Nations peoples. DES will continue to work with all First Nations peoples within the GSMP footprint beyond the life cycle of this review, for the continual improvement of marine park management outcomes that support aspirations for sea Country.

The Queensland Government recognises that First Nations peoples hold distinct cultural rights (section 28 of the *Human Rights Act 2019*) which includes the right to conserve and protect the environment and productive capacity of their land, territories and resources. The final zoning plan will not affect, diminish or extinguish native title and associated rights for First Nations peoples to take, use or keep natural and cultural resources in accordance with Aboriginal tradition under the Commonwealth *Native Title Act 1993.* The *Legislative Standards Act 1992* (section 4(3)(j)) requires Queensland legislation to have sufficient regard to Aboriginal tradition and Island custom to avoid unintended legislative impacts on traditional practices.

5.4.2 Problem

Key threats to cultural values in the GSMP include physical disturbance of places and objects from public visitation, and boating activities. Vessel noise, particularly from the operation of vessels at speed, impacts the enjoyment of Country and use of areas important for the practice of cultural and spiritual activities and knowledge sharing with younger generations. Vessel wash can threaten the integrity and preservation of cultural resources. Shell middens and other culturally significant areas or sites in the intertidal and shallow subtidal areas are particularly susceptible to erosion from vessel wash and scarring by propellers. The risk of degradation and loss of cultural heritage sites such as burial grounds and shell middens is exacerbated by rising sea level, with eroding coastlines resulting in exposure of sacred sites and submersion of sites that were once on dry land.

The management issues and options proposed and discussed in the CRIS focussed on protecting specific areas of cultural value in Tin Can Inlet, informed by the aspirations of the Kabi Kabi people. There are currently no specific marine park management arrangements to preserve these culturally important areas. Vessel ownership and urban

development in the region is predicted to rise, along with the compounding impacts of climate change. Without supportive management, the impacts of vessel usage on the ability to connect to Country and preserve the cultural values of the area will continue and are likely to worsen with increased use of the marine park in the future.

With respect to designated Fish Trap Areas at Woody Island and Booral, the CRIS documented issues relating to the accuracy and complexity of the boundaries of the designated areas. The designated Fish Trap Areas are delineated by a 200m radius from a central point. However, the five Fish Trap Areas at Booral spatially overlap resulting in a complex system of boundaries and the coordinates used to mark the central point of the Fish Trap Area at Woody Island are outside the marine park.

5.4.3 Carland Creek

The Kabi Kabi people have a strong connection with the land and sea Country of Tin Can Inlet. Areas within Tin Can Inlet and its creeks, such as Carland Creek, are culturally important for the Kabi Kabi people who wish to connect to Country in a peaceful and respectful environment and preserve the cultural values of the area, undisturbed and unimpacted by vessel noise and wash.

5.4.3.1 CRIS Options

The CRIS presented three options to protect cultural values in Carland Creek.

Problem	Option 1	Option 2	Option 3
Areas within the Inlet and its creeks, such as Carland Creek, are culturally important for the Kabi Kabi people who wish to connect to Country in a peaceful and respectful environment and preserve the cultural values of the area, undisturbed and unimpacted by vessel noise and wash.	No change.	Establish a Go Slow Area for natural and cultural values.	Rely on proposed MNP zone expansion.

The preferred option in the CRIS was to establish a designated Go Slow Area for natural and cultural values to enable the Kabi Kabi people who wish to connect to Country in a peaceful and respectful environment, and to preserve cultural values of the area.

5.4.3.2 CRIS Consultation Feedback

There was moderate support from the community and stakeholders in relation to this proposal:

- 65% of 861 online survey respondents agreed with the proposed Go Slow Area for natural and cultural values in Carland Creek.

The conservation sector, the scientific community and recreational users were particularly supportive of the proposal for this Go Slow Area. Of those who disagreed with the Go Slow Area proposal, most were recreational fishers, but no specific reasons were cited for their disagreement.

The proposal was informed and supported by engagement with the Kabi Kabi Peoples Aboriginal Corporation, who have a connection to the land and sea Country of this area.

There was a proposal from BNTAC to introduce a similar Go Slow Area for natural and cultural values in Wathumba Creek.

5.4.3.3 Decision for Final Zoning Plan

Carland Creek

A new designated Go Slow Area for natural and cultural values in Carland Creek will be included in the final zoning plan. This is considered the most effective marine park management tool to reduce the impacts of vessel noise and speed on the ability of First Nations peoples to connect to Country and reduce the risk of erosion of shell middens, while still recognising and allowing the use of recreational vessels in the area. It directly recognises and seeks to manage values of importance to First Nations peoples and imposes minimal cost on the community and government.

5.4.3.4 Additional Go Slow Area in Wathumba Creek

In line with a proposal from BNTAC following release of the CRIS, the final zoning plan will include an additional designated Go Slow Area for natural and cultural values in Wathumba Creek (Figure 10), given its cultural significance to the Butchulla people. This additional Go Slow Area will apply to the upstream estuarine reaches of the creek that are within the marine park, north of the Teebing (Wathumba Spit) camping area, recognising and protecting the cultural values of this area.

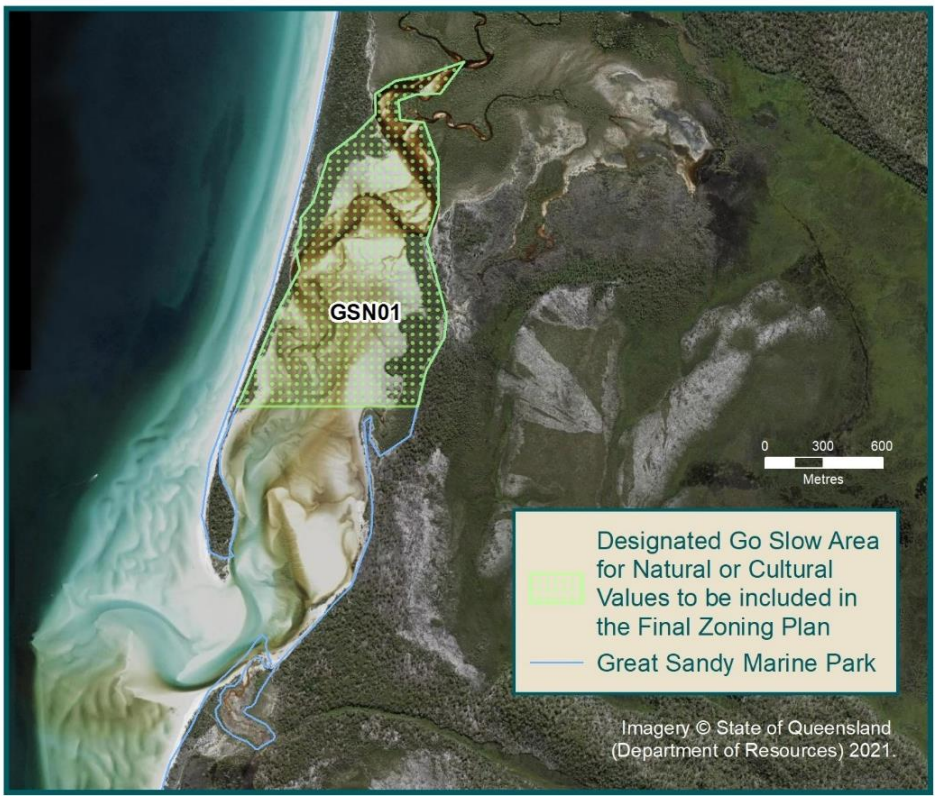

Figure 10. The new designated Go Slow Area for natural or cultural values in Wathumba Creek for inclusion in the Final Zoning Plan.

5.4.4 Searys and Cooloola Creeks

Searys and Cooloola Creeks are important places for the conduct of cultural practices that require a level of privacy to undertake, without disturbance by vessel noise and traffic. Shell midden sites, within the intertidal and shallow subtidal areas at various locations throughout Tin Can Inlet and its creeks, are at risk of erosion from sea level rise associated with climate change which is exacerbated by vessel wash.

5.4.4.1 CRIS Options

The CRIS presented three options to protect cultural values in Searys and Cooloola creeks.

Problem	Option 1	Option 2	Option 3
Searys and Cooloola creeks are important for conducting cultural activities that require a level of privacy to undertake. Shell midden sites are at risk of erosion from sea level rise, exacerbated by vessel wash.	No change.	Establish a No Motorised Vessel Area in Searys Creek and Cooloola Creek.	Rely on proposed MNP zone expansion.

The preferred option presented in the CRIS was to establish a designated No Motorised Vessel Area in Searys Creek and in Cooloola Creek to enable First Nations peoples of the area to conduct cultural practices without disturbance from vessels, and to protect culturally significant sites from erosion.

5.4.4.2 CRIS Consultation Feedback

There was moderate support from the community and stakeholders in relation to this proposal:

- 55% of 862 online survey respondents agreed with the proposed establishment of a No Motorised Vessel Area in Searys Creek and Cooloola Creek.

Those who supported the proposal were mostly from the conservation sector, the scientific community and recreational users. Of those who disagreed with the proposal, most were recreational fishers, but no specific reasons for their disagreement were cited.

A number of commercial crabbers and net fishers indicated that their work in Searys Creek would be affected.

The proposal was informed and supported by engagement with the Kabi Kabi Peoples Aboriginal Corporation (KKPAC), who have a connection to the land and sea Country of this area. The KKPAC sought an exemption from the No Motorised Vessel Area provisions to ensure all members of their community have the opportunity to connect to Country in these creeks, including Kabi Kabi Elders.

5.4.4.3 Decision for Final Zoning Plan

Two small (total area 4.41km^2) designated No Motorised Vessel Areas will be included in the final zoning plan in Searys Creek and Cooloola Creek. The designated area is expected to reduce the risk of noise disturbing cultural practices in the area and will also reduce the impacts of vessel wash on culturally significant sites, e.g. middens. This approach complements the objects of the underlying MNP zone and protects the amenity value for the appreciation and peaceful enjoyment of the natural integrity and cultural values of the area across a range of marine park user groups. The impact on access to these waterways for fishing, which was raised by a small number of commercial and recreational fishers will fundamentally result from the expansion of the underlying MNP zones with these two waterways, rather than the implementation of these designated No Motorised Vessel Areas. A provision will be included to exempt First Nations people of this area from the requirement to enter the area in non-motorised vessels.

5.4.5 Designated Fish trap areas

To better protect the five Fish Trap Areas at Booral and improve compliance with and enforcement of the management provisions, it was proposed in the CRIS to combine the five separate areas into one spatially defined area that encompasses all five existing Fish Trap Areas.

To remove uncertainty and minimise confusion, it was proposed to remove the designated Fish Trap area from Woody Island, noting that protection of the fish traps in the vicinity of Woody Island can be implemented in future, once more accurate mapping of this cultural resource can be undertaken.

5.4.5.1 CRIS Consultation Feedback

No specific comments on this proposal were provided via the consultation process but there was a general sentiment expressed to increase protection of Fish Trap Areas.

There were calls for a comprehensive survey of cultural values (of which fish traps are recognised as one element) and better recognition of connectivity of cultural values throughout the seascape and landscape in marine park documentation.

BAC, BNTAC and the K'gari (Fraser Island) World Heritage Area Committee also requested the coordinates of the fish trap at Woody Island be urgently resurveyed and the designated Fish Trap Area be correctly sited in the final zoning plan rather than removed.

5.4.5.2 Decision for Final Zoning Plan

Based on the outcomes of the consultation the existing five separate designated Fish Trap Areas at Booral will be combined into one spatially defined area in the final zoning plan. The single larger Fish Trap Area will better protect these fish traps through improved compliance with and enforcement of the management provisions.

DES will continue to engage with the Butchulla people in relation to resurveying the Woody Island fish traps, with a preference to undertake a comprehensive survey of the island's perimeter to inform management and protection, noting that fish traps are known to occur in multiple locations around the Island. Future amendment of the zoning plan can occur as the location of these fish traps, and others, are identified.

Appendix 7 provides an overview of designated areas in the marine park for inclusion in the final zoning plan, including the Fish Trap Area at Booral.

5.4.6 Impact analysis of changes for inclusion in the Final Zoning Plan to protect cultural values

Sector	Costs	Benefits
ENVIRONMENT		
Marine biodiversity	No assessable impact.	Cultural and environmental values are intrinsically linked through Country and people. The efficacy of First Nations peoples' approaches to Caring for Country is established through their continuous occupation and successful stewardship of these lands for over 60,000 years. Improved protection of cultural values is aligned with protection of the region's ecological values and marine biodiversity.
Habitats	No assessable impact.	Designated Go Slow Areas for natural and cultural values apply a widely understood marine park management tool to minimise impacts to threatened species, to also conserve culturally significant areas through enhancing connection to Country and protecting sites from physical degradation. Implementing a designated No Motorised Vessel Area reduces the risk of vessel wash impacting the integrity of middens– damage to which is unquantifiable as loss cannot be compensated, and shoreline habitats. Improved boundary definition of the Fish Trap Area enhances the ability to monitor inappropriate uses of this Area. In enhancing connection to Country, reducing the risk of erosion of culturally significant sites (e.g. midden sites), and protecting cultural sites (e.g. fish traps) from physical disturbance, these low cost interventions contribute to the protection of habitats and overall health of marine ecosystems and represent a net benefit.
Threatened Species	No assessable impact.	Designated Go Slow Areas for natural and cultural values are a low cost, established tool to minimise the risk of adverse impacts to threatened species through boat strike, noise pollution or diminishment of their use of areas for food or breeding. Designated No Motorised Vessel Areas will provide the positive incidental impact of reduced risk of adverse impacts to threatened species through boat strike.
National and International Agreements	No assessable impact.	These measures accord with legislative and other obligations to ensure the Queensland Government is reframing relationships with First Nations peoples, and working to ensure rights and interests are appropriately reflected in regulatory instruments.
COMMUNITY		
First Nations peoples	No adverse impacts.	The regulatory measures align with requests of First Nations peoples with a connection to the land and sea Country of the marine park for improved protection of values. The protection of

		cultural sites and increased ability to enjoy cultural practice and Care for Country is of significant and unquantifiable benefit.
Recreational fishers	Assessed as negligible to no impact. The Go Slow Area in Carland Creek and No Motorised Vessel Areas in Searys and Cooloola Creeks overlay MNP zones where fishing is prohibited.	Regulation that provides for the protection of cultural values and cultural practice extends benefit to the entire community. First Nations peoples successfully stewarded Country for thousands of generations, and their input to present day management approaches is critical.
Vessel users	New Go Slow Areas for Natural and Cultural Values and new No Motorised Vessel Areas will impact on motorised vessel users wishing to utilise the area which may result in an increased sense of inconvenience for some recreational vessel users.	These changes complement the objects of the underlying MNP zones in Tin Can Inlet and CP zone in Wathumba Creek and protects the amenity value for the appreciation and peaceful enjoyment of the natural integrity and cultural values of the area across a range of marine park user groups.
General community	Negligible to no impact.	These changes complement the objects of the underlying MNP zone and protects the amenity value for the appreciation and peaceful enjoyment of the natural integrity and cultural values of the area across a range of marine park user groups.
BUSINESS/INDUSTRY		
Commercial fishers	Assessed as negligible to no impact. The Go Slow Area in Carland Creek and No Motorised Vessel Areas in Searys and Cooloola Creeks overlay MNP zones where fishing is prohibited.	Regulation that provides for the protection of cultural values and cultural practice extends benefit to the entire community. First Nations peoples successfully stewarded Country for thousands of generations, and their input to present day management approaches is critical.
Post-harvest seafood businesses	No assessable impact.	No assessable impact.
Charter fishing	Assessed as negligible to no impact. The Go Slow Area in Carland Creek and No Motorised Vessel Areas in Searys and Cooloola Creeks overlay MNP zones where fishing is prohibited.	Regulation that provides for the protection of cultural values and cultural practice extends benefit to the entire community. First Nations peoples successfully stewarded Country for thousands of generations, and their input to present day management approaches is critical.
Hospitality industry	No assessable impact.	No assessable impact.
Tourism	No assessable impact.	Broader understanding of the cultural values of the GSMP is likely to improve visitor experience and provide a platform for First Nations peoples to develop tourism programs that align with their community priorities.
Wide Bay regional economy	No assessable impact.	A failure to implement a contemporary regulatory framework that supports protection of cultural values would represent a significant cultural loss that could in turn diminish the overall health of the marine ecosystem which is the foundation of much of the regional economy.
GOVERNMENT		
Local government	No assessable impact.	Local governments benefit when natural and cultural values of their community are adequately protected and conserved.
State government	Funding for resources to meet public expectations for a well-managed marine park. Overall, for	Improved definition of the Fish Trap Area provides a net gain by an enhanced ability to monitor inappropriate uses of the Fish Trap

	implementation of the final zoning plan, establishment and first year operational costs are estimated to require an additional $3.5M with ongoing annual costs estimated to require an additional $1.5M.	Area through a streamlined compliance regime. Costs to realise this intervention are low.

5.5 Management of Platypus Bay to complement K'gari management

Zoning plan review objective

Complement the management of the marine park with that of the adjacent Great Sandy National Park, and the K'gari (Fraser Island) World Heritage Area.

5.5.1 Context

Platypus Bay is adjacent to the Great Sandy National Park and includes part of the K'gari (Fraser Island) World Heritage Area which extends 500m into the waters of the marine park. The north-eastern area of Platypus Bay between Wathumba Creek and Rooney Point is the most remote inshore area of the marine park with no adjacent settlements, campgrounds, beach access for vehicles or other infrastructure. It supports a range of ecological values and provides remote natural experiences for marine park users. The area is a popular anchorage and is frequented by a range of vessel types including recreational cruising, charter fishing and commercial whale watching vessels.

From July to November, Platypus Bay is a critical resting area for several whale species on their migration from and to Antarctica and hence provides unique whale watching experiences, especially toward the latter part of the season. On average, early pregnant humpback whales, and mother-calf pairs with attendant males spend up to two weeks in the area for maternal care and social activity. As with dugong and turtles, humpback whales (especially mothers and calves) are at risk of vessel strike and disturbance while they are resting in the Bay. Disturbance can increase energy use with implications for the growth potential of calves.

In relation to this area of the marine park, feedback received by DES prior to the release of the CRIS has focused on the importance of Platypus Bay for the reproductive success of humpback whales and other whale species with some stakeholders, including whale researchers, requesting better protection for humpback whales while they are in the marine park. Suggestions have included greater protection of humpback whale habitat, the introduction of a designated Go Slow Area and restricted 'no go' areas where humpback whales are nurturing calves.

5.5.2 Problem

There are no management arrangements in the existing zoning plan to complement the management objectives for the northern part of K'gari (within the Great Sandy National Park and World Heritage Area) and/or to provide similar opportunities for peaceful enjoyment of the adjoining area in the marine park.

In north-eastern Platypus Bay, vessels can be involved in activities such as parasailing, tubing and water-skiing, and personal watercraft can be driven erratically and wave jump. These noisy and erratic modes of vessel operation can impact amenity and social values (e.g. naturalness, tranquillity, appreciation and personal connection) for other users and create a risk of vessel strike and disturbance to humpback whales and other wildlife.

DTMR has predicted a 13% increase in vessel registrations over the next decade, which is expected to increase the risk of disturbance to amenity and natural values of the area. There is a growing area of research that shows the social, physical and psychological benefits that natural areas can have on a person's wellbeing and that these values are important to recognise and protect.

5.5.3 CRIS Options

The CRIS considered three options to complement adjacent land management on K'gari in the marine park, while allowing for continued use of the area (subject to the underlying zone).

Problem	Option 1	Option 2	Option 3
No management arrangements in the zoning plan complement the management objectives for the northern part of K'gari (Great Sandy National Park) or provide opportunities for peaceful enjoyment of the adjoining area in the marine park.	No change to the Zoning Plan.	Establish a designated No Motorised Vessel Area.	Establish a designated area to prohibit motorised watersports and aircraft.

The preferred proposal in the CRIS was to establish a new designated area type in north-east Platypus Bay which would prohibit motorised watersports and aircraft.

5.5.4 CRIS Consultation Feedback

Feedback indicated strong support for the establishment of a designated area (the Platypus Bay area) in the north-east part of Platypus Bay that prohibits motorised watersports and aircraft:

- 78% of 941 online survey respondents agreed with the proposed designated area.

A small number of submissions suggested that Option 2 (i.e. no motorised vessels) should be adopted. Conversely, there was stakeholder concern that if the complete no motorised vessel option (as opposed to only motorised watersports) was progressed, a safe anchorage would be lost for boats traversing the area.

Several submissions from the conservation sector and scientific community highlight the importance of the broader Platypus Bay to migrating humpback whales and suggest that the zoning plan should include additional provisions to protect mother and calf pairs resting in Platypus Bay on their southern migration, e.g. via the use of a designated Go Slow Area.

5.5.5 Decision for Final Zoning Plan

Based on consultation feedback a new type of designated area (the Platypus Bay area) will be included in the final zoning plan as it complements the adjacent land management and provides for reasonable use of the area by all vessels. The designated area is approximately 30km^2 in size (0.5% of the park) in north-east Platypus Bay between Rooney Point and where latitude 24°56.1'S intersects the beach on the western side of K'gari (approximately 5.4km north of the Wathumba Creek mouth). Refer to the map of designated areas to be included in the final zoning plan in Appendix 7.

The designated Platypus Bay Area will allow for the appreciation and enjoyment of the natural integrity of this relatively undisturbed and remote area of the marine park, and is a precautionary measure to ensure the long-term protection of the amenity values of the area from increasing vessel and personal watercraft ownership and use in the region. The special management provisions of the designated area align with the arrangements in place to manage the K'gari section of the Great Sandy National Park that prohibit vehicles from accessing the beach between Wathumba Creek and Sandy Point lighthouse. The Platypus Bay area will complement the landscape setting of the adjacent protected area and provide a quiet environment for visitors to enjoy the marine park, national park and World Heritage Area.

Motorised water sports and the take-off and landing of fixed wing aircraft and helicopters will be prohibited in the designated area. These rules limit noise and nuisance impacts and reduce the potential for disturbance and injury to humpback whales and calves from vessel strike, without compromising vessel safety or access to the area. Motorised watersports generate noise, pose a risk to wildlife, and involve the following activities:

- driving a motorised vessel other than in a straight line, including, for example—
  - in a circular pattern; or
  - by weaving or diverting the vessel; or
  - by surfing down, or jumping over or across, any wave, swell or wash, other than for any necessary turn or diversion;
- towing a person behind a motorised vessel, including, for example, waterskiing or parasailing; or
- the use of a personal water craft other than for transport by the most direct reasonable route between two places.

Commercial fishers undertaking lawful commercial fishing activities within the area (e.g. seine netting) will be exempt from the special management provisions for motorised watersports, as fishing vessels undertaking this sort of netting need to drive a course, other than a straight line, to set nets.

The landing and taking off of helicopters and fixed wing aircraft, such as seaplanes and ultralights, also generate significant amounts of noise. Whilst unable to take off or land, seaplanes will be able to operate as a vessel and travel through the waters of the designated area subject to the management provisions for vessels described above.

The suggestion of a Go Slow Area in southern Platypus Bay, received in CRIS consultation feedback, is considered unfeasible given the large size of area required to incorporate all whale habitat, the volume of vessel traffic in the area, and the extremely low reports of vessel collisions with whales. A Go Slow Area would also impact on safe vessel passage through Platypus Bay, especially in unfavourable weather conditions when increased travel time would affect the ability of vessels efficiently reach a safe harbour or anchorage. Educational messages during the whale season to encourage vessel operators to keep a good lookout for whales is considered a more feasible approach to minimising the risk of vessel collision and disturbance to whales throughout this large area.

Similar to the suggestion to require vessels to operate at slow speeds (i.e. via a Go Slow Area) prohibiting all motorised vessels from the Platypus Bay Area (Option 2 in the CRIS) is not considered practical from a navigational and safety perspective. The north-eastern part of Platypus Bay is a safe corridor for vessels seeking shelter from northerly and easterly winds and a popular overnight anchorage for cruising yachts and bare boat charter vessels, which routinely access the area under engine. Prohibiting motorised vessels from this area would create significant navigational safety issues by requiring them to travel in a more exposed location and requiring vessels to travel at ‘go slow’ speeds (less than 6 knots or “off the plane”) is impractical, given that the designated area will be approximately 18 kilometres in length. These types of designated area would also have unacceptable flow on socio-economic impacts to tourism in the area.

5.5.6 Impact analysis of changes for inclusion in the Final Zoning Plan to deliver complementary management in Platypus Bay.

Sector	Costs	Benefits
ENVIRONMENT		
Marine biodiversity	No assessable impact.	Significantly reduces the risk of vessel strike to humpback whale mothers and calves resting in Platypus Bay on their annual southern migration. Eliminates a key source of noise pollution and disturbance impacting resting humpback whales (from the erratic operation of vessels impacting the amenity of the area).
Habitats	No assessable impact.	No assessable impact.
Threatened Species	No assessable impact.	Significantly reduces the risk of vessel strike to whales and threatened species including turtles.
National and International Agreements	No assessable impact.	Aligns management of this remote area of the marine park with that of the K’gari (Fraser Island) World Heritage Area.
COMMUNITY		
First Nations peoples	No assessable impact.	Natural and cultural values of north-east Platypus Bay are protected. Reduction in vessel and aircraft noise, enabling improved enjoyment of Country. Removal of motorised watersports and aircraft enables access to a quiet, remote area of the marine park to practice cultural and spiritual activities and share knowledge with younger generations.

Recreational fishers	No assessable impact.	Allows all vessels to continue to travel through and utilise the area, provided they are not driven in an erratic manner, minimising socio-economic impacts on recreational use of the area.
Vessel users	Loss of area to potentially undertake motorised watersports in a remote area of the marine park.	Allows all vessels to continue to travel through and utilise the area, provided they are not driven in an erratic manner, minimising socio-economic impacts on recreational use of the area.
General community	No assessable impact.	Significantly complements the landscape setting of the adjacent protected area and the management arrangement that prohibits vehicles from accessing the beach between Wathumba Creek and Sandy Point lighthouse, providing a quiet environment for visitors to enjoy the marine park, national park and World Heritage Area. Significantly reduces the disturbance to users of the marine park and adjacent national park and World Heritage Area from vessel noise and anti-social nuisance behaviour associated with the erratic operation of motorised vessels and aircraft noise, allowing for increased opportunities to appreciate the quiet and remote amenity values in the area. Allows all vessels to continue to travel through and utilise the area, provided they are not driven in an erratic manner, minimising socio-economic impacts on recreational use of the area. Eliminates a key source of noise pollution (from the erratic operation of vessels impacting the amenity of the area). Increased safety for passive recreational users (e.g. kayaking, stand-up paddle boarding) in the area. These activities are often undertaken from cruising vessels at anchor.
BUSINESS/INDUSTRY		
Commercial fishers	Impacts will be minimised via the application of an exemption provision for commercial fishers conducting a lawful commercial fishing activity (e.g. seine netting).	No assessable impact.
Post-harvest seafood businesses	No assessable impact.	No assessable impact.
Charter fishing	No assessable impact.	No assessable impact.
Hospitality industry	Potential loss of flow on expenditure from future motorised watersport tourism activities such as parasailing and banana boat rides, and aircraft/helicopter rides in the designated area.	Flow on benefits from enhanced tourism experiences for commercial whale watching patrons.
Tourism	Potential loss of opportunities for future tourism operators who may have anticipated offering motorised watersport activities such as parasailing and banana boat rides, and aircraft/helicopter rides in the designated area.	Enhanced experiences are expected for patrons on board commercial whale watching vessels. Whale watching in the GSMP is a regionally significant tourism activity during the months of July to November each year

		and Platypus Bay is a critical area for Hervey Bay's whale watching tourism industry.
Wide Bay regional economy	Potential loss of future flow on benefits to the economy of motorised watersport tourism activities and aircraft/helicopter rides in the designated area.	Flow on benefits from enhanced tourism experiences for commercial whale watching patrons.
GOVERNMENT		
Local government	No assessable impact.	No assessable impact.
State government	Funding for resources to meet public expectations for a well-managed marine park. Overall, for implementation of the final zoning plan, establishment and first year operational costs are estimated to require an additional $3.5M with ongoing annual costs estimated to require an additional $1.5M. Cost to government of approximately $2500 annually to enforce the provisions of the designated area.	Aligns the management of the marine park with that of the K'gari (Fraser Island) World Heritage Area and the Great Sandy National Park.

5.6 Coastal management and alignment with declared Fish Habitat Areas

Zoning plan review objective

Enable authorisation and/or undertaking of work at various locations within the marine park to address a range of coastal management issues and better align FHA and marine park management.

5.6.1 Context

5.6.1.1 Coastal management and development

Local government plays a key role in managing the potential impact of coastal erosion on property and infrastructure through activities such as dune restoration, beach nourishment, sand pushing, channel re-alignment and coastal protection works such as groynes and revetments. Local governments need to manage a variety of risks associated with climate change, including how far and at what rate sea level will rise, changes to storm behaviour and associated storm surges, varying coastline responses to rising seas and changed storm behaviour, and assess how resilient environmental, economic and social assets in the coastal zone will be.

The existing GSMP zoning plan has widespread CP zones along shorelines adjacent to urban areas and coastal communities, which significantly restrict the ability of local councils to undertake these activities at scales required to respond to the risks associated with climate change.

A number of coastal locations within the marine park have been identified as requiring a change in zoning to better facilitate coastal management and to provide for appropriate or necessary development activities. One such location is Wanggoolba Creek, a small estuary on the west coast of K'gari within the Great Sandy Strait. Vehicle and passenger barges travel between River Heads and Wanggoolba Creek, transporting tourists and residents between the mainland and K'gari. Deepening and widening of the navigation channel within Wanggoolba Creek to improve all-tide access has been identified as an urgent need by emergency services organisations and tourism operators on K'gari. Improved/all-tide boating access at other locations in the marine park has also been identified as an issue by DTMR.

A need to change the marine park zoning in other coastal locations (e.g. Dayman Spit) to enable local governments to undertake small scale and/or large-scale beach nourishment programs in the future has been expressed by both Fraser Coast and Bundaberg Regional Councils. 'Soft' engineering solutions such as beach replenishment are preferred to hard engineering such as the installation of groynes and revetments, which can interfere with natural coastal processes.

By not addressing these concerns, local government will continue to face uncertainty and/or be prevented from undertaking coastal protection works in response to increasing impacts associated with climate change, including storm surge, sea level rise and inundation of low-lying areas, resulting in the potential loss of private, community and local government assets and infrastructure.

Widespread CP zones along shorelines also restrict the potential for adjacent land-based aquaculture facilities (e.g.

prawn farms) as there is no certainty that seawater intake and discharge structures would be approved under the zone entry or use provisions. Aquaculture is likely to supply an increasingly significant proportion of Queensland's seafood production and benefits regional communities through skills development and job creation. Previous planning by the DAF to identify Aquaculture Development Areas in the Wide Bay Burnett Region was constrained by the uncertainty of intake and discharge structure approval in CP zones.

5.6.1.2 Declared Fish Habitat Areas

Within the GSMP there are 11 declared Fish Habitat Area (FHAs), a type of marine protected area that protects areas of high value inshore and estuarine fish habitats from physical disturbance associated with coastal development (Appendix 9).

FHAs are managed by DES and are declared under the *Fisheries Act 1994* and Fisheries (General) Regulation 2019. Areas within an FHA are assigned a management level, either 'A' for very strict management or 'B' where existing or planned use requires a more flexible management approach. Depending on the management level, a declared FHA will result in limitations on the scale of structures that can be approved (within management B areas) or will prohibit the construction of some structures (within management A areas).

In terms of coastal development, the management objectives of FHA management A areas generally align with the objectives and provisions of a marine park CP zone, and FHA management B areas generally align with management provisions of a marine park HP zone. Declared FHA management provisions are prescriptive in terms of the type of development that can be undertaken, as approval can only be issued for a 'prescribed development purpose' listed in the Fisheries (General) Regulation 2019, whereas the entry and use provisions of marine park zones allow for works to be undertaken that are consistent with the objects of the zone type.

There are several locations where the management level of a declared FHA does not align with the marine park zone type resulting in one marine protected area type potentially allowing development works to be approved and the other prohibiting it. This has resulted in confusion for stakeholders about appropriate development in particular places and a lack of certainty for applicants about likely outcomes of development applications under different assessment processes. This contradictory management and messaging have the potential to undermine stakeholder and public understanding of and support for marine protected area management.

5.6.2 Problem

The current extent of CP zoning in the marine park adjacent to urban areas generally precludes the ability to undertake coastal management activities to address the impacts of climate change through works such as beach nourishment, improve access at identified transport nodes and allow for new private infrastructure at existing development nodes, and conflicts with existing declared FHA management in some locations. In addition, transitional provisions in the Marine Parks (Declaration) Regulation 2006 are outdated and do not allow for assessment of development works under a contemporary marine park assessment framework or require consultation with First Nations peoples to ensure impacts of development on the marine environment and cultural resources are minimised.

5.6.3 CRIS Options

The CRIS considered three options to improve the capacity for local governments to respond to existing and emerging conservation and management issues and remove conflict with existing FHAs in some cases.

Problem	Option 1	Option 2	Option 3
The current extent of CP zoning adjacent to urban areas precludes the ability to undertake coastal management activities, and in some locations, conflicts with existing declared FHA management.	No change.	Amend the 'entry or use with permission' provisions for CP zones.	Change management arrangements.

The preferred option in the CRIS was to amend a range of management arrangements to give local governments the ability to undertake coastal management activities and align marine park and FHA management where feasible.

5.6.4 CRIS Consultation Feedback

The conservation sector raised 'in principle' objection to any locations where the existing zoning is proposed to be downgraded (e.g., for coastal management purposes).

Fraser Coast and Gympie Regional Councils and DTMR strongly support zoning downgrades and FHA management changes and identified a range of minor modifications to the boundaries of the proposed HP zones and requested several new HP zones (downgraded from CP zone) to support their ability to address coastal management issues and boating access more comprehensively.

The key recreational fishing representative body strongly advocated for the prohibition of commercial large mesh gill nets and ring nets from the HP zone proposed in the CRIS at Dayman Spit to reduce the risk of conflict with recreational fishers utilising the Urangan Pier which is a regionally significant recreational fishing location.

5.6.5 Decision for Final Zoning Plan

Option 3 (with modifications outlined below) that includes a range of changes to zone types to allow for local governments to undertake coastal management activities, private infrastructure and dredging and to better align FHA and marine park management, is to be included in the final zoning plan and an amended version of the Fisheries (General) Regulation 2019. Zoning downgrades from CP zone to HP or GU zone, FHA management changes from A to B and some small FHA boundary modifications, will occur in small well-defined locations adjacent to coastal development and infrastructure nodes and public coastal recreation areas, to enable delivery of necessary and well-planned erosion management and climate change resilience works, and to facilitate public and private access to the marine park. Refer to Appendix 6 for the basis for each marine park zone and Appendix 10 for the full list of FHA changes.

The minor modifications requested by Fraser Coast and Gympie Regional Councils and DTMR to HP zone boundaries at Dayman Spit (Figure 11) and the Tin Can Bay foreshore, and boating access requirements at Gatakers Bay Boat ramp channel will be included in the final zoning plan, along with:

- the downgrade of a small area from CP to HP zone requested by DTMR to facilitate access to the public boat ramp at Poona (Figure 12), and
- two additional zone downgrades (from CP to HP zone) at Toogoom and on the western side of Point Vernon requested by Fraser Coast Regional Council to support coastal management works. A complementary downgrade of part of the Beelbi FHA from management A to management B at Toogoom will be included in an amended version of the Fisheries (General) Regulation 2019.

The following additional changes, as proposed in the CRIS, will also be included in the final zoning plan or an amended version of the Marine Parks (Declaration) Regulation 2006:

- Transitional provisions from the Marine Parks (Declaration) Regulation 2006 that authorise development works in the marine park where a development approval existed under the repealed *Integrated Planning Act 1997* when the marine park commenced, will be removed.
- The current list of activities in the zoning plan that can be undertaken without permission but with notification will be amended to include works to maintain existing sandy beach access points, including use of sand from the beach, following damage from storm events.
- The existing non-conforming use provision that allows for spoil disposal for beach replenishment purposes in the CP zone located in the Great Sandy Strait near the mouth of Snapper Creek, will be removed.
- The existing GU zone at River Heads will be rezoned to CP zone as the area is no longer a potential marina development site.

The conservation sector's concerns regarding the cumulative impact of various zoning downgrades are acknowledged, however these downgrades are being implemented in specific defined locations and any proposed works in these downgraded zones will be subject to project-specific marine park permit assessment processes.

Given the relatively large size of the HP zone at Dayman Spit, the area's existing CP zoning which prohibits commercial net fishing (except for bait netting) and its proximity to a regionally significant recreational fishing location, commercial large mesh gill netting and ring netting will be prohibited in this zone (Final Zoning Plan identifier HPZ17).

Figure 11. The HP zone at Dayman Spit presented in the CRIS (left) which was downgraded from CP zone, and the HP zone for inclusion in the Final Zoning Plan (right).

Figure 12. The HP zone at Poona presented in the CRIS (left) which was downgraded from CP zone, and the HP zone for inclusion in the Final Zoning Plan.

5.6.6 Impact analysis of changes for inclusion in the Final Zoning Plan to improve coastal management.

Sector	Costs	Benefits
ENVIRONMENT		
Marine biodiversity	The facilitation of coastal management and development works has the potential to create detrimental environmental impacts, however these can be largely mitigated by the application of conditions during the permit assessment process.	No assessable impact.
Habitats	The facilitation of coastal management and development works has the potential to create detrimental environmental impacts, however these can be largely mitigated by the application of conditions during the permit assessment process.	Removal of the provision for the non-conforming spoil disposal area near Snapper Creek will protect habitats (e.g. mangroves) that occur in the locality.
Threatened Species	The facilitation of coastal management and development works has the potential to create detrimental environmental impacts, however these can be largely mitigated by the application of conditions during the permit assessment process.	No assessable impact.
National and International Agreements	No assessable impact.	No assessable impact.
COMMUNITY		
First Nations peoples	No assessable impact.	Removal of transitional provisions in the Marine Parks (Declaration) Regulation 2006 ensures ongoing coastal management works will be subject to a contemporary marine park assessment process and consultation with First Nations peoples, (through the future act notification process) to ensure impacts on the marine environment and First Nations peoples' native title rights and cultural resources are minimised.
Recreational fishers	No assessable impact.	No assessable impact.
Vessel users	No assessable impact.	No assessable impact.
General community	No assessable impact.	Downgrading management of select coastal areas to allow for better management especially in response to climate change impacts, coastal development and infrastructure will benefit the community by better facilitating the assessment of applications by local councils, for example, to undertake works necessary to protect foreshore areas and enhance coastal community assets. Downgrading the management of CP zones to allow for coastal development will benefit landowners adjoining the marine park with more equitable private access to the park in waterways where pre-existing private infrastructure is prevalent. Improved visitor and emergency services

		access to K'gari facilitated by zoning downgrade at Wanggoolba Creek. The Tin Can Bay to Rainbow Beach powerline corridor zoning downgrade will allow for future upgrade of infrastructure to ensure sufficient and reliable power supply. Removal of transitional provisions in the Marine Parks (Declaration) Regulation 2006 ensures ongoing coastal management works will be subject to a contemporary marine park assessment process and consultation with First Nations peoples to ensure impacts on the marine environment and First Nations peoples' cultural resources are minimised.
BUSINESS/INDUSTRY		
Commercial fishers	No assessable impact.	No assessable impact.
Post-harvest seafood businesses	No assessable impact.	No assessable impact.
Charter fishing	No assessable impact.	No assessable impact.
Hospitality industry	No assessable impact.	No assessable impact.
Tourism	No assessable impact.	Downgrading the management of CP zones to allow for beach replenishment will improve the local tourism asset of beaches along the Hervey Bay township foreshore and elsewhere in the marine park.
Wide Bay regional economy	No assessable impact.	Mitigates against long term costs associated with corrective action for erosion control.
GOVERNMENT		
Local government	No assessable impact.	Aid local government's ability to manage the coastline more effectively to mitigate impacts of erosion and climate change and act promptly to maintain access points to beaches (e.g. beach access to communities and tourist accommodation on K'gari), especially following storm events, with no regulatory burden on either the local or state government. Greater certainty for proponents about likely outcomes of development applications under different assessment processes and consistent messaging to the business community about appropriate development in particular places. The proposed management arrangements will assist local governments to implement Coastal Hazard Adaptation Strategies under the Qcoast2100 program funded by the Queensland Government in partnership with the Local Government Association of Queensland and protect natural values identified by the community as being important during consultation on the development of the Fraser Coast Regional Council *Coastal Futures Strategy.*

State government	A cost to government to administer an increase in marine park permit assessments where CP zones have been changed to HP or GU zones. Although the average cost to government of each permit assessment is approximately $4,800, a total cost cannot be quantified as the number of additional applications is unknown and would be determined by the nature and extent of coastal impacts and the capacity of local governments to respond, and on the demand for new private access structures in CP zones.	Appropriately designed interventions that safeguard the ecological and cultural values of the marine environment, while reducing the costs associated with inadequate safeguards against natural disasters or a changing climate. Reduces regulatory burden on state government associated with local government acting to maintain access points to beaches (e.g. beach access to communities and tourist accommodation on K'gari), especially following storm events. Aligns marine park zone boundaries and declared FHA boundaries to provide more consistent management across these marine protected areas.

5.7 Other zoning plan amendments

5.7.1 Commercial collection of marine aquarium fish in the Little Woody Island MNP zone

5.7.1.1 Context

The commercial MAF fishery operates along the entire Queensland east coast targeting species such as damselfish, butterflyfish and angelfish. MAF fishers focus their collection on coral reef and inter-reef habitat and sell live specimens for display in private and public aquariums in Australia and overseas. It is a hand collection fishery whereby fishers target individual fish using apparatus such as fishing lines with single barbless hooks, cast nets, scoop nets and seine/barrier nets. Divers in the fishery use scuba or surface-supplied air from hookah (hose) apparatus.

Under the standard MNP zone provisions, collection in the MAF fishery is prohibited. However, the existing zoning plan includes a non-conforming use provision to allow, with permission, collection in the MAF fishery to occur in the Little Woody Island MNP zone by a person who holds an active fisheries licence to operate in the fishery. There are currently approximately 40 fishers who hold an endorsement in the Queensland MAF fishery, but it is unknown how many of these fishers operate in the marine park.

5.7.1.2 Problem

The current non-conforming use provision which allows the MAF fishery to occur at the Little Woody Island MNP zone does not limit the number of fishers that can access this area, hence over extraction from this highly protected zone of the marine park has the potential to compromise the integrity of the zone.

5.7.1.3 CRIS Options

The CRIS considered two options to ensure the sustainability of target species of the MAF fishery and the integrity of the MNP zone at Little Woody Island.

Problem	Option 1	Option 2
Non-conforming use provision which allows the MAF fishery to occur at the Little Woody Island MNP zone does not limit the number of fishers that can access this area.	No change.	Amend non-conforming use provision for the commercial collection of marine aquarium fish in the Little Woody Island MNP zone.

The preferred option presented in the CRIS proposed to amend the non-conforming use provision for the commercial collection of marine aquarium fish in the Little Woody Island MNP zone to only allow fishing by

commercial fishers that can demonstrate a history of collecting in the MAF fishery in this zone since 31 August 2006 (since the establishment of the marine park).

5.7.1.4 CRIS Consultation Feedback

The proposal did not generate extensive input from the community and stakeholders, however several submissions indicated that the conduct of non-conforming uses in MNP zones per se was not appropriate and should either be prohibited immediately or phased out by a specific date.

Licensed commercial fishers requested the continuation of the fishery as a non-conforming use in this zone.

5.7.1.5 Decision for Final Zoning Plan

Based on the outcomes of consultation, the final zoning plan will restrict access for the commercial collection of aquarium fish in the Little Woody Island MNP zone (CRIS MNP18) only to those fishers who can demonstrate a history of collecting in this zone since the establishment of the marine park in 2006. This is expected to limit the amount of extractive use that occurs in this highly protected zone with an anticipated potential reduction in extraction over time as fishers who are granted access, sell or relinquish licences. Improved species diversity and abundance in the MNP zone is expected in the longer term.

5.7.1.5.1 Impact analysis of proposed amendment to the non-conforming use provision for the MAF fishery in the Little Woody Island MNP zone.

Sector	Costs	Benefits
ENVIRONMENT		
Marine biodiversity	No assessable impact.	Assists in managing the risk of over extraction of marine aquarium fish from a highly protected zone of the marine park. Expected long-term improvements in species diversity and abundance in the Little Woody Island MNP zone.
Habitats	No assessable impact.	No assessable impact.
Threatened Species	No assessable impact.	No assessable impact.
National and International Agreements	No assessable impact.	No assessable impact.
COMMUNITY		
First Nations peoples	No assessable impact.	No assessable impact.
Recreational fishers	No assessable impact.	No assessable impact.
Vessel users	No assessable impact.	No assessable impact.
General community	No assessable impact.	No assessable impact.
BUSINESS/INDUSTRY		
Commercial fishers	Lost future opportunity and potential income for those fishers whose fisheries licence may allow them to access the area but are not able to demonstrate a past history of collecting in the Little Woody Island MNP zone.	Allows commercial fishers who can demonstrate use of the area since the marine park was established to continue to derive an income.
Post-harvest seafood businesses	Negligible or no impact.	No assessable impact.
Charter fishing	No assessable impact.	No assessable impact.
Hospitality industry	No assessable impact.	No assessable impact.
Tourism	No assessable impact.	No assessable impact.
Wide Bay regional economy	Potential lost future economic benefits from commercial fishers that cannot demonstrate a past history of collecting in the Little Woody Island MNP zone.	Flow on economic benefits from the continuation of commercial MAF fishing activities by existing fishers operating in the Little Woody Island MNP zone.
GOVERNMENT		
Local government	No assessable impact.	No assessable impact.

State government	No assessable impact.	No assessable impact.

5.7.2 Entry or use of the marine park without permission but after notification

5.7.2.1 Context

The existing zoning plan lists a range of activities that can occur without permission, but only after notification has been provided to the Chief Executive, prior to the activity commencing. The zoning plan states that upon receiving notification of a listed activity, the Chief Executive may impose conditions on the entry or use. To determine whether any conditions should be applied to the proposed activity, consideration of potential impacts on the environment and users of the marine park is required. The zoning plan does not currently specify a timeframe for how far in advance notification should be given to the Chief Executive to allow this to occur.

In general, the activities listed present a low risk to the marine environment or other users of the marine park, however the conduct of maintenance dredging for navigational purposes (currently listed as an activity that can occur without permission, after notification) has the potential to impact on the environment and users of the marine park depending on the scale, duration and timing of the works. Maintenance dredging is usually undertaken by local or state government authorities to ensure that lawfully dredged channels are maintained at previously authorised dimensions.

Time is required for an assessment of the notification of maintenance dredging works, prior to the activity commencing, to determine whether the Chief Executive should impose conditions on the activity. This timeframe needs to be prescribed in the zoning plan to provide clarity of requirements to proponents. Clarity is essential when, for example, proponents are engaging commercial contractors.

5.7.2.2 Problem

The existing zoning plan does not include a timeframe for notification of maintenance dredging for navigational purposes in the marine park, prior to undertaking these works. This omission can inhibit the Chief Executive from considering potential impacts on the environment and marine park users, and from determining whether conditions should be applied to the proposed activity before the works may start.

5.7.2.3 CRIS Options

There were two options presented in the CRIS to address the omission of a timeframe for prior notification of maintenance dredging (for navigational purposes) in the marine park.

Problem	Option 1	Option 2
There is no prior notification timeframe for undertaking maintenance dredging for navigational purposes in the marine park. This inhibits the Chief Executive being able to determine the environmental impacts of the activity and impose conditions.	No change.	Introduce new notification requirement for maintenance dredging for navigational purposes.

The preferred option in the CRIS (Option 2) proposed to introduce a requirement that the Chief Executive must be provided with notification of maintenance dredging for navigational purposes at least 40 business days prior to the activity being undertaken.

5.7.2.4 CRIS Consultation Feedback

The proposal generated little input from the community and stakeholders, with the exception of DTMR. While there is limited navigational dredging conducted within the marine park, most of the current (and possible future) navigational dredging, is conducted by DTMR as part of their recreational boating infrastructure program.

DTMR have acknowledged that the current provision, which does not specify any notification period, is potentially problematic and could result in a notification being submitted on the same day as the works commence, however they consider the proposed 40 business day notification period to be excessive.

Consultation with Maritime Safety Queensland within DTMR has been undertaken to determine and agree on an acceptable notification period.

5.7.2.5 Decision for Final Zoning Plan

Based on the outcomes of consultation, a prior notification period of 20 business days before the commencement of maintenance dredging for navigational purposes will be included in the final zoning plan, rather than the 40 business days proposed in the CRIS. This modification ensures that activities able to occur in the marine park without a permission (i.e., a permit) that have a risk of impacting the environment or marine park users, are undertaken following a sufficient notification period. Prior notification of 20 business days is expected to provide a reasonable amount of time for DES to assess the proposed dredging and apply any conditions to mitigate impacts, while minimising delays for the proponent.

5.7.2.6 Impact analysis of prior notification for maintenance dredging

The inclusion in the final zoning plan of a requirement for 20 business days notification prior to commencing maintenance dredging works has no assessable impacts on the environment, community, business or industry. There will be a small administrative burden on government (e.g. DTMR) to ensure notification is provided within the stated timeframe for proposed activities, and the notification period may create a small impost for a proponent in terms of project scheduling. However, the notification timeframe allows sufficient time, commensurate with the environmental risk of these activities, for an assessment of the potential impacts of the activities proposed to be undertaken, and conditions prescribed and conveyed to the proponent if necessary.

5.7.3 Administrative amendments

This section outlines zoning plan changes that are administrative in nature that will be included in the final zoning plan to:

- provide clarity/remove ambiguity to specific zoning plan provisions
- repeal redundant provisions
- reduce or remove administrative and/or regulatory costs on government and marine park users.

These changes are considered to have little, if any, impact on the environment, business or the community and are unlikely to result in an increase in the regulatory burden on, or costs to, the environment, government, business or the community. Many of the changes will assist in achieving consistent legislation, zoning arrangements and terminology for all Queensland marine parks which will provide an efficient approach to the management of Queensland's marine parks.

5.7.3.1 Publication of notices

Existing zoning plan provisions

The Gazette is a publication of the Queensland Government that publishes legal notices such as commencement of new legislation, legislative changes and notices regarding subordinate legislation such as regulations, rules, notices and amendments to subordinate legislation and primary legislation.

The existing zoning plan refers to three types of notices that the Chief Executive is required to publish in the Gazette. These include:

- transit lane notices for designated Go Slow Areas
- grey nurse shark prohibited area notices
- notices advising of the accreditation of Traditional Use of Marine Resource Agreements.

The existing zoning plan does not prescribe any alternative means for publishing the above notices other than in the Gazette. Notices published in the Gazette reach a limited number of people and there is a cost of approximately $100 to government per notice published.

Decision for Final Zoning Plan

Remove the requirement for notifications for the above list of notices to be published in the Gazette and replace with a requirement that these notices are to be published on the DES website or by other means that the Chief Executive deems appropriate (this may include the Gazette).

5.7.3.2 Obsolete non-conforming use provisions

Existing zoning plan provisions

Schedule 1 of the existing zoning plan lists various activities that are inconsistent with the objects of the zone in which they are undertaken and are hence termed non-conforming uses. The schedule outlines the location/s where each activity can be undertaken, with permission, and any conditions that apply to the conduct of the activity. Three of these non-conforming uses are no longer required:

- Conducting an aquaculture operation in a CP or HP zone of the marine park. This activity is managed by the standard provisions of these zones.
- Conducting a developmental fishery (jellyfish fishery) in the CP zone located in the Great Sandy Strait. This fishery is no longer undertaken.
- Collecting in the commercial shell grit fishery in the CP zone located between Beelbi Creek and Torquay. The fisheries authority is no longer in force.

Decision for Final Zoning Plan

Remove the non-conforming use provisions for aquaculture, developmental fishery (jellyfish fishery) and the shell grit fishery.

5.7.3.3 Entry or use of the marine park without permission or notification

Existing zoning plan provisions

The existing zoning plan lists a number of activities that can be undertaken in the marine park without permission or the need to notify the Chief Executive and it also lists activities that can be undertaken without permission but only once notification has been provided to the Chief Executive. These activities are related to emergencies, undertaking functions under various legislative Acts, maintaining navigational aids and navigation channels, defence activities and other similar functions.

Some activities that are currently listed as being able to occur without permission but after notification are essential to the core business of several government departments and are unlikely to adversely impact the marine park. The requirement to notify the Chief Executive before the activity is undertaken is unnecessary in which case it would be best placed in the section that prescribes the activities that can be undertaken without permission or notification.

Decision for Final Zoning Plan

The following list of activities that can be undertaken without permission or notification will be included in the final zoning plan:

- to install, maintain or remove a sign for or about the *Fisheries Act 1994;*
- to undertake government geodetic, bathymetric or similar surveys;
- to construct, operate or service navigational aids, or their ancillary buildings or works, that are authorised under a law of the Commonwealth or the State, including the operation of vessels and aircraft for the purposes.

5.7.3.4 Designated Turtle Monitoring Area

Existing zoning plan provisions

The existing zoning plan includes a Turtle Monitoring Area as a designated area type adjacent to Mon Repos on the Woongarra Coast. The objects for the Turtle Monitoring Area are listed as:

a) to protect turtles and their habitat; and
b) to monitor any effects on turtles from human activities, including trawling; and
c) to respond to risks to turtles.

No special management provisions are prescribed with regard to activities that can or cannot be undertaken in the Turtle Monitoring Area making the designated area type redundant and unnecessary. The objects of the designated area can be achieved by the standard zone provisions underlying the area which outline how research/ monitoring is conducted in the marine park. The current and draft zoning plan also contain other management provisions that assist in the protection of turtles and their habitat.

Decision for Final Zoning Plan

Remove the Turtle Monitoring Area as a type of designated area in the final zoning plan.

5.7.3.5 Operation of a vessel in a particular area

Existing zoning plan provisions

The entry or use provisions for all zone types makes provision for the operation of a vessel or aircraft in a particular area in the zone with and without permission. The original intent of these provisions was to restrict the amount of time a vessel or aircraft could remain anchored in a particular location within the marine park. However, the use of the word ‘operate’ is ambiguous and has created confusion amongst vessel owners, many of whom believe that the zoning plan places restrictions on how often they can use their vessel in the set time periods.

Decision for Final Zoning Plan

Subject to the Office of Queensland Parliamentary Counsel drafting conventions, the wording “operate a vessel or aircraft” will change to “anchor a vessel in a particular area in the zone…” in all relevant sections of the final zoning plan.

5.7.3.6 Detachment of commercial fishing dories

Existing zoning plan provisions

Part 7 of the existing zoning plan outlines restrictions applying to activities carried out in the marine park in addition to the zone entry and use provisions. The current restrictions in place for fishing or collecting state that a person must not detach more than one dory from a primary commercial fishing boat in a CP zone or Buffer zone and that in a MNP zone, dories must not be detached unless the dory is responding to an emergency or being used to transport a person on a direct journey between the primary fishing boat and land. A dory is a tender boat that a person who holds a primary commercial fishing licence may use under a fisheries licence.

The current provisions mirror those prescribed in the Commonwealth Great Barrier Reef Marine Park Zoning Plan 2003 and are not relevant or necessary in the GSMP as much of the commercial fishing in the park occurs in relatively sheltered and shallow waterways which are suited to the use of smaller vessels, negating the need for the use of dories / tender vessels.

Decision for Final Zoning Plan

The sections in the existing zoning plan regarding the detachment of dories from a primary commercial fishing boat in CP and MNP zones will not be included in the final zoning plan. Note - the final zoning plan does not include a Buffer zone.

5.7.3.7 Display of designated Grey Nurse Shark Area restrictions

Existing zoning plan provisions

The special management provisions for the designated Grey Nurse Shark Area requires tourism operators and dive clubs to provide information about the restrictions of the designated area to divers entering the water, as well as displaying a sign stating the restrictions on dive boats and/or their place of business. These two provisions serve the same purpose and given the design of some dive boats, physically displaying signs can be difficult for operators.

Decision for Final Zoning Plan

The requirement for tourism program operators and dive clubs to display a sign outlining the restrictions in place in a designated Grey Nurse Shark Area will not be included in the final zoning plan. The requirement to inform divers of the area restrictions before they enter the water will still apply.

5.7.3.8 Zoning plan definitions

Existing zoning plan provisions

Schedule 3 of the existing zoning plan provides definitions for terms used throughout the zoning plan, however some definitions are ambiguous leading to uncertainty of intent amongst marine park users and DES staff.

Decision for Final Zoning Plan

Amend some existing, and insert new, definitions in the final zoning plan.

5.7.3.9 Management of activities at artificial reefs

Artificial reefs are structures placed in the marine environment to promote an increase in the abundance and diversity of marine species and can be used for diving and/or to provide alternative locations to natural reefs for fishing. These reefs attract and sustain a wide diversity of marine life by providing protection from predators, shelter from currents, breeding opportunities and a supply of rich food sources. They are popular sites for activities such as fishing and scuba diving and the government’s experience with artificial reefs in Moreton Bay Marine Park has demonstrated that, on occasion, conflict between user groups can occur that requires management intervention. There are currently five artificial reef sites within the GSMP.

Public interest in the establishment of artificial reefs to enhance fishing and diving opportunities is increasing. As part of the zoning plan impact mitigation package, two new artificial reefs will be installed in the marine park to assist in the mitigation of impacts on recreational fishers from the expansion of the MNP zone network.

Decision for Final Zoning Plan

The following list of activities that can be prohibited by regulatory notice in or near artificial reefs in the marine park will be included in the final zoning plan:
(a) scuba diving;
(b) snorkelling;
(c) spearfishing;
(d) charter fishing;
(e) fishing for commercial purposes;
(f) fishing for recreation;
(g) anchoring;
(h) surface supplied air diving.

5.7.3.10 Commercial collection of coral adjacent to Woody Island

Existing zoning plan provisions

Collection of coral by commercial and recreational fishers is prohibited in the marine park, except under a non-conforming use provision in the zoning plan which allows for coral collection in the CP zone to the north of Woody Island as a harvest fishery, only by the holders of two specific fisheries authority numbers (1484 or 1470). DAF has historically authorised the collection of coral under these two authority numbers in an area described as Coral Area 801. This area is approximately 0.82km^2 in size and intersects the existing MNP zone and CP zone north of Woody Island (see Figure 13). Coral collected under the non-conforming use provisions from this site is currently minimal and supplies the Reef World Aquarium in Hervey Bay, a local tourist attraction in operation since 1979, and is not taken for commercial sale.

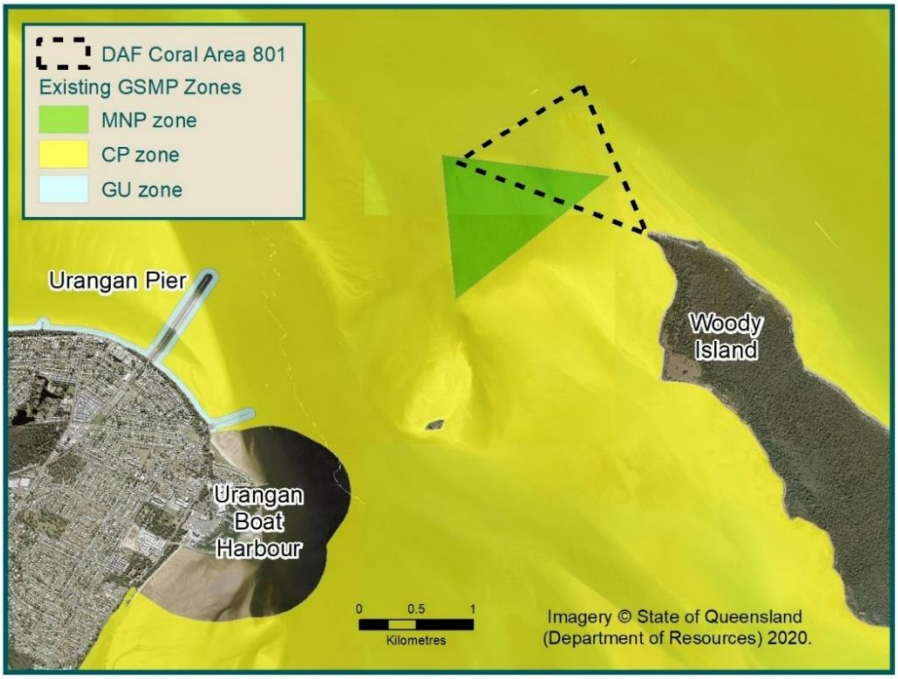

Figure 13. Existing zoning in the vicinity of Coral Area 801.

Part of the CP zone to the north of Woody Island will be converted to a MNP zone in the final zoning plan by expanding the current MNP zone in this area (see Appendix 4). Without an amendment to the existing non-conforming use provisions, this change in the zoning would prohibit coral collection from the area where it is currently allowed to occur. A revised non-conforming use provision is required to allow this activity to continue.

Decision for Final Zoning Plan

The non-conforming use provisions for the coral fishery in the final zoning plan will:

- Allow the activity to continue within the expanded MNP zone, subject to a marine park permission, and only by a person who holds, or is acting under the authority of, authority to take permit numbers 1484 or 1470 under the *Fisheries Act 1994*.
- Confine the collection of coral within the MNP zone to only that part of Coral Area 801 where collection is

allowed to occur under the existing zoning plan, as shown in Figure 14 and defined by the following coordinates:
a) Northern tip of Woody Island (at or about 25°16.371'S, 152°56.573'E)
b) 25°16.239'S, 152°56.224'E
c) 25°16.099'S, 152°56.4'E
d) 25°16.012'S, 152°55.701'E
e) 25°15.669'S, 152°56.266'E

- Allow coral only to be collected for presentation in exhibits at the Reef World Aquarium in Hervey Bay and not for commercial sale.

Figure 14. Map indicating the area in the final zoning plan where the commercial coral fishery will be allowed to continue within Coral Area 801.

5.7.3.11 Conduct of media activities

Existing zoning plan provisions

The entry or use provisions in the zoning plan prescribe the activities that can occur in each zone of the marine park, with or without permission. If not listed as an activity that can occur with or without permission the activity is deemed to be prohibited in the marine park. Media activities, i.e., the recording of images or sounds, including, for example, by filming, photographing or sound recording often occur in the marine park. This can involve low impact activities such as taking still photographs for print media to large scale movie productions which can have impacts on the environment and users of the park.

The existing zoning plan prescribes the zones in which a limited media activity (i.e., one that will have a negligible impact on the marine park) can occur without permission but it does not prescribe whether other types of media activities can occur i.e., those that are likely to have an impact on the natural, cultural and social values of the park. The omission of media activities (that are not considered to fit the definition of a limited media activity) from the list of activities that can be conducted in a zone with permission makes it a prohibited purpose for which the marine park can be used. This is not the intent of the zoning plan.

Decision for Final Zoning Plan

The final zoning plan will include provisions for each zone in the marine park to include media activities, that are not a limited media activity, as an activity that can occur with permission. Conditions can be placed on marine park permits to mitigate any environmental risks or conflict with other marine park users that may arise through the conduct of larger scale media activities.

5.8 Marine park outer boundary

Zoning plan review objective

Ensure the outer boundary is defined in such a way that the accuracy and understanding of the extent of the marine park is improved.

5.8.1 Context

The Marine Parks (Declaration) Regulation 2006 describes the extent of the GSMP, which in turn provides the basis for defining the boundaries of the various zones in the marine park. The Declaration Regulation currently references a statutory plan to define the extent of the marine park, rather than a written metes and bounds description used for the Moreton Bay Marine Park and the Great Barrier Reef Coast Marine Park.

This statutory plan is a low-resolution mapping product, largely based on a version of the coastline that showed navigable waterways rather than all tidal lands and waters. As such, the current plan, when compared with contemporary mapping and imagery does not incorporate the full extent and complexity of the tidal land and waters in various estuaries that were intended to be included within the marine park as per the original intent for declaration of the GSMP, in particular around the mouths of the Mary and Susan rivers.

In addition, since the declaration of the GSMP in 2006, a separate process has been undertaken by the Commonwealth and state governments to review the Australian territorial sea baseline which forms the basis for determining the jurisdictional boundary of Queensland Coastal Waters. This process confirmed that Queensland's Coastal Waters extend further offshore in some parts of the Wide Bay Burnett Region than had historically been mapped, especially in the vicinity of Sandy Cape. Queensland Coastal Waters extend three nautical miles offshore from the Australian territorial sea baseline, which is declared under the Commonwealth *Seas and Submerged Lands Act 1973,* and typically aligns with low water mark, but does not extend into rivers or bays. The effect of this change to the Australian territorial sea baseline on the GSMP is that, in the vicinity of Sandy Cape in particular, Queensland's Coastal Waters now extend further offshore than the current boundary of the marine park.

Marine park users and managers have consistently sought more accurate and easily accessible information on the marine park's boundaries and zones. Specifically, with the advent of fishing and navigational "apps", affordable hand-held GPS systems and chart plotters, park users have sought digital maps of the marine park and its zones to facilitate compliance with the zoning plan, which are difficult to create using the current statutory plan boundary.

5.8.2 Problem

The statutory plan is inaccurate, illogical, and difficult to interpret at the scale required to support use of the marine park, management, and enforcement activities as many of the boundaries shown on the plan do not consistently align with easily identifiable and describable features. In addition to the difficulties created by its low resolution, the use of a fixed boundary drawn at a point in time does not accommodate the dynamic nature of the coast and waterways within parts of the marine park which are constantly being reshaped through erosion and accretion. This can compromise the intent of the marine park to conserve the marine environment up to the level of HAT.

5.8.3 CRIS Option

Only a single option was identified, with the following changes proposed to the Declaration Regulation and Zoning Plan to address the issues described above:

1. Redefine the outer boundary of the marine park using a contemporary written 'metes and bounds' description. This will:
    a) Define the outer boundary in most locations as 'the location of HAT' and will address inaccuracies of the current mapping product and accommodate the dynamic nature of the coastal environment.
    b) Extend the offshore outer boundary of the marine park to align with the revised extent of Queensland coastal waters. An expansion of the marine park boundary around Sandy Cape at the north-eastern end of K'gari and along the eastern boundary south to Double Island Point will indicate the true extent of Queensland Coastal Waters in this area and reflect the intent of the original declaration of the marine park which was to include tidal land and tidal waters, to the offshore limit of Queensland State (i.e. Coastal) Waters, between Double Island Point and Baffle Creek. The amendment to the marine park's offshore outer boundary will add approximately 400km^2 to the total area of the marine park.

By redefining the outer boundary as described above, three small existing MNP zones will be removed as they are located outside the revised marine park outer boundary or, as a result of the boundary redefinition, are ineffectively small in size and/or surrounded by a largely modified landscape. The three MNP zones, with their current identifier, and the reason/s for their removal are:

- Gregory River (MNP05) - most of this MNP zone was originally mapped upstream of tidal limits, above and including a weir, and was also mapped into freehold land which is excluded from the marine park. The remaining area of the MNP zone is too small to retain (0.07km^2)
- Cherwell River (MNP07) - most of this MNP zone includes, or is upstream of, a highly modified area associated with the railway corridor. The remaining area of the MNP zone is too small to retain (0.01km^2)
- Burrum River (MNP08) - This MNP zone includes waters upstream of a weir. The remaining area of the MNP zone is too small to retain (0.1km^2)

5.8.4 Consultation Feedback

There were no questions asked in the survey and no specific feedback was received from the community or stakeholders on the proposed description of the outer boundary of the marine park. BNTAC, however, requested that tidal sections (up to HAT) of lots within their Determination Area where exclusive native title has been recognised, be included within the outer boundary of the marine park.

5.8.5 Decision for incorporation in the Marine Parks (Declaration) Regulation 2006

Based on the outcomes of consultation, the marine park outer boundary will be redefined in the Declaration Regulation using a contemporary written 'metes and bounds' description. This change ensures that the outer boundary is defined in such a way that the accuracy and awareness of the extent of the marine park is improved and provides a clear footprint within which the spatial extent of zones to be included in the final zoning plan will be applied. A written 'metes and bounds' description that defines the outer boundary in most locations as the location of HAT addresses inaccuracies of the current statutory plan and better accommodates the dynamic nature of coastal and estuarine environments. The change brings the description of the marine park in line with the other two Queensland marine parks - the Moreton Bay and Great Barrier Reef Coast marine parks, and will result in an overall increase in the area of the marine park of approximately 400km^2. The areas not previously part of the marine park most notably occur at the offshore extent around Breaksea Spit and a narrow strip of water south to Double Island Point where the extent of Queensland Coastal Waters has been clarified and mapping updated.

The tidal sections of lots within the Butchulla People Land and Sea Claim #2 Determination Area where exclusive native title is recognised will be included in the marine park up to the level of HAT, and the marine park zoning (decided for the final zoning plan) of the areas that adjoin these lots will be applied to these tidal sections up to HAT. The Determination recognises other interests as they exist at the date of Determination, that continue to have effect and prevail over native title rights to the extent of any inconsistency, e.g. the subsisting public right arising under the common law, to fish and navigate; the rights of persons holding licenses, permits or authorities under state legislation, e.g. *Fisheries Act 1994*, *Marine Parks Act 2004* and any other rights of the State or Commonwealth such as public access to beaches, foreshores and waterways. It is not anticipated that including these areas of exclusive native title within the marine park will impact on marine park users. The areas generally consist of mangroves and saltmarsh at the upper extent of the tidal limit on island parcels (e.g. in the Great Sandy Strait) or on parcels adjoining the mainland and collectively make up a relatively small proportion of the total Determination Area within the marine park. It is acknowledged that non-exclusive native title is recognised over the majority of the tidal lands and waters in the Butchulla People Land and Sea Claim #2 Determination Area that is within the marine park.

It is also acknowledged that the marine park covers areas of non-exclusive native title that is part of the Bailai, Gurang, Gooreng Gooreng, Taribelang Bunda People's Determination and small areas of non-exclusive native title areas that are part of the Butchulla People #2 Determination Area (which predominantly extends over K'gari). The Kabi Kabi First Nation Traditional Owners Native Title Claim Group has a claim in progress, and it is acknowledged that this claim extends over sea Country within the southern part of the marine park in Tin Can Inlet.

5.8.6 Impact analysis of changes to the outer boundary description for inclusion in the Declaration Regulation.

Sector	Costs	Benefits
ENVIRONMENT		
Marine biodiversity	No assessable impact.	As the revised outer boundary results in an increase to the area of the marine park of approximately 400km^2, marine biodiversity in the new areas incorporated into the marine park will benefit from the protection offered by the zoning plan and marine park

		legislative framework. The new areas now included in the marine park predominantly include intertidal areas in the Great Sandy Strait, offshore area around Breaksea Spit, and offshore waters around the extent of the marine park.
Habitats	No assessable impact.	As the revised outer boundary results in an increase to the area of the marine park of approximately 400km^2, habitat in the new areas incorporated into the marine park will benefit from the protection offered by the zoning plan and marine park legislative framework. The new areas now included in the marine park predominantly include intertidal areas in the Great Sandy Strait, offshore area around Breaksea Spit, and offshore waters around the extent of the marine park.
Threatened Species	No assessable impact.	As the revised outer boundary results in an increase to the area of the marine park of approximately 400km^2, threatened species utilising the new areas incorporated into the marine park will benefit from the protection offered by the zoning plan and marine park legislative framework. These new areas now included in the marine park predominantly include intertidal areas in the Great Sandy Strait, offshore area around Breaksea Spit, and offshore waters around the extent of the marine park.
National and International Agreements	No assessable impact.	As the revised outer boundary results in an increase to the area of the marine park of approximately 400km^2, any benefits to biodiversity, habitats and threatened species due to new areas being incorporated into the marine park may contribute to the State's obligations under national and international agreements. The new areas now included in the marine park predominantly include intertidal areas in the Great Sandy Strait, offshore area around Breaksea Spit, and offshore waters around the extent of the marine park.
COMMUNITY		
First Nations peoples	No assessable impact.	Recognises and respects the native title rights and interests of First Nations peoples.
Recreational fishers	The Marine Park will be expanded in area by about 400km^2 (about 7%) which imposes a regulatory framework on a few areas not previously part of the marine park, most notably the offshore extent around Breaksea Spit and a narrow strip of water south to Double Island Point where the extent of Queensland Coastal Waters has been clarified and mapping updated. Impacts to recreational fishers will be dependent on the zone applied to the area in the final zoning plan, which will vary depending on the	No assessable impact.

	location.	
Vessel users	No assessable impact.	No assessable impact.
General community	The Marine Park will be expanded in area by about 400km^2 (about 7%) which imposes a regulatory framework on a few areas not previously part of the marine park, most notably the offshore extent around Breaksea Spit and a narrow strip of water south to Double Island Point where the extent of Queensland Coastal Waters has been clarified and mapping updated.	Users of the marine park are expected to find the 'metes and bounds' description logical, consistent and relatively simple to locate on the ground. This will promote user understanding of the extent of the park and support compliance with marine park management.
BUSINESS/INDUSTRY		
Commercial fishers	The Marine Park will be expanded in area by about 400km^2 (about 7%) which imposes a regulatory framework on a few areas not previously part of the marine park, most notably the offshore extent around Breaksea Spit and a narrow strip of water south to Double Island Point where the extent of Queensland Coastal Waters has been clarified and mapping updated. Impacts to commercial fishers will be dependent on the zone applied to the area in the final zoning plan, which will vary depending on the location.	No assessable impact.
Post-harvest seafood businesses	Impacts are likely to be negligible.	No assessable impact.
Charter fishing	The Marine Park will be expanded in area by about 400km^2 (about 7%) which imposes a regulatory framework on a few areas not previously part of the marine park, most notably the offshore extent around Breaksea Spit and a narrow strip of water south to Double Island Point where the extent of Queensland Coastal Waters has been clarified and mapping updated. Impacts to charter fishers will be dependent on the zone applied to the area in the final zoning plan, which will vary depending on the location.	No assessable impact.
Hospitality industry	No assessable impact.	No assessable impact.
Tourism	No assessable impact.	No assessable impact.
Wide Bay regional economy	No assessable impact.	No assessable impact.
GOVERNMENT		
Local government	No assessable impact.	The boundary will better align with other publicly available mapping layers such as aerial imagery and cadastral / property boundaries and more easily integrate with the boundaries of other planning instruments e.g. local government planning schemes. Public boat ramps will continue to be excluded from the marine park, which will maintain reduced regulatory impost for managing agencies undertaking repairs and maintenance on this infrastructure.
State government	The areas not previously part of the marine park that are now included will require	The use of metes and bounds will provide a logical and consistent description of the outer

	education and compliance activities to be undertaken. The expanded area will impose a very minor increase in vessel fuel costs to government in enforcing applicable marine park regulations in these areas.	boundary to support compliance with marine park management. Public boat ramps will continue to be excluded from the marine park, which will maintain reduced regulatory impost for managing agencies undertaking repairs and maintenance on this infrastructure.

6 Overview of changes and impacts to existing fishing activities from the suite of changes to be included in the final zoning plan.

6.1 Background

This section of the Decision RIS provides an overview of the changes to the existing commercial, recreational (including charter) and traditional fisheries conducted within the marine park resulting from the zoning changes in the final zoning plan (as identified in section 5) and an overview of their predicted cumulative impacts and implications to each fishing sector.

The marine park supports extensive recreational and commercial fisheries that are significant from social and economic perspectives to the Wide Bay Burnett Region; the cities, towns and villages that surround the park and to the many residents and visitors to the region who enjoy fishing for recreation and/or consuming fresh local seafood caught by the commercial fishing sector. The waters of the marine park also hold tremendous cultural significance as fishing grounds for the First Nations peoples of the region.

Queensland's fisheries are managed by DAF, which has and continues to implement a significant program of fisheries management reforms under the *Queensland Sustainable Fisheries Strategy 2017-2027* to modernise the State's fisheries management.

While DAF is responsible for fisheries management, almost all fishing in State marine waters on the east coast of Queensland occurs within the three State marine parks. The integration of fishing and marine park management is relatively straightforward in many locations, however, in some locations it can be challenging and highly contended, largely because some of the most prized and productive fishing grounds often hold significance from ecological, conservation and cultural perspectives.

Ultimately, an effective balance needs to be achieved that ensures that the marine environment and its associated ecosystems, species and cultural values remain healthy, productive, resilient, and well protected, and various types of fishing along with other sustainably managed uses can continue within the marine park. As commercial and recreational fishing are the most widespread human uses of the GSMP, delivering this effective conservation/fishing balance has been one of the more significant challenges for this zoning plan review process.

6.2 Commercial fishing

Commercial fishing is the take of marine products for trade or commerce by licenced commercial fishers. The commercial fishing sector provides the community with the ability to purchase local, wild caught fish and other marine animals for consumption, bait and display.

The most recent DAF-commissioned report on the economic and social indicators for Queensland's commercial fisheries (Economic and social indicators for Qld commercial fisheries_2020/2021) indicates that approximately 14,515 tonnes of seafood was caught by the State's 1031 commercial fishing businesses in 2020/21, with a gross value of production (GVP) (beach price) of approximately $279.3m.

Within the Wide Bay Burnett Region*, during 2020/21, the 287 commercial fishing businesses operating in this region landed seafood with an approximated value (GVP) of $29.7m (i.e. approximately 10.6% of the State's total commercial fishery by value).

**The Wide Bay Burnett Region extends from the northern side of the Noosa River to Baffle Creek and therefore aligns reasonably well with the northern and southern boundaries of the GSMP but includes catch from beyond the seaward marine park boundary for some fisheries.*

The four major commercial fisheries conducted within the boundary of the marine park are trawl, net, line and pot fisheries, however there are also a number of smaller harvest fisheries operating in the marine park that collect

coral, marine aquarium fish, beach worms, bloodworms and yabbies. The effects of the combined changes to be included in the final zoning plan for each of these fisheries are discussed below.

The following sections include estimates of catch (by weight) and catch value (in terms of GVP) that is predicted to be forgone from each commercial fishery as a result of the zoning and management changes reducing access to fishing grounds. These estimates are based on commercial fishery catch data from the period 2019-2022 and GVP values for each species used for DAF's 2020/21 economic and social indicators report. The relatively coarse reporting spatial scale of commercial catch data in relation to the fine scale of many of the zoning and management changes has necessitated significant data interpretation to reconcile the differing spatial resolutions.

This analysis is focused on the impacts of the marine park zoning changes that will be included in the final zoning plan and does not consider any implications to the commercial fisheries within the marine park that may result from the implementation of the Queensland and Australian Government's recent announcement to phase out the use of large mesh gill nets from the Great Barrier Reef World Heritage Area by June 2027. While this analysis of impacts does not directly consider those changes, a commercial fishing impact mitigation package that is being designed to mitigate the impacts will be developed collaboratively with DAF and QRIDA and will consider any implications of those changes (e.g. any associated structural adjustment of the fisheries) that may relevant to the design of the package.

6.2.1 Trawl fishery

6.2.1.1 Background

The trawl fishery, which predominantly targets prawns, scallops and bugs, is the largest commercial fishery operating in the Wide Bay Burnett Region. In 2020/21, the 110 fishing businesses operating in the trawl fishery in the region harvested 872 tonnes of seafood, with a GVP of $17.9 (Economic and social indicators for Qld commercial fisheries_2020/2021).

Table 9 presents the total catch from the trawl fishery taken from within the boundary of the Great Sandy Marine Park during each year from 2019 to 2022 and includes the average catch over that four-year period. Based on this average, the trawl fishery within the marine park currently contributes approximately 28% of the total trawl catch within the Wide Bay Burnett Region.

Table 9. Commercial trawl fishing catch (kg) and average catch 2019-2022 within the Great Sandy Marine Park.

2019	2020	2021	2022	Average catch
232,896	320,194	198,680	218,634	**242,601**

Within the marine park, otter trawling (operating under the T1 and T2 fishery symbols) is by far the most significant form of trawling and is focussed within Hervey Bay and in the open offshore waters of the park. The highest trawl catch and effort in the marine park occurs in the northern half of Hervey Bay, near the offshore boundary of the marine park, between Double Island Point and the top of K'gari, and north of the mouth of the Burnett River. Much of the otter trawling within the park is undertaken by the trawler fleets based at Tin Can Bay, Urangan and Bundaberg, however the park is also utilised by trawlers from further afield, e.g. Mooloolaba.

A small river and inshore beam trawl fishery operating under the T6 (Burrum River and south) and T7 (north of the Burrum River) fishery symbols also occurs within the marine park. The areas that this fishery operates in are significantly limited, as the beam trawl vessels can only effectively operate within calm river and inshore environments and most areas of this type within the marine park are within zones under the existing zoning plan that prohibit trawling. Trawling is prohibited in all zones except GU zones (except in the Mary River).

The existing zoning plan includes a non-conforming use provision that allows for some beam trawling to be conducted within a section of the CP zone within the Mary River and within 1km of the Mary River mouth. The use of this area is limited to two T6 licence holders that meet the criteria of the existing non-conforming use provision (Refer to section 5.1.12 for further details).

A stout whiting fin fish trawl fishery (operating under the T4 fishery symbol) occurs in offshore waters between Double Island Point and the northern end of K'gari. The fishery area is limited to waters deeper than the 20 fathom (36m) depth contour. This depth contour approximately aligns with the offshore boundary of the marine park, so this fishery area is generally outside the marine park. However, between 2017 and 2020 a management trial was undertaken which permitted stout whiting trawling to be temporarily conducted in waters less than 20 fathoms deep

and this resulted in increased stout whiting trawling within the boundary of the marine park (particularly adjacent to parts of the eastern coastline of K'gari) during the trial period. A final decision by DAF regarding the addition of shallower waters to the fishery area remains under consideration at the time of preparing this Decision RIS.

Trawling is regulated under fisheries legislation with a market based effort unit system being central to the management framework. Each trawler is permitted to work a certain number of days/nights based on the number of effort units it holds. Through this system, a trawler can increase its allocation by buying or leasing effort units from another vessel without the overall effort in the fishery increasing. There are also a range of other vessel size and gear restrictions, spatial and temporal closures and other management restrictions under fisheries legislation that apply to the trawl fleet that further contribute to the management of fishing effort, exclude trawling from specific locations and restrict permitted species able to be retained. All trawlers are required to have a vessel monitoring system (VMS) installed which tracks the location of the vessel, and operators are required to submit report trip/catch notices, maintain catch and effort logbooks, report interactions with threatened species, and keep sales dockets for all product sold.

Fisheries legislation also requires all otter trawl nets used in the east coast trawl fishery to have a recognised TED and a bycatch reduction device (BRD) installed, and all beam trawl nets to have a BRD installed.

6.2.1.2 Inclusions in the Final Zoning Plan that interact with the trawl fishery

- Expansion of the network of MNP zones to improve habitat representation and threatened species protection (sections 5.1 and 5.3)
- Conversion of GU zones to CP zones and HP zones within Hervey Bay to buffer and connect MNP zones and protect habitat (section 5.1)
- Prohibition of beam trawling in the mouth of the Mary River to remove direct impacts on benthic habitats in the CP zone (section 5.1.12)
- Extension of the boundary of the existing Turtle Protection Area off Mon Repos further offshore to approximately 5km to enhance protection for nesting/inter-nesting turtles (section 5.3.4.6).

Refer to Appendix 4 for the Final Zoning Plan map, Appendix 5 for a comparison of zones between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan, Appendix 7 for the final designated areas map, and Appendix 8 for a comparison of designated areas between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan.

6.2.1.3 Impacts and implications of the Final Zoning Plan

The expansion of the MNP zones and adjustment of some CP and HP zone boundaries as described in section 5.1 will result in the exclusion of trawling from some existing trawl grounds, particularly within Hervey Bay.

While the alignment of the final MNP zone boundaries has deliberately endeavoured to avoid productive trawl areas in the marine park, and some of the boundaries have been modified to address feedback from trawl fishers received through the consultation on the draft zoning plan (see Appendix 4), this has been difficult to achieve at all locations, particularly within parts of Hervey Bay. Hervey Bay contains all the deep-water seagrass and a large proportion of the shallow-water seagrass that occurs within the park. Seagrass is one of the park's more vulnerable habitat types and its ecological values are broadly recognised, yet it is significantly underrepresented in the existing MNP zone network. To more effectively protect seagrass and meet the habitat representation target of protecting at least 15% of the area of each vulnerable habitat type within the MNP zone network, substantial additional areas of seagrass have been incorporated within these zones. This has resulted in some areas of Hervey Bay that support a level of trawl effort being included in these new and expanded MNP zones.

To buffer, connect and protect the integrity of the new and expanded MNP zones, some additional areas of HP and CP zones will also be included in the final zoning plan around the perimeter of Hervey Bay. Some of these changes may also affect some existing trawl areas. The locations within the marine park where zoning and designated area changes are expected to impact on the trawl fishing areas are presented in Figure 15. The final zoning plan will reduce the overall proportion of the marine park that is within GU zones (the only zone type within which trawling is allowed) from 73.9% to 61.1%. While this is an approximate 17% reduction in the area of the marine park that is notionally available for trawling, not all of the area that will be upgraded from GU zone is actively used for trawling, for a range of reasons (e.g. unsuitable depth, presence of rocks, reefs and hard ground, restrictions under fisheries legislations, unproductive for targeted trawl species).

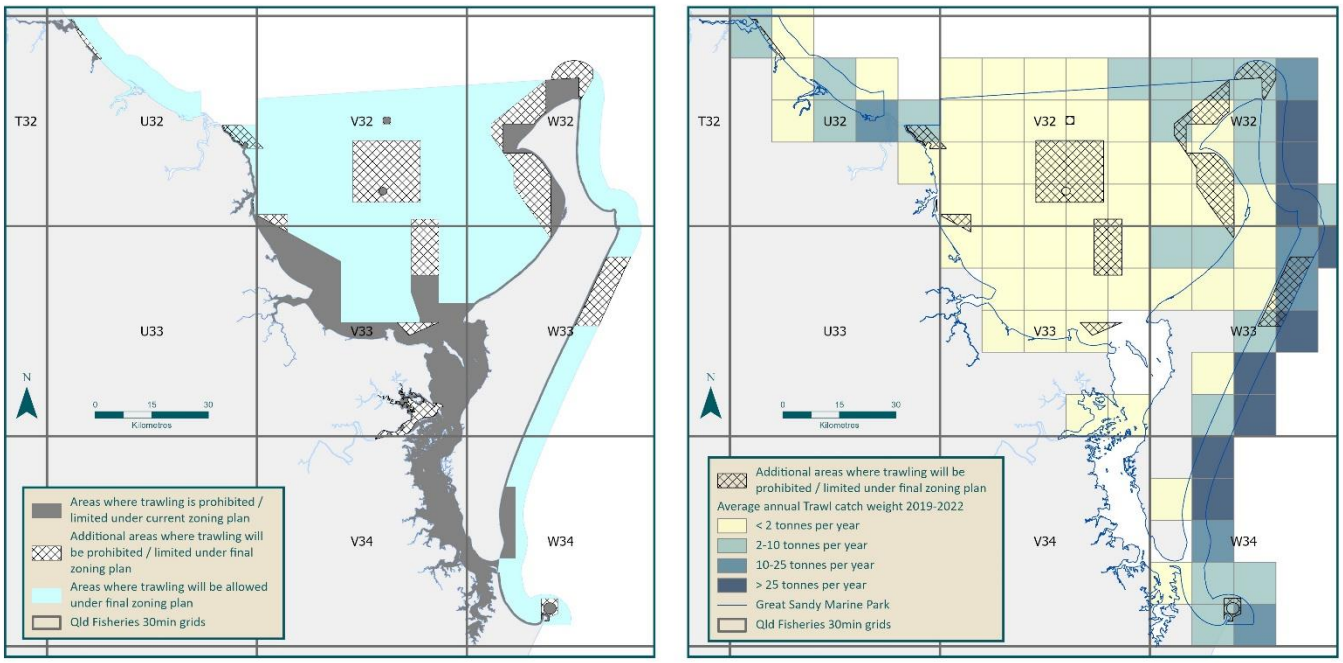

Figure 15. Areas of the marine park where trawling will be prohibited or limited by the Final Zoning Plan (left) and the locations of the new impact areas overlaid with trawl catch heat map (right).

The removal of the non-conforming use provision that currently allows two beam trawl licence holders to operate within a section of the CP zone at the mouth of the Mary River (described in section 5.1.12) will remove beam trawling from this area immediately, rather than these licence holders being slowly transitioned from the area over time, as would have occurred under the existing non-conforming use provision. This will deliver an immediate conservation benefit to this section of the CP zone (which is a highly protected marine park zone) through eliminating the ongoing benthic habitat disturbance caused by this form of fishing.

The existing zoning plan includes a designated Turtle Protection Area that extends one nautical mile (1,852m) offshore from the Mon Repos to Burnett Heads shoreline, which prohibits trawling within its boundary between 1 November and 31 January. The purpose of this designated area is to protect turtles from interaction with trawlers as they access the internationally significant Mon Repos nesting site. The final zoning plan (refer to section 5.3.4.6) extends the offshore boundary of this designated area an additional 3.1km further offshore to provide improved protection for inter-nesting turtles (i.e. turtles aggregating offshore in the active physiological process of egg production prior to coming ashore to nest). The extensive use of this larger area by inter-nesting turtles has been identified through turtle research and monitoring projects undertaken since the original designated area was implemented. While the mandatory use of TEDs in trawl nets minimises the trawling-related mortality risk for turtles in this area and remains a critical management measure for all otter trawling in Queensland waters being caught and expelled through a TED can cause high physiological stress for turtles at this critical point in their breeding cycle. Turtle researchers have raised concern that stress of this type on breeding females has significant potential to impact on breeding success.

The area in the vicinity of Mon Repos supports a low-moderate level of trawling activity (Figure 15) so it is expected that this extension to the boundary of the designated area will result in some impacts to trawling between 1 November and 31 January.

Overall, the final zoning plan will result in limited impacts to the trawl fishery within the marine park and within the broader region. However, any impacts will not be homogenous across the trawl fleet as impacts depend on the exact locations a fishing business accesses, and the ability to access alternative locations which provide similar financial returns post re-zoning. In particular, the two beam trawl licence holders who are currently allowed to operate in the CP zone in and around the mouth of the Mary River will lose access to that area, and some of the otter trawl fleet that focus on trawling in the northern, southern and eastern areas of Hervey Bay will be more significantly impacted by the expanded MNP zone network and other zoning changes in those areas.

Analysis of trawl catch data for the period 2019-2022 from the impacted areas of the marine park suggests that the management and zoning changes will result in a reduction in average trawl catch within the marine park by approximately 30t per year (with a GVP of $575,000/year). This is approximately 12% of the trawl catch from within

the marine park and approximately 3.4% of the 2020/21catch from the trawl fishery in the Wide Bay Burnett Region.

A number of the commercial fisheries operating within the marine park, were subject to significant fisheries management changes in late 2021 due to the implementation of key initiatives under the Queensland Sustainable Fisheries Strategy (QSFS) (e.g. implementation of Total Allowable Commercial Catch (TACC) limits, individual transferable quotas and regionalisation). Those changes appear to have resulted in a significant reduction in total catch reported in some of those fisheries during 2022. The trawl fishery within the marine park has been operating under a market-based effort unit system for many years and therefore the trawl fishery was less affected by these recent QSFS changes, than some of the other fisheries. This conclusion is supported by Table 9, which shows that the total trawl catch within the marine park recorded during 2022 was generally similar to that of the four year average. Analysis of the impact of the zoning and management changes has also been undertaken based on the trawl catch during 2022 (only). This analysis indicates that the zoning and management changes would impact 13% of the 2022 trawl catch from within the marine park, which is generally consistent with the proportion of catch impacted, based on the analysis of the four year average (i.e.12%).

The commercial fishery impact mitigation package will include appropriate and targeted mitigation measures to address the impacts to the trawl fishery to reflect this reduction in trawl fishing grounds within the marine park and to address potential for unsustainable trawl fishing effort transfer.

The protection of significant additional areas of habitats such as seagrass within an expanded MNP zone network will remove trawling impacts and other significant human induced disturbance, which will support the resilience of these habitats to the impacts of natural events (such as floods, cyclones and climate change). Protecting these areas of undisturbed and resilient habitat throughout the park is anticipated to support fisheries productivity in adjacent trawl grounds through spill over, aid recovery following significant natural events and ultimately support the long-term sustainability of the trawl fishery within the marine park and broader region.

6.2.2 Net fisheries

6.2.2.1 Background

The net fishery is the second-largest commercial fishery (in terms of catch volume) operating in the Wide Bay Burnett Region and targets a range of fish and shark species using a variety of netting apparatus, including large mesh gill and ring nets, small mesh (bait) nets, beach seine nets and tunnel nets. Set pocket nets are also used by commercial net fishers in specific locations (e.g. within the Mary River and Kolan River) to target prawns. From a fisheries management perspective the net fishery is part of the East Coast Inshore Fin Fish Fishery (ECIFF). This fishery also includes line fishing for inshore fish species. Across the ECIFF, the most recent DAF Queensland Fisheries Summary Report (Queensland fisheries summary report: May 2022) indicates that during the 2020/21 financial year approximately 93% of the reported catch (by weight) was from the net component of the fishery and 7% was from the line component.

In 2020/21 the ECIFF (including both net caught and a very minor line caught components) in the Wide Bay Burnett Region caught 371 tonnes of fish, sharks and prawns, with a GVP of $2.4m (Economic and social indicators for Qld's commercial fisheries_2020/21). Applying the fishery wide assumption that 93% of this reported catch would be from the net component, the 2020/21 catch in the net component of the fishery within the Wide Bay Burnett Region would be approximately 345t/ year, with a GVP of approximately $2.2m (noting that this assumes that a change in catch volume and catch value are roughly proportional).

Table 10 presents the total catch from the net fishery taken from within the boundary of the Great Sandy Marine Park during each year from 2019 to 2022 and includes the average catch over that four-year period. Based on this average, the net fishery within the marine park currently contributes approximately 80% of the total net catch within the Wide Bay Burnett Region.

Table 10. Commercial net fishing catch (kg) and average catch 2019-2022 within the Great Sandy Marine Park.

2019	2020	2021	2022	Average catch
322,499	319,976	294,746	167,854	**276,269**

Within the marine park, species such as barramundi and threadfin salmon are targeted with large mesh set gill nets (operating under fishery symbol N2) in the rivers and creeks. A wide range of fish species (including mullet, sand

whiting, school and grey mackerel, bream and flathead) are targeted throughout the extensive inshore and nearshore waterways of the marine park using various configurations of large mesh gill nets and ring nets (operating under the N1 fishery symbol).

Ocean beach seine nets (K8 fishery symbol) are used within a defined area along the ocean beaches within HP zones of the marine park, between Double Island Point and Sandy Cape. These nets are predominantly used to target sea mullet (>90% of the catch) during their annual spawning migration, but other species such as tailor, swallowtail dart, bream and whiting are also caught.

Tunnel nets (N10 fishery symbol) are used to target species such as mullet, bream, garfish, whiting, flathead and trevally in specific areas, defined under fisheries legislation, within the Great Sandy Strait and Tin Can Inlet. These nets are essentially temporary fish traps and are set along mangrove-lined foreshore areas with fishers relying on the receding tide to funnel fish into the tunnel of the net. Under fisheries legislation only six N10 symbol holders are licenced to operate within GSMP.

Bait nets or small mesh nets (N11 fishery symbol) are used to target smaller, predominantly bait species, and along with set pocket netting (operating under the N1 fishery symbol), contribute a significantly lower proportion of the overall net catch within the marine park than the other netting methods. The N11 symbol is held by many commercial fishers who operate within the marine park. Fish caught with the bait (small mesh) nets such as garfish and mullet can be sold for bait or human consumption and within the Tin Can Inlet area, may also be used to provide food for tourism related dolphin feeding, however the marine park management prohibits the take of bream, whiting and flathead with these nets to limit the targeting of these key table species. Fisheries legislation also prohibits the take of barramundi with bait (small mesh) nets.

The zoning plan prohibits all forms of commercial netting within MNP zones and Buffer zones. Within CP zones all forms of commercial netting, except for bait netting, are also prohibited. However, within the GSMP the designated Great Sandy Area that currently overlays the CP zones within Baffle Creek, Elliott River, the Burrum River system, most of the Great Sandy Strait and Tin Can Inlet (the Great Sandy Area waterways), allows all forms of commercial netting (compliant with fisheries legislation) to occur within these CP zones.

Commercial netting is allowed within HP zones and General Use (GU) zones, provided it is undertaken in a manner that is compliant with fisheries legislation. Under fisheries legislation several key fish species targeted by the net fishery are subject to Total Allowable Commercial Catch (TACC) limits which caps the overall permissible take and individual transferable quotas which allow for the sharing of catch among fishing businesses. A wide range of gear restrictions (e.g. net type, length, drop, mesh sizes), spatial and temporal closures, species size limits and other restrictions also apply to the fishery. A requirement for net fishing vessels to have a vessel tracking unit installed was recently introduced. All operators are required to submit trip/catch notices for the catch of species with a TACC, maintain catch and effort logbooks, report interactions with threatened species, keep catch disposal records for TACC species and retain sales dockets for product sold.

A significant area of the marine park (Tin Can Inlet, Great Sandy Strait, Burrum River and the south-western portion of Hervey Bay) is within a dugong protection area (DPA). DPAs were introduced in 1998 under fisheries and nature conservation legislation over key dugong habitats along the Queensland coast, with the aim of reducing the risk of dugong interaction with commercial fishing nets in these locations. Within a DPA additional requirements apply to the types of fishing nets that can be used and require fishers to be in close attendance to their nets.

6.2.2.2 Inclusions in the Final Zoning Plan that interact with the net fishery

- Prohibition of commercial netting with large mesh gill nets and ring nets (N1 and N2 fishery symbols) from the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet (via removal of the designated Great Sandy Area) (section 5.2)
- Prohibition of commercial netting with large mesh gill nets and ring nets from the HP zone in the Cherwell River and upper reaches of Burrum River (section 5.2). Note that commercial large mesh netting will continue to be prohibited at Dayman Spit in the new HP zone. This location is currently within a CP zone unaffected by the designated Great Sandy Area
- Introduction of a new non-conforming use provision that allows commercial tunnel netting to continue within the CP zone in the Great Sandy Strait and Tin Can Inlet following the removal of the designated Great Sandy Area (section 5.2)
- Introduction of a new non-conforming use provision that allows commercial set pocket netting to continue within the CP zone of the Mary River following the removal of the designated Great Sandy Area (section 5.2)
- Expansion of the network of MNP zones to improve habitat representation and threatened species protection (section 5.1.6)
- Expansion of the network of CP zones to minimise edge effects on MNP zones and to protect habitat,

(section 5.1.7)
- Amendment of the boundaries of CP zones at four locations to address the dynamic nature of estuary mouths (section 5.1.14)
- Expansion of existing and additional designated Go Slow Areas to enhance protection of turtles and dugong from boat strike (section 5.3.4.7)
- Modification of the existing Sandy Cape Go Slow Area from seasonal to year-round to reflect use of the site by turtles and dugong (section 5.3.4.7).

Refer to Appendix 4 for the final zoning plan map, Appendix 5 for a comparison of zones between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan, Appendix 7 for the final designated areas map, and Appendix 8 for a comparison of designated areas between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan.

6.2.2.3 Impacts and implications of the Final Zoning Plan

The net fishery within the marine park will be the most significantly impacted commercial fishery from the changes included in the final zoning plan. The major driver of this impact will be the prohibition of the use of large mesh gill nets and ring nets from the CP zones of Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet, and from the new HP zone in the Cherwell River and upper reaches of Burrum River. The use of these nets in the CP zones within these waterways is currently allowed to occur under the provisions of the designated Great Sandy Area.

The Great Sandy Strait (including Tin Can Inlet and the mouth of the Mary River) is the most productive net fishing area within the marine park and the vast majority (approximately 90% or more) of fish commercially caught within the Strait are currently taken with large mesh gill nets and ring nets. These nets are also the primary net fishing apparatus used in Baffle Creek, Elliott River and Burrum River.

As detailed in section 5.2, prohibiting the use of these nets within the CP zones of the Great Sandy Area waterways, and within the HP zone in the Cherwell River and upper reaches of Burrum River, is included in the final zoning plan to address:
- the ongoing conflict regarding net fishing arrangements in these waterways that is eroding community confidence in the marine park management.
- the risks that large mesh gill nets and ring nets present to the threatened species within these waterways.

The changes to net fishing will not impact on the continuation of bait (small mesh) netting within the CP zones within the Great Sandy Area waterways, or in the HP zone at Dayman Spit and in the Cherwell River and upper reaches of the Burrum River; set pocket netting in the CP zone within the Mary River; or tunnel netting within the CP zone within the Great Sandy Strait and Tin Can Inlet. While these forms of net fishing are not without some risk to threatened species, those risks are lower than for large mesh gill nets and ring nets. The retention of these lower risk net fishing methods will allow for a limited level of commercial net fishing to continue to occur within these waterways and contribute to the supply of local seafood and bait for public purchase.

The prohibition on the use of large mesh gill nets and ring nets from the CP zones within these waterways will largely be implemented through the removal of the designated Great Sandy Area. By removing this designated area all forms of commercial netting, except for bait (small mesh) netting, would be automatically prohibited by the underlying CP zone standard provisions.

Within the Cherwell River and the upstream reaches of the Burrum River that are currently CP zone and within the designated Great Sandy Area, the zoning will be changed to HP zone to allow for improved management of ongoing coastal development issues in those waterways (refer to section 5.6). The standard provisions for a HP zone would normally allow for commercial netting to be conducted. However, to ensure net fishing effort does not transfer into this area following its prohibition from the remainder of the Great Sandy Area waterways, a new zoning plan provision will be implemented to specifically prohibit large mesh gill and ring netting from this new HP zone. Bait (small mesh) netting would be allowed in this HP zone.

Set pocket netting in the Mary River and tunnel netting in the Great Sandy Strait and Tin Can Inlet waterways will be allowed to continue in the CP zone in these locations, through new non-conforming use provisions. A marine park permit will not be required for set pocket net and tunnel net fishers to operate in accordance with these new provisions.

It is likely that fishing effort (and catch) by the six tunnel net fishers that are licenced to fish within the Great Sandy Strait and Tin Can Inlet will increase over the current extremely low levels, following the removal of the large mesh gill nets and ring nets. It is understood that most of the fishers who hold these tunnel net endorsements have tended to focus their net fishing effort on fishing with their N1 nets in recent years, as netting with the N1 nets requires far less time and labour inputs than are required for a tunnel netting operation. While it is expected that

fishing effort and catch in the tunnel net fishery will increase, this increase is unlikely to replace a significant proportion of the catch that will be removed as a result of the prohibition of the large mesh gill nets and ring nets. The spatial scale of tunnel net operations will not expand as a result of these operations being able to continue. Catch in the tunnel net fishery is predicted to be 'self-limiting' as there are relatively few locations within the Great Sandy Strait and Tin Can Inlet that have the appropriate waterway structure and features to support successful tunnel netting operations, and the significant time and labour costs associated with this fishing method will make it unviable to 'overwork' those locations.

In addition to the prohibition on the use of large mesh gill nets and ring nets within the Great Sandy Area waterways, the commercial net fishing sector will also be impacted to varying degrees by the expansion of the MNP zone network and some new and enlarged CP zones in various locations throughout the marine park (Appendix 4). The following new and extended MNP zones are likely to have the greatest interaction with more productive net fishing areas:

- MNP01 (Littabella) which includes the nearshore habitats south of the mouth of Baffle Creek
- the extension of the existing MNP14 (Marsh Creek) which includes a section of nearshore habitat adjacent to Marsh Creek.

While minimising impacts to all commercial fisheries has been a key consideration in the placement of the new and expanded MNP zones, ensuring that representative examples of all habitat types are comprehensively included within the MNP zone network and protecting key habitats for protected species has necessitated the inclusion of some of these more productive net fishing locations within the network.

The modifications to the offshore boundaries of the existing CP zones within Coonarr Creek (CPZ13), Coongul Creek (CPZ20) and Awinya Creek (CPZ16), along with the integration of the CPZ within Wathumba Creek with the CP zone within Platypus Bay and along the nearshore area between Wathumba Creek to Rooney Point (CPZ05), will significantly impact on productive net fishing locations.

In relation to Coonarr, Coongul, Awinya and Wathumba Creeks, the existing zoning plan protects each of the creeks within CP zones, however the continual movement of the creek mouths due to natural coastal processes has caused ongoing management uncertainty and compliance issues regarding the location of the CP zone boundary at the mouth of each creek. The solution involves the extension of the CP zone boundary at each location offshore for a distance of approximately 500m from the creek mouth and a suitable distance to the north and south of the existing creek mouths to accommodate the longshore creek mouth movement. These boundary changes will ensure that the creek mouths and the coastal processes and ecological functions that occur there are entirely protected by the CP zone. This solution will also support the conservation integrity of the CP zones within each creek by removing the ability for nets to be positioned directly in front of the creek mouths.

Figure 16 shows the area of the marine park where the use of large mesh gill nets and ring nets will be prohibited by the final zoning plan.

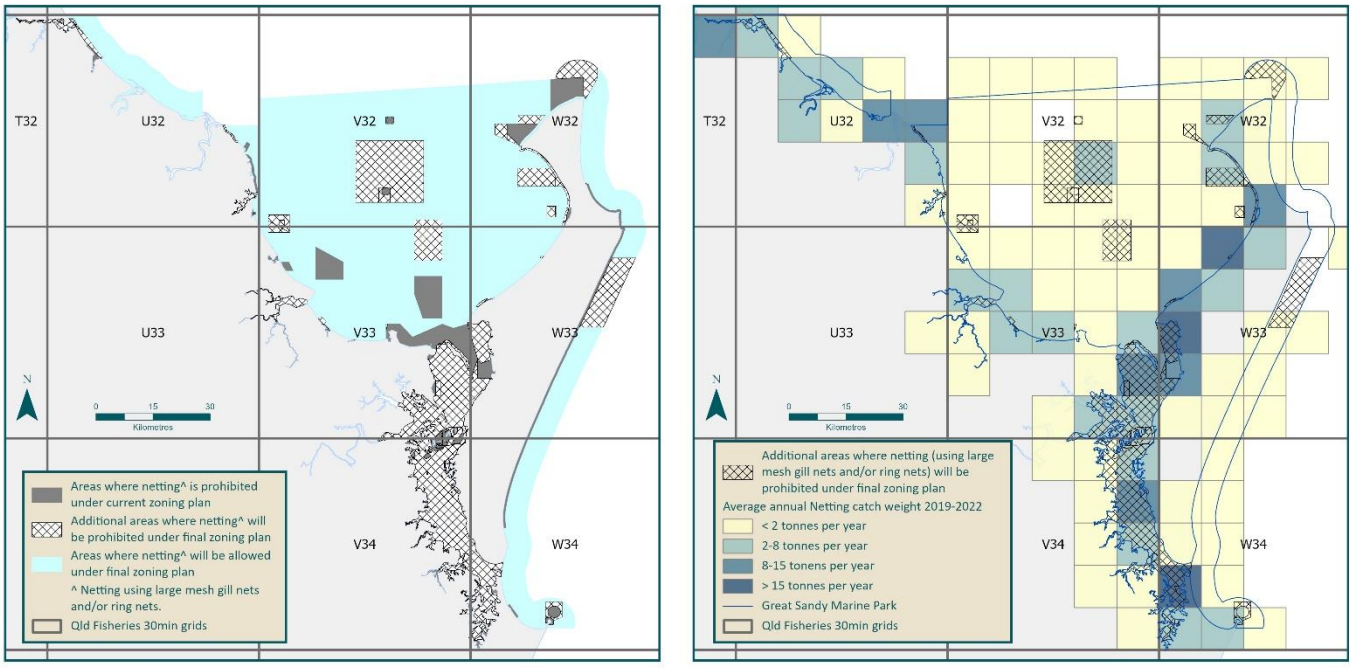

Figure 16. Areas of the marine park where large mesh gill netting and ring netting will be prohibited by the Final Zoning Plan (left) and location of new impact areas overlaid with net fishery catch heat map (right).

A number of additional and extended Go Slow Areas are included in the final zoning plan to protect threatened species from interactions with fast moving vessels and to protect cultural values from the impacts of vessel wash. Net fishers have historically raised concerns that Go Slow Areas in key net fishing areas impact on their ability to efficiently and successfully set nets and locate schools of fish. While these concerns are recognised, Go Slow Areas have proved to be an effective, balanced and essential management tool to protect species and other conservation values in areas of the park where fast-moving vessels present a particular risk (e.g. boat strike, shoreline erosion), while maintaining the ability for vessels to continue to access and operate in those areas.

Most of the new and expanded Go Slow Areas are located within the Great Sandy Strait (see Appendix 7). Given that the use of large mesh gill nets and ring nets will be prohibited within those waterways, net fishers are likely to have significantly less overall interaction with Go Slow Areas in these waterways than currently occurs. For those netting methods that will be permitted to continue within the Great Sandy Strait and Tin Can Inlet, it is not expected that the additional Go Slow Areas will result in negative impacts to tunnel or set pocket net fishing operations, as these netting methods do not utilise high speed vessel manoeuvring to set their nets. Bait (small mesh) netting operations in these waterways may be affected by the additional Go Slow Areas, however the extent of bait netting that will continue in these waterways, and therefore any interaction issues, is difficult to predict at this time.

The extension to the Go Slow Area located south of the mouth of the Burrum River (GSA03) has the potential to result in additional interaction with netting operations in that area. This extension is based on improved dugong monitoring data which identifies that the existing boundaries of this Go Slow Area are not adequately protecting all areas of high dugong use in this location. This Go Slow Area is particularly important given the high intensity of vessel movements through the mouth of the Burrum River.

The conversion of the existing nearshore Go Slow Area between Sandy Cape and Rooney Point (GSA01) from applying on a seasonal basis (between 15 October and 30 April) to year-round may result in some efficiency issues for the netting operations conducted in this productive net fishing area. Again, this change is based on improved monitoring data that indicates that this area is being actively used by significant numbers of both dugong and turtles during most months of the year, hence the risk from boat strike is not being effectively addressed by the current seasonal go slow provisions.

Overall, the final zoning plan will result in major impacts to the net fishery within the marine park. The prohibition of large mesh gill nets and ring nets from Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet will be a primary driver of this impact, however some of the new and expanded MNP zones and CP zones will also contribute to this impact in particular locations.

The retention of bait (small mesh) netting in all CP zones, allowing tunnel netting and set pocket netting to

continue, minimising the extent of impact of zoning changes to the ocean beach haul fishery and continuing to allow netting to continue in HP zones (except in the Cherwell River, upstream reaches of the Burrum River and at Dayman Spit) and GU zones, will retain a level of commercial net fishing (albeit substantially reduced) within the marine park and some supply of fresh local fish and bait from the park to the general public. However, the zoning changes will substantially impact on the net fishing businesses that operate in the park, to the extent that some will become unviable. Impacts will also flow on to businesses that provide services that support the net fishery, and the public will see reduced availability of fresh fish from these waterways for purchase.

Analysis of net catch data for the period 2019-2022 from the areas of the marine park affected by the zoning plan changes suggest that these changes will result in a reduction in net catch by approximately 184t per year (with a GVP of approximately $1.7m per year). This is 67% of the total net catch within the marine park and approximately 53% of the total 2020/21 net catch within the Wide Bay Burnett Region.

It should be noted that the net fishery was subject to significant fisheries management changes in late 2021 as the result of the implementation of key initiatives under the QSFS (e.g. the introduction of TACC limits, individual transferable quotas and regionalisation) and in the following year (2022) the total reported net catch within the marine park was approximately 40% lower than the four-year average (refer to Table 10). While there is always some natural variability in catch between years, it is likely that the implementation of the fisheries management changes has been a key factor in this reduced catch in 2022. This may be a consideration for the design of a commercial fishery impact mitigation package, as those fisheries management changes have likely modified the 'base case' for the net fishery in the marine park into the future.

Given this significantly lower catch in 2022, a separate analysis of the impact of the zoning and management changes has been undertaken, focused only on that 2022 net catch. This analysis confirmed that while the total catch in the net fishery and the total volume of catch impacted by the zoning and management changes in 2022 were both substantially lower than the four-year average, the proportion of the total net catch that was impacted by those changes remained relatively consistent (i.e. 67% based on the 4 year average and 63% based on the 2022 catch).

The impact mitigation package for the commercial fishing industry will include appropriate and targeted mitigation measures to address the impacts to the net fishery within the GSMP and the risks of unsustainable effort transfer that will result from the marine park zoning changes.

While there will be economic and social impacts from the changes within the GSMP that affect the net fishery, the management changes within the GSMP are expected to significantly reduce conflict regarding the management of the marine park, positively support the conservation of threatened species and enhance the region's recreational fishing lifestyle. The economic impacts of these changes are predicted to be offset over time by increased regional economic activity associated with tourism and an improved recreational fishery that will be generated by the reduced commercial net fishing effort within the park.

6.2.3 Pot fisheries

6.2.3.1 Background

The commercial pot fisheries within the Wide Bay Burnett Region are focused on three key species: mud crabs, blue swimmer crabs and spanner crabs. Within the region in 2020/21, 57 tonnes of mud crabs (GVP $1.7m), 70 tonnes of blue swimmer crabs (GVP $0.73m) and 385 tonnes of spanner crabs (GVP $5.5) (Economic and social indicators for Qld's commercial fisheries_2020/21) were taken by commercial crab pot fishers.

Mud crabs and blue swimmer crabs (caught in pots under the C1 fishery symbol) are the key crab fisheries that occur within the Great Sandy Marine Park, with spanner crabs generally being taken from deeper waters outside the boundary of the marine park. Blue swimmer crabs are caught in both the pot and trawl fisheries in the marine park, with approximately 90% of the commercial catch taken with pots and 10% in the trawl fishery (this proportion is reflected in DAF's *Queensland blue swimmer crab fishery harvest strategy: 2021-2026* 2021 Blue Swimmer Harvest Strategy).

The marine park is a significant mud and blue swimmer crab fishing ground from a statewide perspective. Along with Moreton Bay, Hervey Bay supports the most productive blue swimmer crab fishing grounds in the State and approximately 10% of the mud crabs taken commercially from Queensland east coast waters are from within the marine park.

Commercial pot fishers target mud crabs within the Great Sandy Strait, Tin Can Inlet and within mangrove lined rivers and creeks throughout the park, however the area in the general vicinity of the mouth of the Mary River is by far the most productive mud crab fishery area. Blue swimmer crabs can be caught throughout the park, but the most productive potting grounds are within the mid and deeper water areas of Hervey Bay.

Commercial crab potting is prohibited within MNP zones and Buffer zones and is also effectively prohibited in CP zones due to the four-pot limit per person that applies within this zone. However, similar to the provisions of the designated Great Sandy Area in relation to commercial net fishing, the existing zoning plan includes a non-conforming use provision that overrides the standard provisions of the CP zones of Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet and allows commercial crabbers to use commercial quantities of crab pots in accordance with their fisheries licence/endorsements in the CP zones within those waterways. Commercial crab potting is allowed within HP and GU zones.

Under fisheries legislation, both blue swimmer and mud crabs are subject to Total Allowable Commercial Catch (TACC) limits and quota based management. Limits on the number of pots that can be used per fishery symbol, size limits, prohibition on the take of females and other restrictions also apply to the fishery. A requirement for crab fishing vessels to have a vessel tracking unit installed was recently introduced and operators are required to submit trip/catch notices for all catch of species with a TACC, maintain catch and effort logbooks, report interactions with threatened species keep catch disposal records for TACC species and retain sales dockets for product sold.

6.2.3.2 Inclusions in the Final Zoning Plan that interact with the pot fishery

- Expansion of the network of MNP zones to improve habitat representation and threatened species protection (section 5.1.6)
- Establishment of new and expansion of existing CP zones to minimise edge effects on MNP zones and provide additional habitat protection (section 5.1.7)
- Establishment of additional designated Go Slow Areas and expansion of some existing Go Slow Areas to enhance protection of turtles and dugong from boat strike (section 5.3.4).

Refer to Appendix 4 for the final zoning plan map, Appendix 5 for a comparison of zones between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan, Appendix 7 for the final designated areas map, and Appendix 8 for a comparison of designated areas between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan.

6.2.3.3 Impacts and implications of the Final Zoning Plan

As commercial crab potting is prohibited in MNP zones and effectively prohibited in CP zones, the expansion of the MNP zone network and the creation of new and enlarged CP zones under the final zoning plan have the greatest potential to impact on the commercial mud crab and blue swimmer crab pot fisheries within the marine park (Refer to Figure 17 for locations that commercial pot fishing will be impacted by the changes to be included in the final zoning plan).

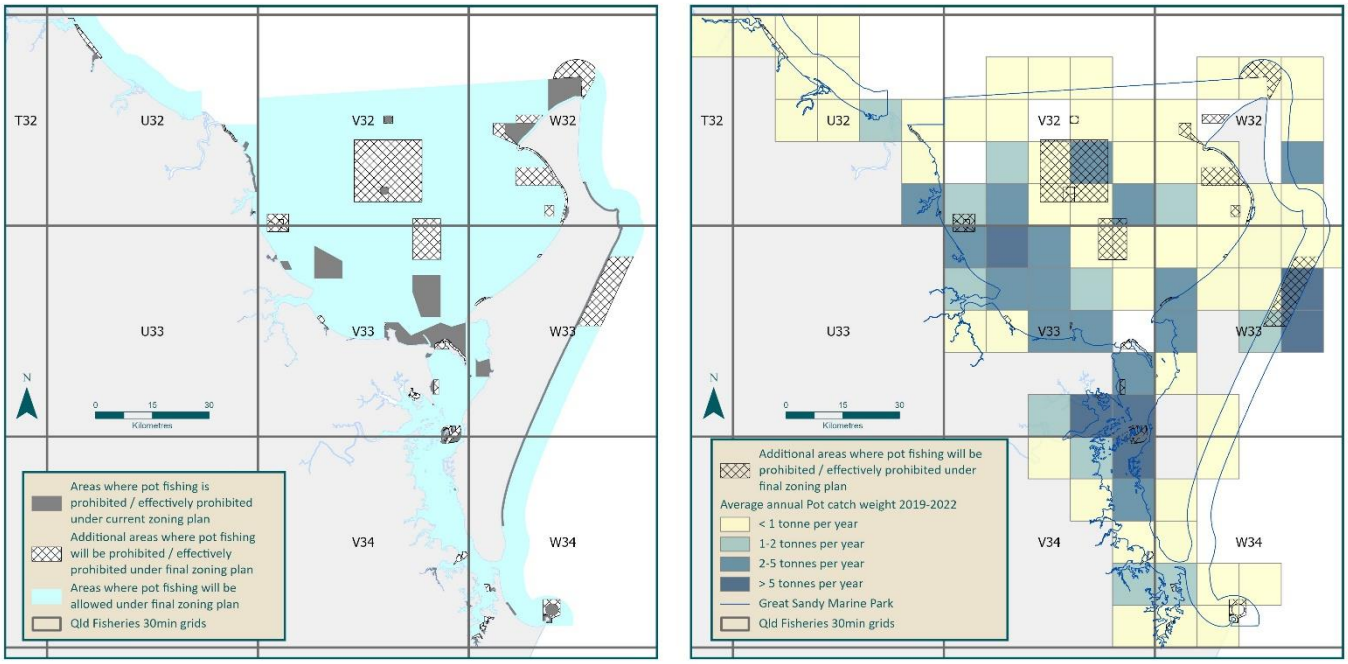

Figure 17. Areas of the marine park where the commercial pot fishery will prohibited / effectively prohibited by the Final Zoning Plan (left) and location of new impact areas overlaid with pot fishery catch heat map (right).

While major changes to the management of net fishing arrangements in the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet will be implemented to address stakeholder conflict issues in these waterways and the risks posed by large mesh gill nets and ring nets to threatened species, a similar conflict is not associated with commercial crabbing in these waterways. As such, the final zoning plan will retain a non-conforming use provision that allows commercial crab potting to be conducted within the CP zones in those waterways (Refer to Figure 8 for the Non-conforming Use area within the CP zone of the Great Sandy Strait and Tin Can Inlet). This non-conforming use provision will not require commercial crabbers to hold a marine park permit to pot within these CP zones.

In general, final zoning plan changes are expected to have low-moderate impacts on key mud crab fishing grounds, however some localised impacts are expected to result from the following additional/expanded MNP zones:

- Enlargement of the existing MNP zone at Mangrove Point (Final Zoning Plan identifier MNP20)
- The new MNP zone in the upstream reaches of the Susan River (MNP21).
- The new MNP zone on the northern side of the mouth of Kauri Creek at Cowra Point (MNP24).
- Modification and consolidation of the existing Turkey, Booker and Walsh Islands MNP zones into Final Zoning Plan identifier MNP22.

The existing MNP zone at Mangrove Point will be enlarged to better protect and connect the shallow water habitats in this location (MNP20). These habitats provide important basking and foraging areas for turtles and feeding habitats for shorebirds. The enlarged area will result in localised impacts to crab fishers who currently pot along the offshore boundary of the current MNP zone.

The new Susan River MNP zone (MNP21) protects a representative example of the habitats present in this upstream, intertidal area of the marine park. This MNP zone includes areas of saltmarsh, which are listed as a threatened ecological community under the EPBC Act, and stands of cannonball mangroves, for which this area of the marine park represents the southern distribution limit for this species in Queensland. The boundaries of this MNP zone have been aligned to exclude as many navigable waterways as practical to minimise impacts on the mud crab fishery, while still ensuring that the MNP zone will achieve its habitat representation and protection objectives. The south-western boundary of this MNP zone adjacent to that main Susan River channel has been set back 10m into the mangrove fringe specifically to allow commercial crabbers to set their pots along the mangrove edge and place their pot floats in the mangroves to hold the pots from being dragged away by the strong currents in this location.

The new MNP zone located north of the mouth of Kauri Creek at Cowra Point (MNP24) aims to protect a representative example of the intertidal habitats within the lower section of the Great Sandy Strait. This location has been selected as it directly adjoins an area of terrestrial national park and provides an excellent example of the communities that occur across the intertidal profile in this section of the park. It also includes and protects an area of intertidal flats that is intensely utilised by dugongs and turtles. This area of the Great Sandy Strait is subject to a moderate level of mud crabbing effort, so given the habitat types that are included in the MNP zone, it is likely that some loss of productive mud crab habitat from the fishery will result.

The area of the Great Sandy Strait in the vicinity of Turkey Island is a highly productive mud crab habitat that is heavily utilised by the commercial crab fishing sector. This area is located within the central section of the Great Sandy Strait, just to the south of its junction with the Mary River and in the general vicinity of the tidal interface of this double ended estuary, where tidal currents from the north and south meet and change their direction of flow. The confluence of these significant hydrological flows results in this area receiving regular inputs of nutrient rich waters and sediment. A large component of the sediment is retained in this area of the Strait and locally reworked and redistributed, creating a complex network of mangrove islands and shoals. This complex and nutrient-rich environment supports the area's extensive and diverse estuarine flora and fauna communities. Given its ecological significance, it is essential that part of this area of the Great Sandy Strait is protected and effectively represented within the MNP zone network.

The existing zoning plan has four MNP zones in this section of the Great Sandy Strait covering Turkey Island, Walsh Island, the intertidal area to the east of Booker Island and an unnamed mangrove island located southwest of Turkey Island. The location and boundaries of these existing MNP zones are shown in Figure 18. These existing MNP zones are disconnected and do not effectively incorporate a comprehensive example of the significant habitat mosaic within this area. Further, the alignment of their boundaries, in particular the Turkey Island MNP zone, is difficult to interpret which has created uncertainty for users of the area and ongoing compliance and enforcement issues.

The final zoning plan modifies the MNP zone configuration in this area to create a single, consolidated MNP zone that incorporates the eastern section of Turkey Island, the existing Walsh and Booker Island MNP zones and their interconnecting habitats (Figure 18). The boundary of this MNP zone (MNP22) has been clearly defined via a series of coordinates to aid understanding and compliance. As part of this MNP zone consolidation, the zoning of

the western portion of Turkey Island and the MNP zone southwest of Turkey Island has been downgraded to CP zone, with commercial crabbing allowed to be conducted in those locations under the commercial crabbing non-conforming use provision. Minimising impact to the commercial crabbing sector has been a major consideration in the development of the final consolidated MNP zone, however the changes will result in a minor net loss of access to the crab fishery in the area.

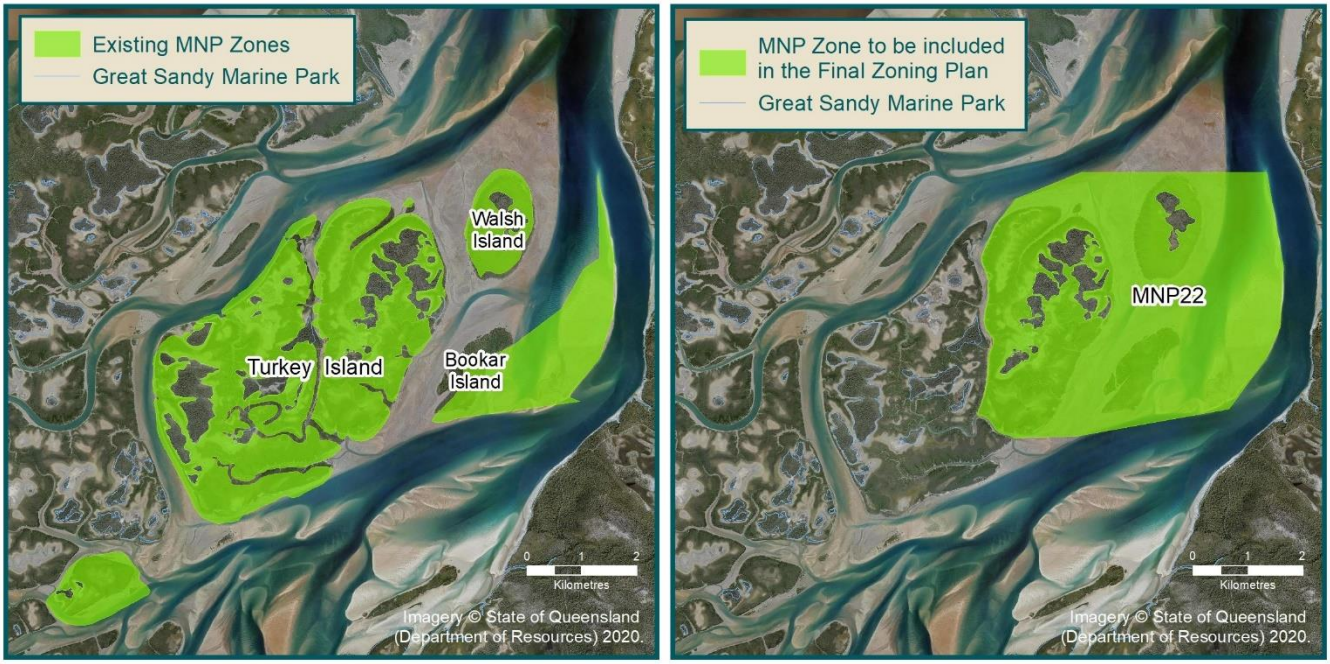

Figure 18. Existing MNP zones in the vicinity of Turkey Island (left) and the modified MNP zone in this location to be included in the Final Zoning Plan (right).

The significant enlargement of the MNP zone network in Hervey Bay is expected to result in moderate impacts on the blue swimmer crab pot fishery within the Bay due to the loss of some productive crabbing grounds.

The alignment of the MNP zone boundaries in Hervey Bay has aimed to limit impacts on the most productive crabbing areas (and key areas for other fisheries), however this has been challenging to achieve. Hervey Bay contains all the deep-water seagrass and a large proportion of the shallow water seagrass that occurs within the park. Seagrass is one of the park's vulnerable habitat types, yet it is significantly underrepresented in the existing MNP zone network. To more effectively protect seagrass and meet the habitat representation target of protecting at least 15% of the area of each vulnerable habitat type within the MNP zone network, substantial additional areas of seagrass have been incorporated within these zones. Some modifications to proposed zoning arrangements within Hervey Bay have been made subsequent to the consultation on the draft zoning plan, to address consultation feedback from blue swimmer crab fishers and reduce impacts to the fishery. However, some impacts have been unavoidable and in particular, the Central Hervey Bay (MNP04) and Southern Hervey Bay (MNP09) MNP zones (Refer to Figure 19 and Appendix 4) are likely to cause the more significant impacts.

Blue swimmer crabs are a relatively mobile species, so some of the crabs that are currently caught within the areas that will become MNP zones, may still be caught in other areas as they move through the marine park.

Figure 17 indicates that the Offshore Dundubara MNP zone (MNP12), adjacent to the ocean beach of K'gari may also interact with crabbing activities. The crab fishery in this offshore location predominately targets spanner crabs, so it is likely that the vast majority of the catch that is identified in the underlying heat map in Figure 17, as potentially interacting with these MNP zones, is being caught in areas that are outside the boundary of the marine park. This conclusion is based on an understanding of the preferred depth range of spanner crabs.

Several additional and extended Go Slow Areas will be included in the final zoning plan to protect threatened species from interactions with fast moving vessels. The location and need for these Go Slow Areas have been identified through improved turtle and dugong monitoring data. Crab fishers who work within the Great Sandy Strait have historically raised concerns that the existing Go Slow Areas impact on their ability to efficiently move through their key crabbing areas to check and re-bait their pots. They highlight that limiting their ability to move quickly between pot locations is particularly problematic in areas with expansive intertidal flats that can only be accessed during a small part of the tidal cycle.

However, Go Slow Areas have proved to be an effective and balanced management tool that protect species and other conservation values in areas of the park where fast-moving vessels present a particular risk (e.g. boat strike, shoreline erosion), while maintaining the ability for vessels to continue to access and operate in those areas.

Some of the new and expanded Go Slow Areas within the Great Sandy Strait overlap with productive mud crab fishing grounds, however they are generally small additions to the existing Go Slow Areas or are of a size and shape that are not expected to create a substantial additional impost to commercial crab fishers operating in these locations.

Overall, the final zoning plan will result in minor to moderate impacts on the commercial crab fishery within the marine park, however there will be some individual crab fishers who may be more significantly impacted. In particular, the blue swimmer crab fishers who operate in central Hervey Bay and potentially a small number of the mud crab fishers who operate in parts of the upstream section of the Susan River, adjacent to Mangrove Point, in the vicinity of Turkey Island and near the mouth of Kauri Creek, may be more significantly impacted by some of the MNP zones. Analysis of mud crab and blue swimmer crab catch data for the period 2019-2022 from the impacted areas of the marine park suggest that the final zoning plan may result in:

- a reduction in average mud crab catch within the marine park by approximately 8.9t per year (with a GVP of $277,000 per year). This is approximately 18% of the mud crab catch from within the marine park and approximately 16% of the 2020/21 catch from the mud crab fishery in the Wide Bay Burnett Region.
- a reduction in average blue swimmer crab catch within the marine park by approximately 4.9t per year (with a GVP of $54,500 per year). This is approximately 8% of the blue swimmer crab catch from within the marine park and approximately 7% of the 2020/21 catch from the blue swimmer fishery in the Wide Bay Burnett Region. The locations of zoning plan changes that will impact on blue swimmer crab fishing areas are shown in Figure 19.

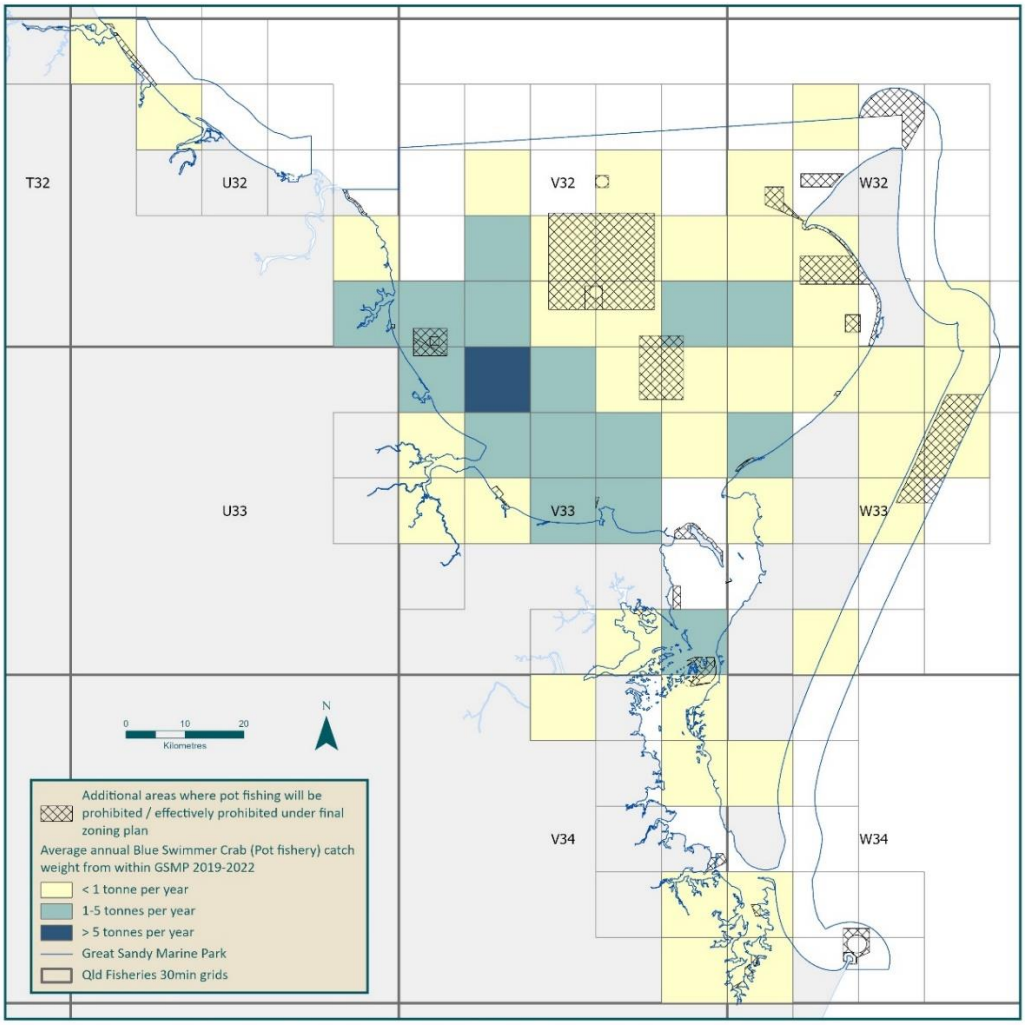

Figure 19. Additional areas of the marine park where the commercial pot fishery will be prohibited/effectively prohibited by the Final Zoning Plan overlaid with blue swimmer crab pot catch heat map.

It should be noted that the pot fishery was subject to significant fisheries management changes in late 2021 as the result of the implementation of key initiatives under the QSFS (e.g. the introduction of TACC limits and individual transferable quotas). The reported pot catch for both mud crabs and blue swimmer crabs within the marine park during 2022 is significantly lower than the four-year catch average (refer to Table 11). While there is always some natural variability in catch between years, it is likely that the implementation of the fisheries management changes have been a key factor in this reduced 2022 catch. This may be a consideration for the design of a commercial fishery impact mitigation package, as those fisheries management changes have likely modified the 'base case' for the pot fishery in the marine park into the future.

Table 11. Commercial pot catch and predicted impact based on average annual 2019-2022 catch data and 2022 catch data for mud crab and blue swimmer crab fisheries

Pot Fishery	Average of 2019-2022 Catch Data		2022 Catch Data	
	Catch within marine park	Predicted reduction due to zoning and management changes	Catch within marine park	Predicted reduction due to zoning and management changes
Mud Crab	48t	18%	35t	15%
Blue Swimmer Crab	59t	8%	22t	19%

A separate analysis, based on the pot catch for mud crabs and blue swimmer crabs from only 2022, has been undertaken, to determine if the impacts of the zoning and management changes, using the 2022 catch data differ for those based on the four-year average catch data.

This analysis identifies that for mud crabs, while the total catch is significantly lower in 2022 than the four-year average catch, a similar proportion of the annual catch (i.e. approximately 15%-18%) will be impacted by the zoning and management changes based on either data.

The data analysis for blue swimmer crabs provides a more complex outcome. While the reported catch within the marine park in 2022 is significantly lower than the four-year average catch, it would appear that the impact from the zoning and management changes will be significantly higher based on the 2022 catch than for the four-year average catch (refer to Table 11). Detailed investigation of the 2022 data indicates that this higher level of impact is resulting from a significant volume of reported blue swimmer crab catch from a single near shore grid site adjacent to the ocean beach of K'gari that will be impacted by a new Marine National Park Zone in that location. Given its nearshore location and the fact that no blue swimmer crab catch was reported from that grid site in 2019, 2020 or 2021, it appears that this higher impact is most likely the result of a log book data error. This will be investigated further as part of the development of the impact mitigation package.

The impact mitigation package for the commercial fishing industry will include appropriate and targeted mitigation measures to address the impacts to the crab pot fishery to reflect this reduction in crab fishing grounds within the marine park and to address potential for unsustainable fishing effort transfer in the pot fishery.

The predicted impacts to commercial crab catch from the expansion to the MNP zone network may also be partially offset over time from spillover of crabs from these additional protected areas. Research in Moreton Bay Marine Park following the implementation of additional MNP zones in key mud crab habitats in 2009 showed trends of increased abundance and size of crabs in some areas where all extractive activities had been removed by zoning changes. Mud crabs were also significantly more abundant in MNP zones that had been in place longer, highlighting the biodiversity benefits of MNP zones and that these benefits can take time to be realised. There was evidence of a spillover effect of mud crabs into areas outside of MNP zones with some tagged mud crabs found between one and 24km from MNP zone boundaries. This spillover may have occurred from older MNP zones and the length of closure of these areas to fishing was shown to be an important driver of mud crab size and abundance. These results indicate the positive spillover benefits from the additional MNP zones that can be anticipated in the GSMP into the future.

6.2.4 Line fisheries

6.2.4.1 Background

Commercial line fisheries in the Wide Bay Burnett Region target a range of demersal reef fish species (e.g. snapper, pearl perch, red emperor, coral trout (predominantly bar cheek coral trout)) and pelagic species (e.g. mackerel, tuna). Line fishers in the region operate within the Rocky Reef Fin Fish Fishery, East Coast Spanish Mackerel Fishery, Coral Reef Fin Fish Fishery and the East Coast Inshore Fin Fish Fishery (ECIFF), depending on their licence requirements under fisheries legislation and on the species they target.

It is estimated that total catch from the line fisheries in the Wide Bay Burnett Region for the 2020/21 financial year was approximately 74.8t and GVP of approximately $0.94m. These totals include: Rocky Reef Fin Fish Fishery (12.6t, GVP $0.14m), East Coast Spanish Mackerel Fishery (16.2t, GVP $0.25m, Coral Reef Fin Fish Fishery (20t, GVP $0.35m and the Line component of the ECIFF (25t, $0.2m - assuming that line catch contributes approximately 7% of the total catch in the ECIFF) (Economic and social indicators for Qld's commercial fisheries_2020/21).

Within the marine park commercial line fishers target various species of mackerel within Hervey Bay and reef species over the various reef, coffee rock and ledge habitats scattered throughout the park. The commercial line fishery is the smallest of the major commercial fisheries conducted in the park.

Commercial line fishing is prohibited within MNP zones and is limited to only surface trolling in the existing Buffer zone located at Wolf Rock. Line fishing is allowed in CP, HP and GU zones, however there are specific limits on the number of rods/lines and hooks per person that can be used within the CP zones. The standard CP zone provisions within the marine park allows for the use of one rod/line per person and a total of one hook, however within the designated Great Sandy Area, which applies to the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet, a maximum of three rods/lines per person may be used with a combined total of six hooks. These hook and line limits apply to both commercial line fishers and recreational anglers.

Under fisheries legislation many species targeted in the line fishery are subject to Total Allowable Commercial Catch (TACC) limits and quota-based management. A range of spatial and temporal closures, species size limits and other restrictions also apply to the line fishery. A requirement for line fishing vessels to have a vessel tracking unit installed was recently introduced. Operators are required to submit report trip/catch notices for all catch of species with a TACC, maintain catch and effort logbooks, report interactions with threatened species, keep catch disposal records for TACC species and retain sales dockets for product sold.

6.2.4.2 Inclusions in the Final Zoning Plan that interact with the line fishery

- Expansion of network of MNP zones to improve habitat representation and threatened species protection (section 5.1).
- Establishment of three designated No Anchoring Areas to protect sensitive habitats from anchor damage (section 5.1.11).
- Modification of the limited line fishing definition in the provisions for CP zones to allow for the use of a maximum of two rods/lines per person with a combined total of two hooks (section 5.2).

Refer to Appendix 4 for the final zoning plan map, Appendix 5 for a comparison of zones between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan, Appendix 7 for the final designated areas map, and Appendix 8 for a comparison of designated areas between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan.

6.2.4.3 Impacts and implications of the Final Zoning Plan

The expansion of the network of MNP zones is the key aspect of the final zoning plan that will result in impacts to the commercial line fishery.

It is difficult to accurately assess the degree of impact that the MNP zones will have on line fishing for pelagic species within Hervey Bay, as these species are highly mobile and move through Hervey Bay seasonally. Most of the line catch of pelagic species occurs in the eastern half of the Bay. There are many factors that influence where these schools of pelagic fish will move and where they will become ‘catchable’ (e.g. wind, water clarity, currents, presence of bait schools). While the expanded MNP zone network will prohibit fishing for schools of these species in some of the areas of Hervey Bay where they are currently caught, it is probable that there may be opportunities to target these same schools once they move beyond the boundary of the MNP zones.

The impact of new MNP zones on a reef fishing location is more certain, as the reef species that are targeted are strongly associated with the seabed structure (e.g. reef, coffee rock) in those locations. This association between the habitat and the targeted reef species means that when an area of reef/rock habitat is included in an MNP zone it can be assumed that the catch from that area will be removed from the fishery, at least in the short-term. In the longer term, the protection of reef habitats in MNP zones has been demonstrated (for species such as common coral trout, stripey snapper) to result in spillover. Spillover results from the exclusion of fishing pressure in the MNP zone which, over time, supports the fish population to increase and the size, maturity and breeding success of individual fish to improve, such that individuals will eventually begin to spill out of the MNP zone to surrounding reef habitats, where they can become available to the fishery. Research conducted in the Keppel Islands region of the southern Great Barrier Reef found that the MNP zones there, which accounted for 28% of the reef area, produced about 50% of all juvenile coral trout that recruited to MNP zones and to fished reefs outside of the MNP zones, within a radius of 30km.

The expanded MNP zone network includes some additional areas of reef, coffee rock and other hard bottom habitats that are actively used by the line fishing sector. In particular, the new and expanded MNP zones in the following locations are likely to impact on the line fishery for reef species:

- Rooney Point (MNP03)
- Central Hervey Bay (MNP04)
- Wolf Rock (MNP27).

Figure 20 shows the locations within the marine park that will be closed to line fishing by the final zoning plan and where these additional closed areas will interact with current line fishing areas.

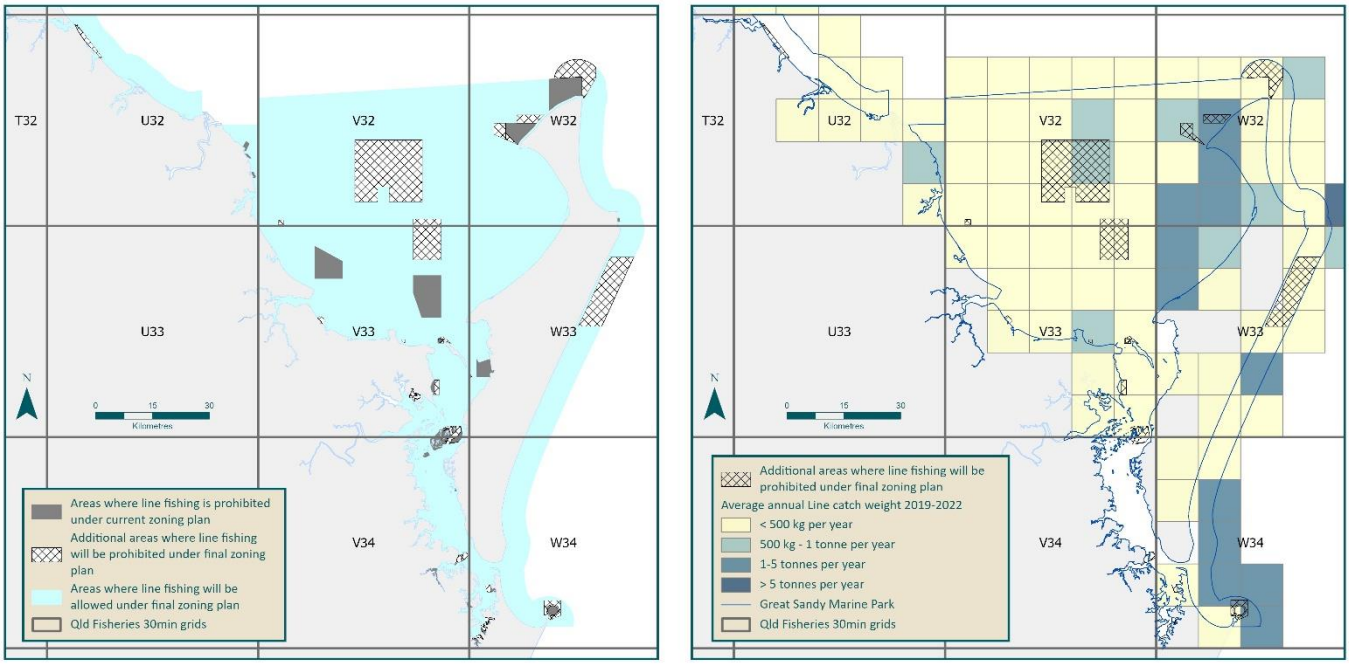

Figure 20. Areas of the marine park where the commercial line fishery will be prohibited by the Final Zoning Plan (left), and location of new impact areas overlaid with line fishery catch heat map (right).

Each of these MNP zones has been established and/or enlarged to ensure reef and other hard bottom habitats are adequately represented and protected in MNP zones. In the case of the Wolf Rock MNP zone, the enlarged boundary is also to improve the protection of the critically endangered grey nurse sharks that inhabit that area. Recent monitoring of grey nurse shark movement in the Wolf Rock area has shown that these sharks regularly move outside the boundary of the existing MNP zone and Buffer zone in that location and that the area of the MNP zone needs to be enlarged to improve the level of protection for that species (refer to section 5.3.3)

The three No Anchoring Areas, one in Platypus Bay (NAA01) and two near Point Vernon (NAA02 and NAA03) are intended to protect defined areas of susceptible habitat from anchor damage (refer to section 5.1.11). The two No Anchoring Areas at Point Vernon aim to protect fringing reef habitats in a high use recreational fishing location directly adjacent to a residential area that is unlikely to be utilised by commercial line fishers. The No Anchoring Area in Platypus Bay aims to protect an area of deep-water coral and sea whip habitat. Commercial line fishing occurs in this area of Platypus Bay so this No Anchoring Area may require commercial line fishers to adjust their fishing practices in this small area to exclude the use of an anchor. Although there is uncertainty, it is expected that

this requirement will have little, if any, impact on the line catch from this location.

The existing zoning plan allows for the use of one rod /hand-held line and one hook per person within all CP zones, except those within the designated Great Sandy Area (i.e. Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet), where each line fisher may use a maximum of three rods/lines per person with a combined total of six hooks. As part of the removal of the designated Great Sandy Area, the final zoning plan implements a 'middle ground' approach, whereby all line fishers (commercial and recreational) will be allowed to use a maximum of two rods/lines per person with a combined total of two hooks, within all CP zones in the park. This approach is consistent with the provision of CP zones in Moreton Bay Marine Park. This change is unlikely to result in significant impacts or benefits to the commercial line fishery as most of the key commercial line fishing locations are not within CP zones and, in those areas where some line fishing currently occurs in the designated Great Sandy Area, it appears unlikely that the limit of two rods/lines per person with the combined total of two hooks will significantly impact on the current catch rates.

Analysis of line catch data for the period 2019-22 from the impacted areas of the marine park suggests that the zoning changes will result in a reduction in average line catch within the marine park by approximately 3.4t per year (with a GVP of $51,000/year). This is approximately 11% of the line catch from within the marine park and approximately 5% of the 2020/21 combined line fishery catch in the Wide Bay Burnett Region.

The impact mitigation package for the commercial fishing industry will include appropriate and targeted mitigation measures to address the impacts to the line fishery to reflect this reduction in line fishing grounds within the marine park and to address potential for unsustainable fishing effort transfer in the line fishery.

6.2.5 Harvest fisheries

'Harvest fisheries' is a collective term for a group of commercial fisheries that generally involve the gathering of marine resources by hand, or with the use of hand-held apparatus. The harvest fisheries target a wide range of species such as coral, marine aquarium fish (MAF), yabbies, beachworms and bloodworms.

These fisheries tend to have a smaller number of participants than other commercial fisheries and the resources that they target are often not harvested for human consumption. A number of harvest fisheries are focused on bait species (e.g. beachworms, bloodworms and yabbies) to supply the recreational fishing sector and others supply the hobby industry (e.g. marine aquarium fish and coral are sold for display in public or private aquaria). Recreational fishers also harvest beach worms and yabbies directly using the same harvest methods as commercial fishers.

In 2019/20 the combined GVP of the coral harvest and MAF fisheries in the Wide Bay-Burnett Region was $0.1m (this is <1% of the GVP of these fisheries from a statewide perspective Economic and social indicators for Qld's commercial fisheries_2020/21. Note the 2019/20 GVP for coral and MAF fisheries for the Wide Bay Burnett Region has been presented, as in 2020/21 the Economic and Social indicators Report, the GVP for these fisheries is reported based on a larger South East Queensland fishing region.

The GVP for 'other harvest fisheries' is reported as a combined value. The 2020/21 GVP for this group fisheries in the Wide Bay Burnett Region (which includes the beachworm, bloodworm, yabby and adult and juvenile eel fisheries) was $0.5m (Economic and social indicators for Qld's commercial fisheries_2020/21). This Regional GVP is difficult to present as a proportion of the statewide GVP, as many of the fisheries included in this combined group target entirely different marine resources in different regions of the State and therefore, it would not be a 'like-for like' comparison.

Under the Marine Parks Regulation 2017, 12 fisheries are listed as harvest fisheries that can be undertaken within State marine parks. All 12 of these harvest fisheries can be conducted with permission in GU and HP zones. Only the beachworm and MAF fisheries are allowed to operate in CP zones and must be undertaken in accordance with a marine park permission. Since the GSMP was established in 2006, the following harvest fisheries have been, or are currently, undertaken within the park:

- MAF (A1 and A2 fishery symbols)
- Beachworm (W1 fishery symbol)
- Bloodworm (W2 fishery symbol)
- Yabby (Y fishery symbol)
- Shell grit (G fishery symbol)
- Coral (D fishery symbol).

In addition to these standard marine park management provisions, the existing zoning plan includes three non-conforming use provisions that allow for MAF, coral and shell grit collection to also be conducted in some small, defined areas of the marine park that are within zone types that would normally prohibit these fisheries. The

designated Great Sandy Area, that currently applies to the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet, also modifies the standard CP zone management in these waterways to allow blood worming and yabby harvesting to be conducted (without a marine park permission). These non-conforming-use and designated Great Sandy Area provisions were implemented to maintain access for these harvest fisheries to specific locations that were in use prior to the declaration of the marine park.

Under fisheries legislation, commercial fishers operating in the harvest fisheries must also hold a current authority to operate in the fishery, submit monthly catch returns to DAF and comply with any other requirements for the fishery as prescribed in fisheries legislation. As part of implementing actions under the Queensland Sustainable Fisheries Strategy 2017-2027, DAF has recently prepared harvest strategies for the coral and MAF fisheries. These strategies detail a range of management actions necessary to achieve ecological, economic and/or social objectives for these fisheries.

6.2.5.1 Coral fishery

6.2.5.1.1 Background

The majority of the State's commercial coral fishery occurs within the Great Barrier Reef, however under fisheries legislation two small areas south of the Great Barrier Reef are also available for coral harvesting. One of these areas (referred to by DAF as Coral Area 801), is located within the GSMP. It is approximately 0.82km^2 in size and overlaps the existing CP and MNP zones at the northern end of Woody Island.

Collection of coral by commercial and recreational fishers is generally prohibited in GSMP. The only exception to this, is an allowance under a non-conforming use provision in the existing zoning plan, for the holders of two coral collecting licences (numbers 1484 or 1470) to collect coral within the part of the current CP zone that overlaps Coral Area 801. Further background and a map showing the location and extent of Coral Area 801 are provided in section 5.7.3.10. Coral collected from this site is used for presentation in exhibits at the Reef World Aquarium in Hervey Bay and is not taken for commercial sale.

6.2.5.1.2 Inclusions in the Final Zoning Plan that interact with the coral fishery

- Expansion of the MNP zone at the northern end of Woody Island over Coral Area 801.
- Amendment of the existing non-conforming use provision that relates to the coral fishery within the area north of Woody Island to:
    - Allow for coral collection within the expanded MNP zone (with a marine park permission), but only from that part of Coral Area 801 where collection is currently allowed to occur under the existing zoning plan (refer to Figure 14).
    - Retain the existing limit on coral collection to only a person who holds, or is acting under the authority of, authority to take permit number 1484 or 1470 under the *Fisheries Act 1994*.
    - Allow coral collection only for presentation in exhibits at the Reef World Aquarium in Hervey Bay and not for commercial sale.

Refer to Appendix 4 for final zoning map.

6.2.5.1.3 Impacts and implications of the Final Zoning Plan

The final zoning plan will maintain the continued low volume and infrequent collection of coral from this site by the two existing permit holders under strict permit conditions. Coral collection will only be allowed to support the operation of the Reef World Aquarium.

This outcome recognises the long history of use of this area for the collection of coral to supply the Reef World Aquarium, the educational benefits from the aquarium exhibiting local coral species, and the limited extent of collection that is required to meet the aquarium's requirements.

The final zoning plan will not result in any impacts to the existing coral fishery in the marine park.

6.2.5.2 Marine Aquarium Fish fishery

6.2.5.2.1 Background

The Marine Aquarium Fish (MAF) fishery operates along the entire Queensland east coast targeting species such as damselfish, butterflyfish and angelfish. MAF fishers focus their collection on coral reef and inter-reef habitat and sell live specimens for display in private and public aquaria in Australia and overseas.

It is a hand collection fishery whereby fishers target individual fish using apparatus such as fishing lines with single barbless hooks, cast nets, scoop nets and seine/barrier nets. Divers in the fishery use scuba or surface-supplied air from hookah (hose) apparatus.

Utilising practices that minimise injury or damage to the collected fish and that maintains them alive and in good condition throughout the collection, holding, transport and sale process are critical for the MAF fishery.

The MAF fishery sells most of its product to the international market, with 64% of aquarium fish caught in 2018/19 throughout Queensland being exported. While some species have a broad distribution, others are endemic to Queensland and nearby waters and attract high demand from export markets.

Under fisheries legislation the MAF fishery is a limited entry fishery managed largely through input controls such as limits on the number of vessels and collectors that can operate under a single licence, gear restrictions, species size limits and spatial and temporal closures for some species. MAF fishers are also required to submit catch and effort information via logbook returns.

Within the marine park, a marine park permission is required to conduct the MAF fishery in CP, HP and GU zones. The MAF fishery is prohibited in all Buffer and MNP zones, with the exception of the Little Woody Island MNP zone (MNP18). In this zone a non-conforming use provision allows for the collection of aquarium fish species, with permission, by a person who holds, or is acting under, an authority to carry out aquarium fish collecting under the *Fisheries Act 1994.*

Catch value for 2019/20 for the combined coral harvest and MAF fisheries in Queensland, indicate that for the two combined fisheries in the Wide Bay Burnett Region, generating a gross income of $0.1m (Economic and social indicators for Qld's commercial fisheries_2020/21). As there is no commercial 'true' coral fishery in the marine park, it is assumed that this GVP would have been entirely generated from the MAF fishery.

There are a number of reef habitats in the GSMP that have a history of use by fishers in the MAF fishery including Four Mile Reef, the reefs along the Woongarra Coast, around Point Vernon and Pialba, and reefs in the vicinity of Little Woody Island.

6.2.5.2.2 Inclusions in the Final Zoning Plan that interact with the MAF fishery

- New and expanded MNP zones at Four Mile Reef, the reef at Pialba and Myers Creek (which includes Teebar Ledge).
- Introduction of No Anchoring Areas at Gatakers Bay and Gables Point.
- Amendments to the conditions of the non-conforming use provision that provides for the fishery to operate in the existing MNP zone adjoining Little Woody Island (MNP18), to limit access to this site to only fishers who can demonstrate a history of collecting at this site since 31 August 2006.

Refer to Refer to Appendix 4 for final zoning map, Appendix 5 for a comparison of zones between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan, Appendix 7 for the final designated areas map, and Appendix 8 for a comparison of designated areas between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan.

6.2.5.2.3 Impacts and implications of the Final Zoning Plan

The establishment of new and expanded MNP zones at Four Mile Reef (MNP10), Pialba (MNP17) and Myers Creek (MNP26) will prohibit all forms of fishing within the boundaries of those zones and will reduce the area of reef habitat within the marine park that is available to the MAF fishery. The non-conforming use provision that allows the MAF fishery to be conducted within the MNP zone adjacent to Little Woody Island will continue unchanged, although access to this site will be limited to only MAF fishers who can demonstrate a history of collecting at this site since 31 August 2006.

The establishment of No Anchoring Areas over two reefs at Gatakers Bay (NAA02) and Gables Point (NAA03) will not impact MAF collection at these sites as MAF fishers will be exempt from No Anchoring Area rules (refer to section 5.1.12.5)

Given that the 2019/20 combined GVP of the coral harvest and MAF fisheries in the Wide Bay Burnett Region is reported to be $0.1m and the non-conforming use provision over the Little Woody Island MNP zone (MNP 18) is being retained to support the MAF harvesting from this site, it would appear that overall economic impacts to the MAF fishery from the final zoning plan will be minimal.

The impact mitigation package for the commercial fishing industry will include appropriate and targeted mitigation measures to address the minor impacts to the MAF fishers that will result from the zoning plan changes.

6.2.5.3 Beachworm fishery

6.2.5.3.1 Background

The State's commercial beachworm fishery area consists of all foreshores along the east coast of Queensland. Beachworms, of the family Onuphidae, are the focus species of this fishery and are used as a prized bait for recreational fishers, particularly for targeting whiting.

Beachworms are hand collected (sometimes with the use of pliers) by fishers working in the intertidal surf zone along open ocean beaches. There are very limited physical impacts on the environment from this fishery and there are no by-catch issues associated with the collection of the species.

DAF manages the fishery based on the following three management areas:

- Zone 1 - Foreshores between the NSW border and Inskip Point
- Zone 2 - Foreshores of Fraser Island
- Zone 3 - Foreshores between Inskip Point and Cape York excluding Fraser Island.

Beachworm fishers are limited to the fishery management area/s, stated on their fisheries authority. A harvest strategy for the beachworm fishery has not yet been developed by DAF.

In the GSMP commercial beachworm harvesting can occur in all CP, HP and GU zones, providing a marine park permit for this purpose is also held by the fisher. The commercial harvest of beachworms is prohibited within Buffer and MNP zones.

Based on commercial fishery catch data for the years 2019-2022, and average of approximately 410,000 worms are caught from the marine park each year. This level of catch suggests that the beachworm fishery is likely to be contributing a significant proportion of the 2020/21, $0.5m GVP (Economic and social indicators for Qld's commercial fisheries_2020/21) from the 'other harvest fisheries' (i.e. exclusive of the coral and MAF fisheries) conducted within the Wide Bay Burnett region.

6.2.5.3.2 Inclusions in the Final Zoning Plan that interact with the beachworm fishery

As the final zoning plan will not implement any new zoning changes over the ocean beaches with the marine park, it is not expected that any interaction with the beachworm fishery will occur.

6.2.5.3.3 Impacts and implications of the Final Zoning Plan

The final zoning plan will not result in any impacts to the existing beachworm fishery in the marine park.

It should be noted that the MNP zone that was proposed in the CRIS north of Ngkala Rocks (CRIS MNP06) will not be included in the final zoning plan. Consultation feedback identified that this proposed MNP zone was likely to have a significant impact on the fishery.

6.2.5.4 Bloodworm fishery

6.2.5.4.1 Background

The State's commercial bloodworm fishery area includes all foreshores along the east coast of Queensland, however the fishery predominantly occurs within Moreton Bay and, to a lesser extent within the GSMP.

The fishery targets bloodworms of the family Eunicidae, within muddy seagrass habitats of estuaries. As bloodworms live in burrows extending up to 50 cm below the surface, the fishery requires substantial interaction with the seagrass and underlying substrate to extract the worms. Bloodworms are harvested by hand or by digging using a wide-pronged fork during low tide.

Bloodworms are sold live as bait to the recreational fishing sector where they are a sought-after bait for targeting whiting, dart, bream and flathead.

The habitat disturbance associated with the commercial bloodworm fishery is an ongoing issue of concern in relation to this fishery, with the rate of recovery of an area of seagrass following a worm digging operation being largely dependent on the skill and diligence of the commercial fisher in replacing the extracted seagrass sods. Under fisheries legislation it is a requirement that seagrass sods must be replaced at the end of each collecting activity otherwise penalties apply. Fisheries legislation also prohibits the use of digging implements (e.g. the use of worm digging forks) within declared Fish Habitat Areas (FHA) due to the habitat disturbance that can be created with these implements. This prohibition on the use of digging implements effectively prohibits commercial (and recreational) bloodworm harvesting within all declared FHAs. Appendix 9 shows the location of declared FHAs within the marine park.

A harvest strategy for the bloodworm fishery has not yet been developed by DAF.

In the GSMP, the commercial harvesting of bloodworms can occur, with permission, in all HP and GU zones. It is also currently allowed within CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet (without the requirement to hold a marine park permission) through the provisions of the designated Great Sandy Area but is prohibited from all other CP, Buffer and MNP zones within the marine park.

The allowance of bloodworming within the CP zones of the designated Great Sandy Area was implemented when the marine park was first declared in recognition that a limited amount of commercial bloodworming was likely to be occurring within parts of these waterways. However, with the prohibition on the use of digging implements within declared FHAs (that pre–date the declaration of the marine park), bloodworming has been effectively prohibited by declared FHA management in Baffle Creek, Elliott River, the Burrum River and large sections of the Great Sandy Strait. Since the declaration of the marine park, catch records indicate minimal collection in the commercial bloodworm fishery within the marine park with that collection only occurring in the central/southern parts of the Great Sandy Strait and parts of Tin Can Inlet.

6.2.5.4.2 Inclusions in the Final Zoning Plan that interact with the bloodworm fishery

- Prohibition of commercial bloodworming from the CP zones within Baffle Creek, Elliott River, the Burrum River system and Great Sandy Strait (via removal of the designated Great Sandy Area) (section 5.1.13)
- Expansion of MNP and CP zones (sections 5.1)

Refer to Appendix 4 for final zoning map, Appendix 5 for a comparison of zones between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan, Appendix 7 for the final designated areas map, and Appendix 8 for a comparison of designated areas between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan.

6.2.5.4.3 Impacts and implications of the Final Zoning Plan

The final zoning plan is expected to impact on a very small number of bloodworm fishers. Current available data indicate that there are fewer than five fishers operating in the bloodworm fishery in GSMP and their annual catch from the area is low.

The existing management provisions for declared FHAs that cover large parts of the waterways that are currently part of the designated Great Sandy Area already significantly limit the areas in which the collection of bloodworms with a digging implement can occur.

The impact mitigation package for the commercial fishing industry will include appropriate and targeted mitigation measures to address the very minor impacts to the blood worm fishers that will result from the zoning plan changes.

6.2.5.5 Yabby fishery

6.2.5.5.1 Background

The State's commercial yabby fishery area encompasses all foreshores of the Queensland east coast. The fishery targets marine yabbies (*Trypaea australiensis*), which are harvested from intertidal areas using handheld yabby pumps.

Under fisheries legislation the fishery area is divided into four management zones, with fishers only permitted to collect yabbies in the zone/s designated on their fisheries authority. The GSMP is within the Sunshine / Fraser (zone C) management area. A harvest strategy for the yabby fishery has not yet been developed by DAF.

In the GSMP, commercial harvesting of yabbies can occur, with permission, in all HP and GU zones. The holders of (or those acting under) three fisheries authorities (numbers 3690, 1435 and 3464) are also allowed to harvest yabbies in the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet. This allowance is provided by provisions of the designated Great Sandy Area that overlays the CP zones in these waterways. Commercial yabby harvesting is prohibited from all other CP, Buffer and MNP zones within the marine park.

When the marine park was first established, five commercial yabby authority holders were operating within the Great Sandy Strait and potentially at sites within Baffle Creek, Elliott River and Burrum River. Initially the designated Great Sandy Area provisions allowed for those five authority holders to operate in the designated area however, this number was reduced to the three currently listed when the zoning plan was remade in 2017 as two of the original authority numbers were no longer active. Of those three currently listed authority numbers, only two remain active (1435 and 3464).

6.2.5.5.2 Inclusions in the Final Zoning Plan that interact with the yabby fishery

- Removal of the designated Great Sandy Area, including the provisions that allow for the harvest of yabbies in the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet by authority numbers 3690, 1435 and 3464 (section 5.2)
- Creation of a new non-conforming use provision that will allow the commercial yabby fishery to continue in the CP zone in Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet without permission for those persons who hold fisheries authority number 1435 or 3464 (section 5.2)
- Expansion of MNP and CP zones over intertidal areas (section 5.1).

Refer to Appendix 4 for the final zoning plan map, Appendix 5 for a comparison of zones between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan, Appendix 7 for the final designated areas, and Appendix 8 for a comparison of designated areas between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan.

6.2.5.5.3 Impacts and implications of the Final Zoning Plan

Impacts to the yabby fishery are expected to be nil or negligible. The areas of expansion of MNP and CP zones are generally not in areas of the marine park that would be expected to provide key yabby habitat and the replacement of the yabby fishery related provisions from the designated Great Sandy Area with a new non-conforming use provision, will largely ensure maintenance of the existing fishing rights of the holders of fisheries authority numbers 1435 or 3464.

6.2.6 Overall commercial fishery impacts

As detailed in the preceding sections, the final zoning plan will include a range of changes that will displace and impact on the current commercial fisheries undertaken within the marine park. These changes will reduce the current commercial catch across all fisheries within the marine park by approximately 35%, with this reduced catch having a value of approximately $2.5-3m (GVP) per year (noting that catch naturally varies from year to year). The majority of this impact, 80% by catch weight and 63% by value, will result from impacts on the net fishery (in particular to the large mesh gill net component of the east coast inshore finfish fishery).

6.2.7 Commercial fishery impact mitigation

A commercial fishery impact mitigation package will be developed to appropriately mitigate impacts to affected commercial fishers and to manage potential effort transfer issues into other fisheries or other areas of the marine park. Support for the post-harvest sector and other impacted workers in the commercial fishing sector (e.g. skippers and deckhands) will also be addressed by the impact mitigation package.

The package will be designed in collaboration with DAF and QRIDA and will consider the broader impacts associated with the Great Barrier Reef net fishing changes announced on 5 June 2023. It will be implemented by QRIDA during the second half of 2023, prior to the new zoning plan taking effect.

6.3 Recreational fishing

6.3.1 Background

Recreational fishing is undertaken for recreation, sport and to provide seafood for personal consumption but not for trade or commerce. It is a popular and highly valued recreational pursuit in Queensland, with a recent statewide recreational fishing survey finding that 660,000 Queenslanders participated in recreational fishing over a 12-month period during 2019/20, undertaking 2.8 million days of fishing (2019/20 Rec Fishing Survey Outcomes). The Hervey Bay region is second only to the Brisbane region in terms of the State's recreational fishing effort. Between April 2019 and April 2020 approximately 442,000 recreational fishing days were recorded in the Hervey Bay region (15% of the State's total).

Recreational fishers target a wide range of species that inhabit the diverse and high-quality habitats within the marine park. The Great Sandy Strait and the rivers and creeks throughout the park are fished from the shore and from vessels for species such as bream, whiting, flathead, grunter, mangrove jack, salmon and barramundi. Within Hervey Bay, schools of pelagic species such as mackerel and tuna are targeted during the warmer months. The inshore reefs, coffee rock outcrops, artificial reefs and ledges that fringe the bay and that are present in parts of the Great Sandy Strait are targeted for species such as grass sweetlip, cod, snapper, coral trout and fingermark. Some of these inshore reefs are also popular spearfishing locations. In the northern half of Hervey Bay and in the open waters east of K'gari there are deeper reef habitats where recreational fishers catch red emperor, coral trout, pearl perch, snapper and a wide range of other reef species.

The ocean beach of K'gari is nationally renowned for its winter tailor fishery and the ocean beaches between Double Island Point and Sandy Cape are fished year-round for species such as bream, whiting and swallow-tail dart. Parts of the Hervey Bay area are becoming internationally recognised sportfishing destinations. In particular, the extensive intertidal flats on the western side of K'gari draw specialist anglers targeting golden trevally, giant trevally and queenfish. Further to the north, in the vicinity of Rooney Point, a unique fishery targeting juvenile black marlin in shallow water habitats has developed.

In addition to fish, crabs and prawns are also a focus for recreational fishers within the marine park with mud crabs particularly targeted in the Great Sandy Strait, blue swimmer crabs targeted in inshore and offshore waters and prawns targeted with cast nets around the river mouths.

A number of artificial reefs have been constructed within the marine park, in accessible inshore locations, which make them very popular recreational fishing destinations.

An active inshore and offshore charter fishing sector operates within the park. Charter fishers are commercial businesses that provide a platform (usually a vessel), equipment and their specialised fishing knowledge to their recreational fishing clients. Clients on charter fishing trips must use recreational fishing apparatus and are subject to the same fishing related marine park management restrictions as any other recreational fisher using the park.

The 2014 statewide recreational fishing survey indicated that almost 60% of the fishing effort within the area of the marine park (Fraser coastal waters) is shore-based (2013/14 Rec Fishing Survey Report). This survey also identified that trumpeter whiting, sand whiting, dart and tailor are the most harvested recreational species in the region.

The estimated annual recreational fishing expenditure in 2019/20 by Queenslanders who fish in Queensland delivered a Gross State Product of $333.7M to the Queensland economy through direct fishing trip expenditure (such as bait and tackle purchase) and flow-on activity (e.g. expenditure on boats and maintenance). This expenditure was assessed to support 3,136 full time equivalent jobs across the State (2021 Rec fishing economic report).

Within the Wide Bay Burnett Region (which for the reporting purposes extends from the northern side of the Noosa River to Baffle Creek and therefore aligns reasonably well with the northern and southern boundaries of the Great Sandy Marine Park (GSMP) but includes catch from beyond the seaward marine park boundary), the annual recreational fishing expenditure was estimated to deliver a Gross Regional Product valued at $35.2M (approximately 11% of the State's recreational fishing expenditure) and to support 359 full time equivalent jobs within the region.

In the GSMP, recreational line fishing is prohibited within MNP zones and limited to only surface trolling for pelagic species in the Buffer zone around Wolf Rock. Line fishing is allowed in CP, HP and GU zones, however there are specific limits on the number of rods/lines per person and the combined total of hooks that can be used within the CP zones. The standard CP zone provisions allow for the use of one rod/line per person with a total of one hook, except within the designated Great Sandy Area, that applies to the CP zones within the Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet, where a maximum of three rods/lines per person with a combined total of six hooks may be used.

Recreational crabbing, bait gathering and spear fishing, in accordance with fisheries legislation, may be conducted in CP, HP and GU zones. These activities are all prohibited in MNP and Buffer zones.

6.3.2 Inclusions in the Final Zoning Plan that interact with the recreational fishery

- Expansion in the number and size of MNP zones throughout the marine park (section 5.1)
- Modification of the southern boundary of the Hoffmans Rocks MNP zone (MNP06) (section 5.1)
- Introduction of three designated No Anchoring Areas (section 5.1.11)
- Increase in the number and size of designated Go Slow Areas (sections 5.3.4)
- Introduction of No Motorised Vessel areas in Searys Creek and Cooloola Creek (NMV01 and 02) (section 5.4.4)
- Amendments to line fishing gear restrictions in CP zones (section 5.2)
- Prohibition of large mesh gill nets and ring nets from the CP zones within the Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet (sections 5.2)

Refer to Appendix 4 for the final zoning plan map, Appendix 5 for a comparison of zones between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan, Appendix 7 for the final designated areas map, and Appendix 8 for a comparison of designated areas between the existing zoning plan, the zoning plan presented in the CRIS, and the final zoning plan.

6.3.3 Impacts and implications of the Final Zoning Plan

6.3.3.1 Expansion of the Marine National Park zone network

The expansion of the network of MNP zones will be the key aspect of the final zoning plan that will result in the most widespread impacts to recreational fishing and crabbing across the marine park. The current MNP zone network prohibits all forms of fishing, including recreational fishing, from 241km^2 (3.9%) of the park. The final zoning plan will expand this MNP zone network to protect an additional 552.14km^2 of the park within this highly protected zone type, taking the total percentage of the park within MNP zones to 12.8%. While this is a significant increase commensurate with the ecological values of the marine park, approximately 87.2% of the park will remain available for recreational fishing and crabbing. It should be noted that a number of the MNP zones that were proposed in the preferred zoning option in the CRIS have been modified for inclusion in the final zoning plan to reflect consultation feedback from the recreational fishing sector (refer to section 5.1.6).

As detailed in section 5.1, a comprehensive, adequate, representative and efficiently located MNP zone network is the foundation of marine park management. The MNP zone network of the final zoning plan has been developed based on a range of habitat, species and use data and has been guided by a suite of bio-physical and socio-economic guiding principles, developed by the independent SRG. These MNP zones will protect representative examples of all 23 habitat types within the park (specifically more than 15% of the total area of all vulnerable habitat types and more than 10% of the total area of all other habitat types are incorporated within the MNP zone network) and protect key habitats for threatened species while deliberately attempting to minimise impacts on existing users.

Due to the broad distribution of use of the marine park by recreational fishers and the lack of a geographic catch recording system for the recreational fishery, there is significant uncertainty associated with predicting the extent of impacts to recreational fishing resulting from the new and expanded MNP zones in many areas of the park.

Based on the findings of the 2014 statewide recreational fishing survey that shore-based fishing contributes 60% of the recreational fishing in the Fraser Coastal Waters region, an assessment has been conducted to determine the extent of the marine park's shoreline that will be adjoined by MNP zones. The total length of shoreline within the marine park (i.e. the length of mainland shoreline and the shoreline of K'gari within the marine park) is 1508km. Of this total shoreline length, 7.1% (106km) directly adjoins an MNP zone under the existing zoning plan. This will increase to 9.2% (139km) under the final zoning plan.

Shore-based recreational fishing effort is not evenly distributed along the entire length of the marine park shoreline. Rather, most effort is likely to be focused near population centres (cities, towns, villages), around infrastructure (jetties, boat ramps, bridges) and along the ocean beaches of K'gari and the mainland that are readily accessible by 4WD vehicles. Such locations are not generally compatible with the intent of an MNP zone and therefore have been largely avoided by the expanded MNP zone network for inclusion in the final zoning plan. The preferred zoning option presented in the CRIS included a proposed MNP zone north of Ngkala Rocks, that extended over part of the ocean beach of K'gari and would have prohibited shore-based fishing in that location. As a result of significant feedback to the consultation from recreational fishers and other stakeholders, that proposed MNP zone will not be included in the final zoning plan.

As such it is expected that the expanded MNP zone network will result in minimal additional impact to shore-based recreational fishing, which is the most widely conducted form of recreational fishing within the marine park.

From a vessel-based fishing perspective, the area of the marine park that is expected to be the most extensively affected by the new and expanded MNP zones, based on area of change, is the central and southern sections of Hervey Bay. Hervey Bay contains all of the deep-water seagrass and most of the shallow water seagrass that occurs within the park. Despite seagrass being one of the park's vulnerable habitat types and having a wide range of well documented, ecological values, it is significantly underrepresented in the existing MNP zone network. To more effectively protect this seagrass and meet the habitat representation target of protecting at least 15% of the area of vulnerable habitat types within MNP zones, the MNP zone network in the final zoning plan will incorporate substantial additional areas of seagrass, particularly within MNP04 Central Hervey Bay (CRIS MNP07), and MNP09 Southern Hervey Bay (CRIS MNP11).

These large MNP zones may impact on some areas that are currently used by vessel-based recreational fishers, particularly those who target pelagic species at certain times of the year and, in the case of the new MNP04 (CRIS MNP07), some deep-water holes and reef habitats north of the Twenty-Five Fathom Hole where reef species are targeted. As pelagic species (such as mackerel) move through the bay in schools, it is probable that there will be opportunities to target these same schools prior to them entering, or after they exit the boundary of these MNP zones, which may limit the overall impact to the recreational fishery for those species.

The new and expanded MNP zones that include reef habitats in the final zoning plan are likely to result in greater

impact to vessel-based recreational fishers, as the reef species that are targeted tend to be more strongly associated with the bottom structure (e.g. reef, coffee rock). This association means that when an area of reef/rock habitat is included in an MNP zone, the catch from that area will be largely lost to the fishery, at least in the short/medium-term. In the longer term, the protection of reef habitats in MNP zones has been demonstrated (for species such as coral trout, for example) to result in 'spill over', whereby the population and size of individual fish in the MNP zone increases due to the lack of fishing pressure and individuals may move out of the highly protected area to surrounding reef habitats, where they can become available to the fishery at those locations.

In addition to the reef habitats within MNP04 - Central Hervey Bay (CRIS MNP07), the expanded network of MNP zones to be included in the final zoning plan includes areas of reef, coffee rock, ledges and other hard bottom habitats in a variety of locations that are actively targeted by vessel-based recreational fishers. These MNP zones include:

- Rooney Point MNP03 (CRIS MNP03)
- Four Mile Reef MNP10 (CRIS MNP12)
- Woody Island MNP16 (CRIS MNP16)
- Myers Creek MNP26 (CRIS MNP25)
- Wolf Rock MNP27 (CRIS MNP26).

While the impacts to recreational fishing from these MNP zones are acknowledged, each has been established and/or enlarged to ensure that these vulnerable and ecologically significant reef and hard bottom habitats are adequately represented and protected. The basis for each MNP zone is provided in Appendix 6.

The expansion of the Wolf Rock MNP zone to be included in the final zoning plan has been specifically designed to better protect the critically endangered grey nurse sharks that inhabit this area. Recent monitoring of the grey nurse shark movement in the Wolf Rock area has shown that these sharks are undertaking excursions outside the boundary of the current MNP zone and its surrounding Buffer zone, where they become susceptible to capture by line fishers and risk injury from hook ingestion. While it is recognised that the waters in the general vicinity of Wolf Rock are heavily used by vessel-based recreational line fishers and that the consultation on the CRIS identified significant opposition to this MNP zone expansion from the recreational fishing sector, this is the only known gestation site for pregnant female grey nurse sharks on the east coast of Australia with approximately half of the breeding population's female sharks having been recorded at Wolf Rock. The conservation benefits generated by this MNP zone expansion, particularly to this critically endangered species, have been assessed to outweigh the impacts of removing fishing access to this area (refer to section 5.3.3 for further discussion).

The final zoning plan includes new, expanded, and in some cases reduced MNP zones (refer to section 5.1.6) that may result in localised impacts or benefits to recreational fishers. As such, fishers should review the MNP zone boundary locations to determine if these will have implications to their individual recreational fishing pursuits.

6.3.3.2 Modification of southern and western boundaries of Hoffmans Rocks MNP zone

The southern boundary of the existing Hoffmans Rocks MNP zone (CRIS MNP05) will be moved north by approximately 250m to remove a gutter and surrounding rocky outcrop from the existing MNP zone. The Woongarra Coast is a popular and accessible location for spear fishers, however available spear fishing sites are relatively constrained by the current extensive MNP zone network along this rocky coastline. This has been an ongoing source of complaints from the spearfishing community.

The gutter and adjacent rocky reef habitat identified within the red circle in Figure will be removed from the existing MNP zone to allow this highly accessible nearshore area to become available for spear fishing and other forms of recreational fishing. To offset the relocation of this southern boundary and maintain the zone's overall area, its western boundary will be moved further inshore. This relocated inshore boundary will protect additional intertidal and near shore rocky reef habitat within the MNP zone and more clearly indicate that fishing in the area between the shore and the western boundary of the MNP zone is not supported.

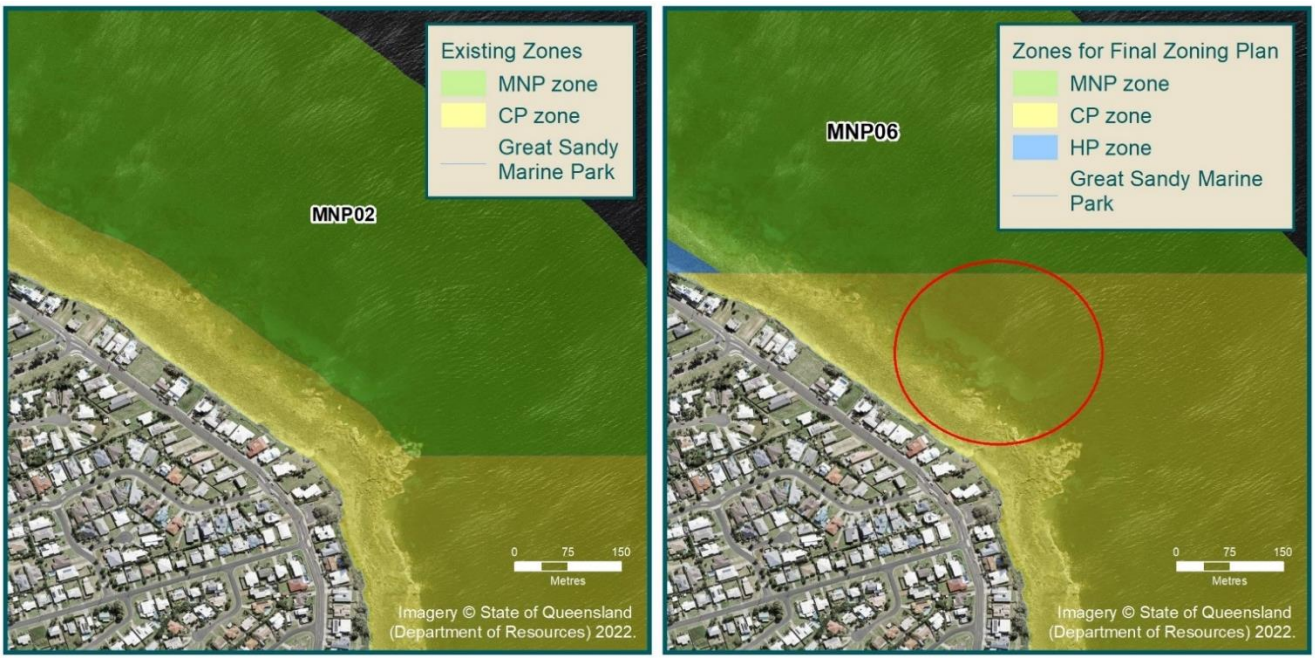

Figure 21. Existing zoning configuration of the southern and western boundaries of Hoffmans Rocks MNP zone (left) and MNP zone boundary for inclusion in the Final Zoning Plan (right).

6.3.3.3 Introduction of designated No Anchoring Areas

The three designated No Anchoring Areas that will be included in the final zoning plan are intended to protect defined areas of susceptible benthic habitat and cultural values from anchor damage. The No Anchoring Area in Platypus Bay (NAA01) will protect a remote, fragile deep-water coral and sea whip community while the two areas at Point Vernon (Gatakers Bay NAA02 and Gables Point NAA03) will protect fringing reef habitats in this high use, nearshore location.

No Anchoring Areas provide a balanced marine park management solution to the problem of anchor damage, whereby they address the threat to the habitat while allowing fishing access to be retained.

Due to their location, it is expected that the Gatakers Bay and Gables Point No Anchoring Areas will have a significantly larger interaction with recreational fishers. However, recreational fishers will still be able to use and enjoy these areas provided they modify their existing fishing methods, where necessary, to eliminate the need for anchoring (e.g. drift fishing or the use of electric motors to hold position).

6.3.3.4 Additional designated Go Slow Areas

A number of additional and extended designated Go Slow Areas will be included in the final zoning plan to protect threatened species from interactions with fast moving vessels and to protect natural and cultural values (Appendix 7). The location and need for these Go Slow Areas has been identified through improved turtle and dugong monitoring data and, in relation to the Go Slow Area over Carland Creek in southern Tin Can Inlet and in the upper reaches of Wathumba Creek on the western Side of K'gari to protect cultural values, from engagement with First Nations peoples.

These additional Go Slow Areas will impact on the speed at which vessel-based recreational fishers can move around some areas of the park, particularly within parts of the Great Sandy Strait and Tin Can Inlet where the majority of these additional areas are located. However, like the existing Go Slow Areas, the new areas do not overlap any marked navigation channels, so do not affect the primary maritime transit corridors through the park.

Go Slow Areas provide a valuable and balanced management tool that protects threatened species from boat strike and disturbance in key, shallow water areas and protects cultural values (e.g. middens) from boat wash impacts, while maintaining the ability for vessels to continue to access and operate in those areas.

The final zoning plan will retain and redefine the existing transit lanes at Poona and Kauri Creek, that extend across the Go Slow Areas, to provide direct access corridors to the Poona boat ramp and through Kauri Creek. Within these transit lanes, the Go Slow Area provisions will not apply. An additional transit lane will be introduced across the expanded Go Slow Area at Tinnanbar. This transit lane will minimise impact on travel time for vessels launching from the Tinnanbar boat ramp and accessing the main navigation channel through the Great Sandy

Strait.

6.3.3.5 Designated No Motorised Vessel Areas in Searys Creek and Cooloola Creek

The designated No Motorised Vessel Areas in Searys Creek (NMV01) and Cooloola Creek (NMV02) in southern Tin Can Inlet, that will be included in the final zoning plan in combination with the extension of the existing MNP zones in these waterways (MNP29 and MNP30), aim to enhance protection of the ecological values within these waterways and support the aspirations of First Nations peoples for better recognition and protection of the significant indigenous cultural values that exist within these areas.

The No Motorised Vessel Area provisions will prohibit the use of vessels propelled by petrol or diesel fuelled motors within these two waterways. The prohibition of these vessels aims to create a quiet and serene setting that respects the desire of First Nations peoples to connect with and use these culturally important areas and will also address issues associated with boat wash eroding sensitive cultural values that fringe the waterways.

Given that the boundaries of the No Motorised Vessel Areas directly align with the expanded MNP zones, it will be these MNP zones, which prohibit all forms of fishing, that will be the factor that primarily drives the impact on recreational fishing within these two waterways.

To minimise impacts to recreational fishing, the boundaries of the No Motorised Vessel Areas (and extended MNP zones) in Searys Creek and Cooloola Creek have been aligned to specifically exclude the following more popular fishing areas:

- the foreshore surrounding the Poverty Point camping area on the southern side of Cooloola Creek
- the foreshore surrounding the powerline crossing, south of Searys Creek
- Searys ledge, north of Searys Creek.

6.3.3.6 Amended line fishing gear restrictions in CP zones

The existing zoning plan allows line fishers to use one rod/line per person with a total of one hook per person within all CP zones, except those within the designated Great Sandy Area (i.e. the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet), where a maximum of three rods/lines per person with a combined total of six hooks may be used. In removing the designated Great Sandy Area, the final zoning plan will adopt a ‘middle ground’ approach, whereby all line fishers (recreational and commercial) will be allowed to use a maximum of two rods/lines per person with a combined total of two hooks within all CP zones in the park. This approach is consistent with the rules that apply in CP zones in the Moreton Bay Marine Park.

This change is predicted to result in an overall beneficial outcome for recreational fishers. While the change will reduce the number of rods/lines that are allowed to be used in some CP zones from three to two, in practice it is likely that most recreational fishers would rarely fish with three rods/lines. Whereas allowing for the two rods/lines to be used in CP zones where currently only one may be used, is likely to be of material benefit to recreational line fishers, as the use of two rods/lines is understood to be the most frequent practice for many fishers.

6.3.3.7 Removal of the Designated Great Sandy Area and prohibiting large mesh gill nets from the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet

The final zoning plan will prohibit commercial net fishing with large mesh gill nets and ring nets (operating under N1 and N2 fishery symbols) from the CP zones of Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet, and from the HP zone at Dayman Spit (HPZ17) and in the upstream reaches of the Burrum River and the Cherwell River (HPZ13). This inclusion in the final zoning plan is discussed in detail in section 5.2.

The key outcomes for recreational fishers are:

- significantly reduced competition for catch of fin fish within these waterways, as most (approximately 90% or more) of the commercial net fishing catch and associated fishing effort would be removed.
- retention of the approximately 144,000 kg of fish each year (based on average commercial net catch data from 2019-2022) that is currently caught by commercial fishers using large mesh gill nets and ring nets in these four waterways each year within the ecosystem, which is expected to:
    - support the sustainability of fish stocks within these waterways and enhance the stocks of some fish species from a regional perspective
    - support a more natural functioning ecosystem within these waterways
    - improve recreational fishing opportunities
    - support increased recreational fishing based regional economic activity (e.g. tourism, bait and tackle, vessel and equipment sales etc) which, over time, is expected to deliver regional economic benefits.

6.3.4 Recreational fishery impact mitigation

As detailed in the preceding sections, the final zoning plan will include a range of changes that will displace recreational fishing in some areas of the park and significantly enhance recreational fishing opportunities in other areas.

It is expected that the removal of commercial netting with large mesh gill nets and ring nets from the CP zones within Baffle Creek, Elliott River, the Burrum River system, Great Sandy Strait and Tin Can Inlet and from other CP zones along the western shoreline of K'gari will deliver a significant improvement to the recreational fishing opportunity within these areas. On balance, and at a whole of park scale, it is considered that this outcome will mitigate any loss of recreational fishing access to other areas of the park resulting from the expansion of the MNP zone network.

To support the region's recreational fishing lifestyle and promote future regional economic growth based on nature-based tourism, recreational, charter and sportfishing the government has set aside $6M for the provision of additional/upgraded recreational boating infrastructure (e.g. public boat ramps) within the marine park and $2.5M for the construction of additional artificial reefs within the park.

The provision of alternative fishing locations, through the installation of artificial reefs is expected to provide new recreational fishing opportunities across the park. Depending on their location, these reefs provide additional habitat and recreational fishing opportunities to catch species such as trevally, Spanish mackerel, coral trout, estuary cod, mangrove jack and Jewfish. The installation of several artificial reefs in Moreton Bay Marine Park following its comprehensive zoning plan review in 2008 has successfully created popular recreational fishing locations. The reefs are constructed from purpose built structurally stable reef structures thus maximising productivity and longevity. By providing additional fishing opportunities, artificial reefs are expected to reduce crowding at remaining fishing locations, thereby improving fishing experiences and reducing fishing pressure on natural reefs in the marine park. The economic benefits of artificial reefs have been recently demonstrated in NSW where a 'Social Return on Investment' analysis in 2019 found that government investment in artificial reefs generates benefits such as increased recreational fishing activity, experiences and expenditure, attraction of new visitors and research activity and positive net returns for the State (e.g. $1.18 net benefit per construction dollar).

6.4 Traditional fishing

Traditional fishing is a significant cultural activity for many First Nations peoples. There is a history of traditional fishing in the marine park, with the Bailai, Gurang, Gooreng Gooreng, Taribelang Bunda peoples, the Butchulla people and the Kabi Kabi people having a strong connection with the marine park's sea Country. A number of fish traps remain throughout intertidal and subtidal areas. Many of the techniques traditionally used to fish in the area have influenced contemporary commercial and recreational fishing techniques undertaken in the marine park today (e.g. tunnel netting, set pocket netting, spearfishing).

The GSMP zoning plan recognises section 211 of the *Native Title Act 1993* (C'wealth) and does not affect native title rights and interests, including any activity such as fishing or traditional hunting, carried out in accordance with any native title rights or interests. Zoning plan provisions allow for the traditional use of marine resources including fishing, to be undertaken in all zones of the marine park, including MNP zones.

The zoning plan also allows for carrying out a traditional use of marine resources activity under an accredited TUMRA. A TUMRA is a voluntary, community-led plan for management of the use of traditional resources which describes how Traditional Owner groups work in partnership with the Queensland Government to manage traditional use activities on their sea Country.

Each TUMRA has a committee to manage the agreement and traditional use of marine resources in relevant sea Country, including traditional take, of species such as dugongs and turtles. This management of traditional use is usually based on both cultural lore and contemporary science.

There is currently one TUMRA accredited within part of the GSMP, being the Port Curtis Coral Coast Regional TUMRA, which was most recently re-accredited in April 2019 and will run for 10 years. This TUMRA applies to the sea Country of the Port Curtis Coral Coast Traditional Owner groups (including the Gooreng Gooreng, Gurang, Byellee and Taribelang Bunda people) which extends to the north from Burrum Heads.

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8 Appendices

Appendix 1. Composition of Great Sandy Marine Park Zoning Plan Review Scientific Reference Group (SRG)

Name	Affiliation
Dr Russ Babcock	CSIRO
Dr Michele Barnes	ARC Centre of Excellence for Coral Reef Studies, James Cook University
Prof Bill Carter	University of the Sunshine Coast
Dr Jon Day	ARC Centre of Excellence for Coral Reef Studies, James Cook University
Dr Carissa Klein	The University of Queensland
Dr Andrew Olds	University of the Sunshine Coast
Dr Eva Plaganyi	CSIRO
Dr Susan Rockloff	Central Queensland University
Prof John Rolfe	Central Queensland University
Dr Tim Stevens (Chair)	Griffith University

Appendix 2. Guiding principles recommended by the Great Sandy Marine Park Zoning Plan Review SRG

Bio-physical Guiding Principles		
Criteria	**Principle**	**Explanation**
Habitat representation	Represent a minimum amount of each 'habitat type' in no-take zones	*Protect representative examples of each habitat type within no-take zones to ensure maintenance of habitats and associated biodiversity* and to deliver a precautionary approach to the marine park zoning.* The Scientific Reference Group (SRG) emphasise the need to set effective representation targets considering international mandates, contemporary standards and the expanding body of evidence that demonstrates the biodiversity conservation benefits of no-take zones. Australia is a signatory to the Convention on Biological Diversity which currently aims for at least 10% of each habitat type to be protected in a system of no-take areas by 2020. More recent guidance, such as from the International Union for Conservation of Nature (IUCN) and from research by SRG members, recommends the designation and implementation of at least 30% of each marine habitat in a network of highly protected MPAs and other effective area based conservation measures. The SRG therefore recommends that the review of the Great Sandy Marine Park zoning plan should aim for a **minimum of 30% of each habitat type within the marine park to be protected in a system of no-take zones**[#], noting that certain habitats (e.g. those that are unique or critical to threatened species) may require a greater level of protection in no-take zones. **On 4 August 2020, the SRG provided a revised habitat representation target of a minimum of 30% of the area of vulnerable habitat types and 10-30% of the area of non-vulnerable habitat types.** *Biodiversity is described as the variety of life forms and the habitats that make up a region.
Vulnerable habitats	Protect vulnerable habitats in no-take zones	*Vulnerable habitats and their associated flora and fauna values should be effectively protected in no-take zones. Habitat types defined as 'vulnerable' are typically those that are easily disturbed or transformed by human actions and are slow to recover after disturbance. The extent of protection required depends on the degree of vulnerability of the habitat and may exceed the minimum 30% target required for general habitat representation.* The SRG identify the coral / reef habitats (including coral reefs, reefal gardens, coffee rock, paleochannel reef communities and the gastropod reef), mangroves, saltmarsh and seagrass as the more vulnerable habitat types within the marine park. The SRG recommends that where an area of vulnerable habitat is incorporated into a no-take zone, ideally and where practical, the entirety of that habitat should be included (i.e. include an entire reef, rather than only part of it). The SRG noted that this is unlikely to be possible for the more extensive, vulnerable habitats such as seagrass.

Size	Create larger no-take zones	*Larger no-take zones are generally preferred to minimise edge effects*. No-take zones should be adequately sized to protect each representative area of habitat from relevant threatening processes and should also aim to protect the home range of any focal species within those habitats.* *Edge effects are defined as the change in species composition, physical conditions, or other ecological factors at the boundary between two ecosystems.
Replication	Replicate representative habitat types in no-take zones	*Each habitat type should be protected in more than one no-take zone to account for 'within habitat type' variation (e.g. not all seagrass beds are the same) and to support habitat resilience (e.g. as a precaution against climate change or major localised damage).*
Connectivity	Provide connectivity within the network of no-take zones	*No-take zones should be spaced and located to support the transfer of organisms (offspring, juveniles, adults) and genetic exchange between populations to create connectivity through the network of no-take zones. The spacing required to maintain connectivity between no-take zones can be increased if the no-take zones are larger.* Maintaining connectivity with key habitats adjacent to the marine park is also noted by the SRG as a factor for consideration in marine park zoning.
Ecosystem linkages	Include consideration of ecosystem links among habitats, and of sea and adjacent land uses in determining no-take zones	*Areas that support other habitats or are dependent on other habitats (ecosystem links), should be protected. Past and present uses may have influenced the integrity of biological communities, and need to be considered when choosing no-take zones. For example, existing no-take zones and areas adjacent to terrestrial protected areas are likely to have greater biological integrity than areas that have been used for resource exploitation. Building upon these areas is a good starting point for an enhanced network of no-take zones.*
Vulnerable life stages	Protect vulnerable life-stages of species in no-take zones	*Vulnerable life stages of species should be effectively protected in no-take zones. The inclusion of localities where a species becomes especially vulnerable, or which are vital for completion of their life cycle (such as critical nursery areas, spawning or nesting sites), adds value to a candidate no-take zone.*
Species and areas of special interest	Include species, populations and areas of special interest in no-take zones	*Species, populations and areas of conservation concern (e.g. locations critical to threatened, rare, endangered or restricted-range species and areas with particular geomorphologic features or naturalness) should be effectively protected in no-take zones.* The extent of protection required, depends on the degree of vulnerability, with the SRG noting that some locations that are critical to a species of conservation concern may require the entire area of that habitat to be protected in a no-take zone.
Resilience	Provide for future resilience against natural or human-induced changes, climate change or threatening processes	*Areas that are less likely to be subject to impacts and have a high degree of naturalness (i.e. less exploited) should be considered for no-take zones to ensure greater resilience against future change or threats.* The SRG notes that inclusion of preservation zones (no-take, no-entry areas) over some examples of pristine habitat is important to: • support resilience to climate change, • allow ongoing monitoring of climate change impacts, and • understand the ecological limits of natural systems undisturbed from human use.

Integrated management	Support no-take zones with complementary zoning, designated areas and other management	*The core network on no-take zones should be supported by complementary zoning of surrounding areas and the implementation of designated areas (e.g. Go Slow Areas, No Anchoring Areas) and other management arrangements (e.g., temporal closures) to address specific threats and to deliver a comprehensive and integrated management framework that protects the biophysical values within the marine park.*

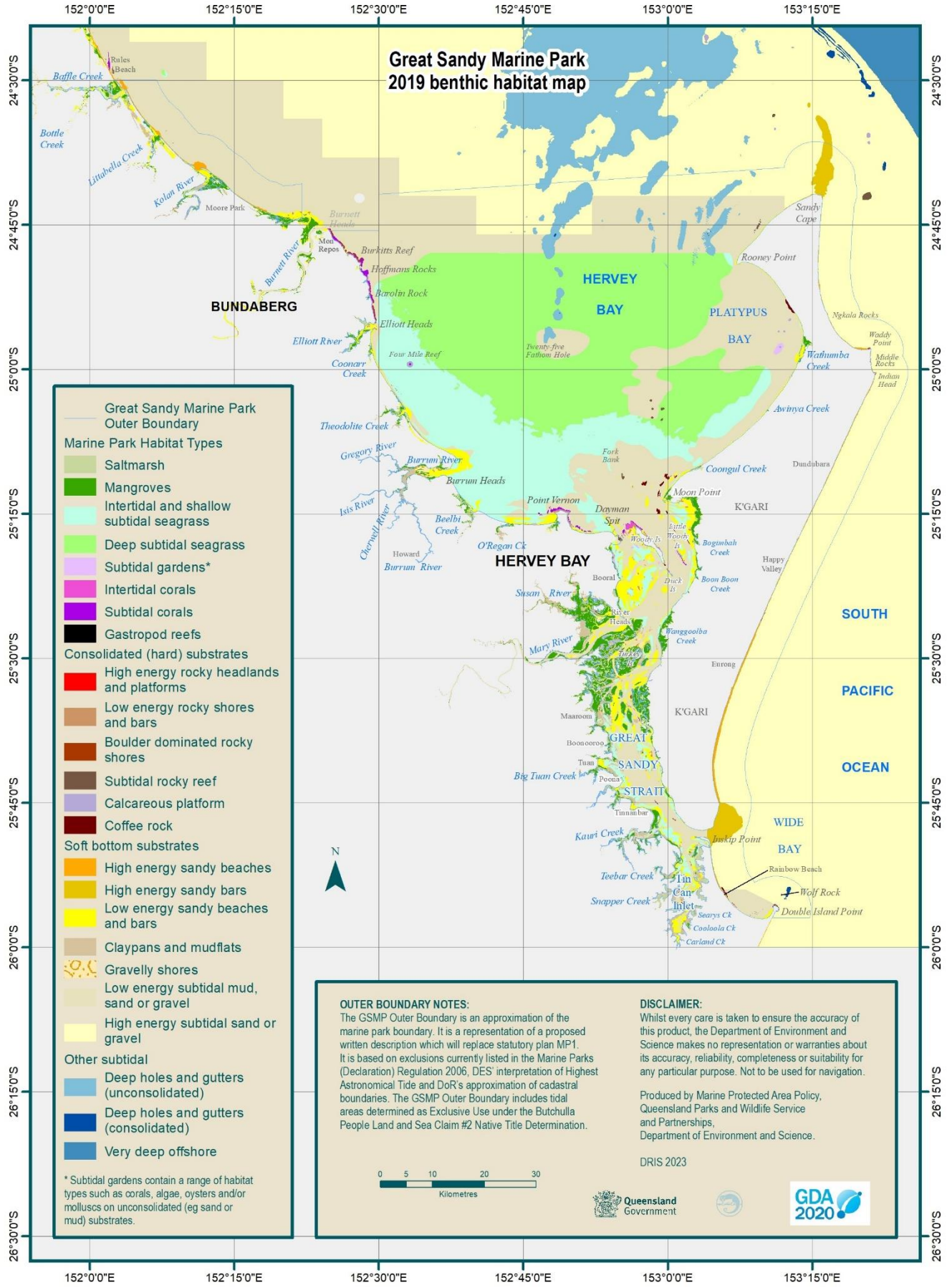
Socio-economic Guiding Principles		
Criteria	**Principle**	**Explanation**
Balancing conservation and sustainable use	Ensure the zoning considers social, economic, cultural and environmental costs and benefits	*Zoning selection should be made considering the costs and benefits to the community (being multiple communities of place and interest). This acknowledges the objective to achieve a balance between conservation goals and the need for continued sustainable use.* The SRG notes that recent social research has identified that there are sites within marine parks that are highly valued by users, due to the quality of experience that they provide (e.g. a peaceful amenity value), rather than for more obvious ecological, economic or social values. These social values should also be recognised and factored into zoning considerations, particularly in the face of coastal population growth, and corresponding trends in tourism and recreational vessel numbers and patterns of use.
Minimise impacts	Minimise the impact of zoning on human interactions with the marine park including access, activities, values and aspirations	*Zoning should minimise impacts on users of the marine park, including minimising impact on reasonable access to natural food resources that can be obtained with a minimal carbon footprint. For example, fishing and boating should remain a significant and integral activity within the marine park. Engagement of stakeholders and the community in a participatory process that is open and transparent should be ongoing throughout the review process.*
Support First Nations peoples' interests	Support First Nations peoples' aspirations and protect sites of cultural importance	*Zoning should support First Nations peoples' aspirations for their sea Country and where appropriate, manage threats to sites of cultural importance (e.g. no-anchoring provisions to protect fish traps).* *Open and transparent engagement with First Nations peoples should be ongoing throughout the review process and Native Title interests should be acknowledged.*
Management complementarity	Complement, where possible, other management mechanisms and arrangements that affect the marine park	*In considering zoning options, other arrangements that may protect and/or manage the marine environment should be taken into account to minimise conflict and provide greater operational clarity. As part of the review, other environmental conservation legislation, management of use and major initiatives to protect the marine park's values should be considered. For example, policies and strategies dealing with marine pollution, international wetlands, national parks, declared Fish Habitat Areas, fisheries management, water quality and coastal development all have relevance to marine park planning and management.*

Efficient and effective	Maximise the understanding of the marine park and the manageability of zones	*The final zoning plan should consider operational and implementation issues to help provide for efficient management and enforcement. Uses in the marine park should be consistent, where practicable, with other state marine parks to help the community understand and appreciate conservation and use of the marine environment. An awareness campaign to maximise the understanding of the marine park should also be conducted.*

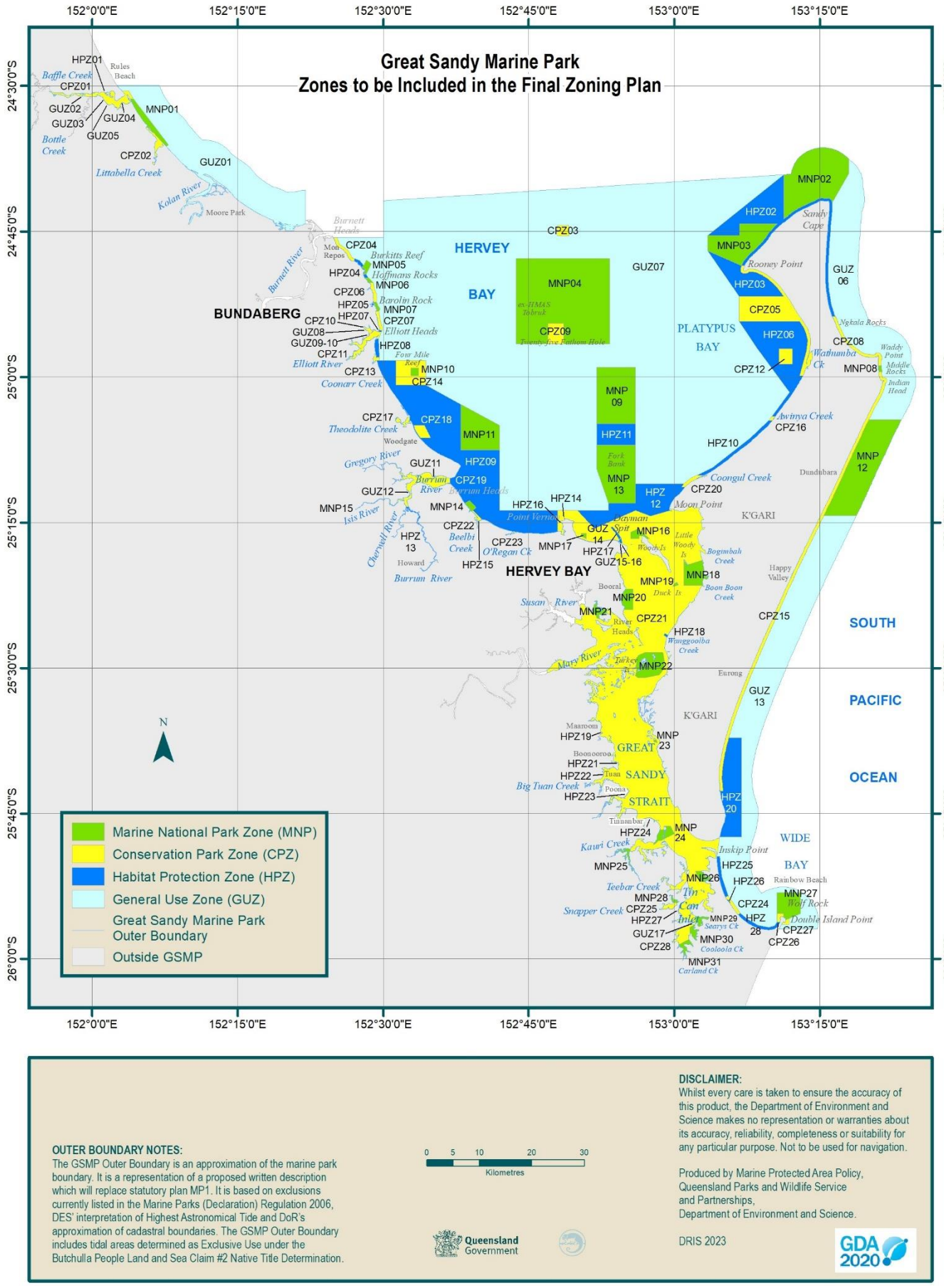
In addition to the above bio-physical and socio-economic principles the SRG recommends the following general management principles should also be applied to the zoning plan review:

1. No-take zones should be considered as a long-term conservation mechanism and be retained even if the habitats within these zones change over time.
2. Designated areas should be applied to support and enhance the underlying zoning provisions.
3. Design of the zoning should take into account scientific best practice in experimental design and monitoring.
4. In drawing zone boundaries or management provisions, the precautionary principle should be employed, recognizing limitations of the extent and accuracy of current habitat mapping within GSMP.

Appendix 3. Great Sandy Marine Park habitat map



Appendix 4. Great Sandy Marine Park Final Zoning Plan (zones)



OUTER BOUNDARY NOTES:
The GSMP Outer Boundary is an approximation of the marine park boundary. It is a representation of a proposed written description which will replace statutory plan MP1. It is based on exclusions currently listed in the Marine Parks (Declaration) Regulation 2006, DES' interpretation of Highest Astronomical Tide and DoR's approximation of cadastral boundaries. The GSMP Outer Boundary includes tidal areas determined as Exclusive Use under the Butchulla People Land and Sea Claim #2 Native Title Determination.

Queensland Government

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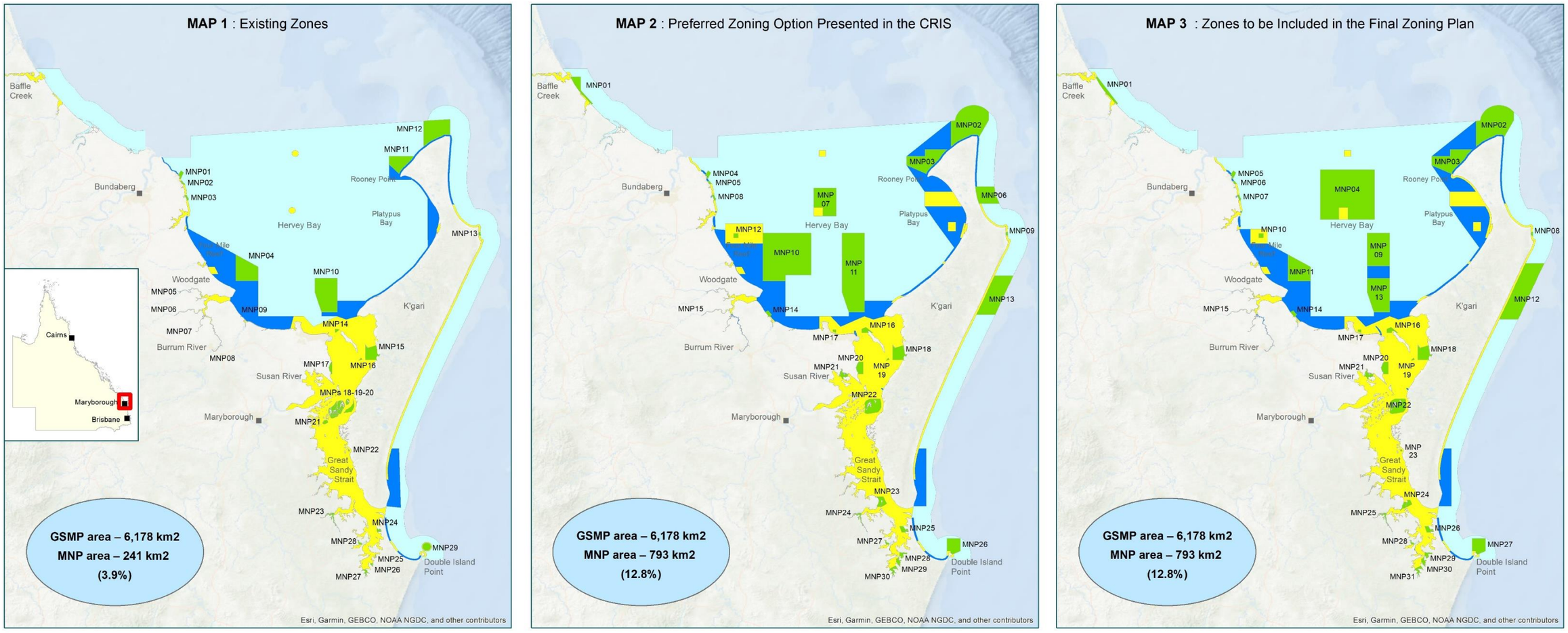
Produced by Marine Protected Area Policy, Queensland Parks and Wildlife Service and Partnerships, Department of Environment and Science.

DRIS 2023

GDA 2020

Appendix 5. Comparison of Great Sandy Marine Park existing zones, preferred zoning option presented in the CRIS, and the zones to be included in the Final Zoning Plan



Appendix 6. Basis for final zoning

Note: Reference to 'existing zone' refers to Marine Parks (Great Sandy) Zoning Plan 2017, and ZP refers to zoning plan.

Marine National Park Zones

Final ZP Identifier	**MNP01 - Littabella**
Consultation RIS Identifier	MNP01 - Near Baffle Creek
Existing zoning	GUZ01A, CPZ02
Change from existing ZP	Establish a new MNP zone.
Total area	8.6 km^2
Justification	• Protects a 2 km^2 representative area of high energy open sandy foreshore habitat (high energy sandy beach) with the remainder predominantly sandy mud habitat (low energy subtidal mud, sand or gravel) within the north-western foreshore area of Hervey Bay. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these open sandy foreshore habitat types including infauna, invertebrates and epibenthic fish. • Directly adjoins the Mouth of Baffle Creek Conservation Park, providing integrated protected area status and protection across the marine and terrestrial interface. • Complements the adjacent Baffle Creek declared Fish Habitat Area. • Avoids the Baffle Creek mouth that is a popular fishing location. • Location avoids existing marine aquaculture site. • Incorporates the mouth of Littabella Creek. • Location minimises potential interaction with offshore trawling. • Increases proportion of MNP zones in the north-western area of Hervey Bay. • Increases representation of high energy sandy beaches (is the key area in the MNP zone network for representation of this habitat type) and low energy subtidal mud, sand or gravel habitat.
Final ZP Identifier	**MNP02 - Breaksea Spit**
Consultation RIS Identifier	MNP02 - Breaksea Spit
Existing zoning	MNP12, GUZ01C
Change from existing ZP	Extend existing MNP zone to the north and east.

Total area	98 km^2
Justification	• Protects a 95 km^2 representative area of high energy subtidal sands and high energy sandy bar habitats at the northern end of K'gari. • Comprehensively incorporates that part of Breaksea Spit that is within Queensland coastal waters (and the marine park), as a significant and unique geomorphological feature. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these high energy sandy habitat types. • Includes key courtship, inter-nesting and basking areas for vulnerable green turtles (*Chelonia mydas*) and endangered loggerhead turtles (*Caretta caretta*). • Overlays a key migratory pathway for loggerhead turtles returning to nest from southern areas including Moreton Bay. • Includes key habitat for vulnerable dugongs (*Dugong dugon*), including those undertaking seasonal migrations across Hervey Bay in search of warmer waters, and dugongs migrating from southern areas including Moreton Bay. • Partially overlaps the Fraser Island declared Fish Habitat Area. • Boundary extension aligns with revised outer boundary of the marine park and the Fraser Island declared Fish Habitat Area. • Location minimises impacts on offshore trawl fishery. • Increases representation of high energy sandy bars (is the key area in the MNP zone network for representation of this habitat type) and high energy subtidal sands.
Final ZP Identifier	**MNP03 - Rooney Point**
Consultation RIS Identifier	MNP03 - Ferguson Spit
Existing zoning	MNP11, HPZ03, GUZ01B
Change from existing ZP	Extend existing MNP zone west and north.
Total area	50 km^2
Justification	• Protects a 50 km^2 representative area of subtidal sand (low energy subtidal mud, sand or gravel), deep holes and gutters (unconsolidated), subtidal rocky reef, coffee rock and a unique gastropod reef, at the north-eastern extremity of Hervey Bay. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these subtidal sand and rocky reef habitat types. • Incorporates and provides effective protection for the known extent of a rare, deep water reef community (approximately 30m depth), that provides habitat for encrusting *Siliquariidae sp.* gastropods that live in close association with *Irciniidae sp.* sponges and attracts assemblages of benthic and pelagic fish species. • Includes the entirety of Keiths Reef, a subtidal rocky reef habitat. • Includes key courtship, inter-nesting and feeding area for vulnerable green and endangered loggerhead turtles. • Includes key habitat for vulnerable dugong, including those undertaking seasonal migrations across Hervey Bay in search of warmer waters, and dugongs migrating from southern areas including Moreton Bay.

	• Overlays part of a key migration pathway used by loggerhead turtles returning to Hervey Bay to nest from southern areas (including Moreton Bay) and by humpback whales (*Megaptera novaeangliae*), including mother-calf pairs, during their migration to Antarctica. • Partially overlaps the Fraser Island declared Fish Habitat Area. • Increases representation of unvegetated, low energy sandy habitat (low energy subtidal mud, sand or gravel) (is a key area in the MNP zone network for representation of this habitat type), deep holes and gutters (unconsolidated) and vulnerable coffee rock habitat.
Final ZP Identifier	**MNP04 - Central Hervey Bay**
Consultation RIS Identifier	MNP07 - Hervey Bay Paleochannel
Existing zoning	GUZ01B
Change from existing ZP	Establish a new MNP zone.
Total area	254 km^2
Justification	• Provides protection for a representative section of the Mary River paleochannel (ancient river channel) deep water habitats that extend through Hervey Bay. • Protects a 234 km^2 representative area of deep subtidal seagrass (>15m depth) in the northern section of Hervey Bay which recent (2022) research has shown was the most resilient to flood impacts and an important refuge area for turtles, while other seagrass areas recover. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these seagrass and deep holes and gutters (unconsolidated) habitat types including vulnerable dugong. • Incorporates deep channel areas that many species use as routes between areas of habitat. • Incorporates habitat for deep water reef communities that may offer value as refugia for coral species affected by climate change. • Directly adjoins the Twenty-five Fathom Hole CP zone and significantly increases the area of paleochannel that is currently protected within this CP zone. • Very high density of dugongs recorded in 2016 aerial surveys. • Interim results from late 2022 aerial surveys show dugongs concentrated towards the middle, subtidal area of Hervey Bay. This highlights the importance of this area of deep subtidal seagrass area for dugongs, especially in times when a lack of shallow and intertidal seagrass in inshore areas means less food resources are available. • Location minimises impact on offshore trawl fisheries. • Incorporates the ex-HMAS Tobruk dive site. • Increases representation of vulnerable deep subtidal seagrass and deep holes and gutters (unconsolidated) (is the key area in the MNP zone network for representation of these habitat types), as well as low energy subtidal mud, sand or gravel habitat.
Final ZP Identifier	**MNP05 - Burkitts Reef**
Consultation RIS Identifier	MNP04 - Burkitts Reef

Existing zoning	MNP01
Change from existing ZP	Minor modification of existing MNP zone boundary.
Total area	2km^2
Justification	• Protects a 2 km^2 representative area of inshore fringing coral reef and rocky basalt foreshore habitat (boulder dominated rocky shores, intertidal and subtidal corals habitat types) along the Woongarra coastline of Hervey Bay. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these coral and rocky reef habitat types. • Supports a diverse soft coral community with a high abundance of finger leather coral (*Cladiella sp.)* and other less common Hervey Bay coral species. • Generally represents the southern limit of inshore fringing subtidal coral reef communities. • Includes an important endangered loggerhead turtle inter-nesting and transit area adjacent to a significant nesting beach. • Clarifies the inshore and offshore boundaries of the MNP zone with geographic coordinates. • Inshore boundary not extended to HAT to allow for consideration of future coastal protection works at adjacent properties. • Key area in the MNP zone network for representation of subtidal coral habitat.
Final ZP Identifier	**MNP06 - Hoffmans Rocks**
Consultation RIS Identifier	MNP05 - Hoffmans Rocks
Existing zoning	MNP02, CPZ03, GUZ01B
Change from existing ZP	Minor reduction in size of existing MNP zone via modification to southern boundary.
Total area	0.6 km^2
Justification	• Protects a 0.6 km^2 representative area of inshore fringing coral reef and rocky basalt foreshore habitat (intertidal and subtidal corals) along the Woongarra coastline of Hervey Bay. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these rocky reef habitat types. Supports predominantly soft coral communities and some hard coral species (e.g. *Acropora* spp.). • Generally represents the southern limit of inshore fringing subtidal coral reef communities. • Includes an important endangered loggerhead turtle inter-nesting and transit area near a significant nesting beach. • Existing southern boundary moved north to clarify the boundary location, reduce conflict and address long-term compliance issues. • Inshore boundary of MNP zone moved closer inshore (approximately 30m from HAT) to protect intertidal corals and geographic coordinates define the boundary (inshore boundary not extended to HAT to allow for consideration of future coastal protection works at adjacent properties). • Key area in the MNP zone network for representation of subtidal coral habitat.

Final ZP Identifier	**MNP07 - Barolin Rock**
Consultation RIS Identifier	MNP08 - Barolin Rock
Existing zoning	MNP03
Change from existing ZP	Minor reduction in size of existing MNP zone via modification to western (inshore) boundary.
Total area	1 km^2
Justification	• Protects a 1 km^2 representative area of fringing coral reef and rocky basalt foreshore habitat (intertidal and subtidal corals, boulder dominated rocky shores) along the Woongarra coastline of Hervey Bay. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these rocky reef habitat types. • Includes areas recognised for their high soft coral coverage (particularly *Cladiella spp*.) and diversity. • Includes an important endangered loggerhead turtle inter-nesting and transit area. • Adjacent to a nesting beach used by a small number of loggerhead turtles. • Inshore boundary of MNP zone moved offshore (approximately 30m from HAT) to allow for consideration of future coastal protection works at adjacent properties and geographic coordinates define the boundary.
Final ZP Identifier	**MNP08 - Champagne Pools**
Consultation RIS Identifier	MNP09 - Middle Rocks
Existing zoning	MNP13
Change from existing ZP	Retain existing MNP zone.
Total area	0.6 km^2
Justification	• Protects a 0.6 km^2 representative area of exposed headland and rocky platform habitat (high energy rocky headlands and platforms and high energy subtidal sands) on the north-eastern shoreline of K'gari. • Protects a key geological feature of the K'gari coastline, which along with Waddy Point and Indian Head, traps north moving sand and creates the 'anchor points' for the K'gari sand mass. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these subtidal exposed headland and rocky platform habitat types, including rock pool fauna communities, such as fish, anemones and echinoderms. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Partially overlays the Fraser Island declared Fish Habitat Area.

	• Partially overlays the K'gari (Fraser Island) World Heritage Area.
Final ZP Identifier	**MNP09 - Southern Hervey Bay**
Consultation RIS Identifier	MNP11 - Fork Bank
Existing zoning	GUZ01B
Change from existing ZP	Establish a new MNP zone.
Total area	72.5 km^2
Current zoning	GUZ
Justification	• Protects a 69 km^2 representative area of deep subtidal seagrass (>15m depth) and 2km^2 of unvegetated sand habitat (low energy subtidal mud, sand or gravel) within central and southern Hervey Bay. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these seagrass and sandy habitat types. • Provides protection for additional resilient seagrass habitat important to turtles and vulnerable dugong. • Includes an important resting, transit and feeding area for dugong and turtles. • Location avoids navigation channels and minimises impact on trawl fishery. • Increases representation of vulnerable deep subtidal seagrass and increases representation of low energy subtidal mud, sand or gravel habitat.
Final ZP Identifier	**MNP10 - Four Mile Reef**
Consultation RIS Identifier	MNP12 - Four Mile Reef
Existing zoning	GUZ01B
Change from existing ZP	Establish a new MNP zone.
Total area	2 km^2
Current zoning	GUZ
Justification	• Protects a 0.9 km^2 representative area of calcareous platform, in addition to intertidal and shallow subtidal seagrass, and subtidal coral habitat. • Protects the only fully subtidal and deepest coral reef (10m below Lowest Astronomical Tide) within the marine park that has the following key features: ○ the only reef in the marine park with a solid calcareous reef base and a vertical, continuous building structure, similar to that of

	reefs within offshore regions of the Great Barrier Reef ○ a coral community that is dominated by high-density hard corals (*Pocillopora sp*.) which is unusual at both a local and regional level, showing parallels to coral reef formations found in Central/South America ○ value as a climate change refuge due to its depth and location (~5km offshore) which protect the reef from extreme weather and flood water impacts. • Protects a representative example of (and refuge for) the flora and fauna species associated with this coral reef habitat. • Incorporates the entire reef system. • Size provides a 100m buffer from the outer reef edge. • Increases representation of calcareous platform (is the key area within the MNP zone network for representation of this habitat type).
Final ZP Identifier	**MNP11 - Offshore Woodgate**
Consultation RIS Identifier	MNP10 - Offshore of Woodgate
Existing zoning	MNP04
Change from existing ZP	Retain existing MNP zone.
Total area	45 km^2
Justification	• Protects a 44 km^2 representative area of shallow subtidal seagrass habitat (to a depth of 15m) within western Hervey Bay (is the key area in the MNP zone network for representation of this habitat type) • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these seagrass habitat types. • Includes an important resting, transit and feeding area for vulnerable dugong and turtles. • Minimises impact on fisheries (nearshore recreational and commercial fisheries and offshore trawl fisheries). • Location avoids existing and planned aquaculture areas. • Protects vulnerable shallow subtidal seagrass habitat important to threatened species - turtles and dugong.
Final ZP Identifier	**MNP12 - Offshore Dundubara**
Consultation RIS Identifier	MNP13 - Offshore of Wyuna Creek
Existing zoning	GUZ01C
Change from existing ZP	Establish a new MNP zone.
Total area	102 km^2

Justification	• Protects a 102 km^2 representative area of high energy subtidal sand habitat within the waters offshore from K'gari to the extent of the marine park. • Protects a representative example of (and refuge for) the flora and fauna species associated with this high energy sand habitat. • Overlays part of a key migration pathway for species such as sea mullet (*Mugil cephalus*), tailor (*Pomatomus saltatrix*), eastern king prawns (*Penaeus plebejus*), vulnerable dugongs and endangered loggerhead turtles. • Location minimises impacts on public use of the beach for fishing and the offshore trawl fishery. • Increases representation of high energy subtidal sands (is the key area in the MNP zone network for representation of this habitat type).
Final ZP Identifier	**MNP13 - Fork Bank**
Consultation RIS Identifier	MNP11 - Fork Bank
Existing zoning	MNP10
Change from existing ZP	Retain existing MNP zone.
Total area	68 km^2
Justification	• Protects a 19 km^2 representative area of shallow subtidal seagrass (to depth of 15m) and 49 km^2 of unvegetated low energy sandy habitat within central and southern Hervey Bay. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these seagrass and sandy habitat types. • Includes an important resting, transit and feeding area for vulnerable dugong and turtles. • Location avoids navigation channels and minimises impact on trawl fishery. • Key area in the MNP zone network for representation of low energy subtidal mud, sand or gravel habitat.
Final ZP Identifier	**MNP14 - Marsh Creek**
Consultation RIS Identifier	MNP14 - Marsh Creek
Existing zoning	MNP09, HPZ02
Change from existing ZP	Extend existing MNP zone to the north, south and offshore.
Total area	2 km^2
Justification	• Protects a 2 km^2 representative area of estuarine and foreshore habitat (intertidal and shallow subtidal seagrass, low energy sandy habitat, and a small area of mangrove and saltmarsh) on the south-western side of Hervey Bay. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these upper estuarine and foreshore habitat types.

	• Directly adjoins a shorebird high tide roost site known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of the critically endangered eastern curlew (*Numenius madagascariensis*). • Protects important seagrass habitat used by high densities of vulnerable dugong. • Directly adjoins the Burrum Coast National Park, providing integrated national park status, connectivity with protected mangrove and saltmarsh habitats and protection area across the marine and terrestrial interface. • Overlays part of the Beelbi declared Fish Habitat Area. • Incorporates the mouth of Marsh Creek and ensures the MNP zone can accommodate natural creek movement within its boundary. • Location avoids navigation channels. • Aligns the southern boundary with revised southern boundary of the Go Slow Area. • Increases representation of vulnerable seagrass, mangrove and saltmarsh habitat and unvegetated sandy (low energy subtidal mud, sand or gravel) habitat.
Final ZP Identifier	**MNP15 - Isis River**
Consultation RIS Identifier	MNP15 - Isis River
Existing zoning	MNP06
Change from existing ZP	Minor modification to existing MNP zone boundary.
Total area	0.2km^2
Justification	• Protects a 0.2 km^2 representative area of upper estuarine habitat (low energy rocky shores and bars) in the Isis River system. • Alignment of downstream boundary with the boundary of the Burrum declared Fish Habitat Area (results in loss of 600m length of waterway that is currently MNP zone adjoining freehold land). • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these upper estuarine habitat types.
Final ZP Identifier	**MNP16 - Woody Island**
Consultation RIS Identifier	MNP16 - Woody Island
Existing zoning	MNP14, CPZ09
Change from existing ZP	Extend existing MNP zone in all directions.
Total area	3.25 km^2

Justification	• Protects 2 km^2 a representative area of coral reef habitat (intertidal and subtidal corals, subtidal gardens) with the remainder predominantly low energy habitats e.g., rocky shores and sandy beaches and bars, within the northern Great Sandy Strait. • The increased area of the zone reflects the size and shape of the reef enhancing protection for the greater reef ecosystem. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these reef habitat types. • Includes the richest individual coral reef site in the marine park with 43 hard coral species recorded and supports the largest area and highest cover of Near Threatened Acropora digitifera (IUCN red list of threatened species). • Incorporates unique and extensive (covering 300-400m^2) monospecific stands of branching coral (Acropora sp.) and brain coral (Family Faviidae) colonies considered to be more than a century old. • Protects a coral community that is historically one of the marine park's more resilient communities, despite its relatively close proximity the Mary River mouth and associated frequency of flooding impacts. • Given the levels of coral abundance and diversity and its location, the reef is well-placed to provide larvae southward to reefs in the Great Sandy Strait, westward to reefs along the Hervey Bay foreshore and northward to reefs along the Woongarra coastline, making it important for post-disturbance recovery of reefs throughout the marine park. • Location avoids navigational channels and adjacent artificial reef site. • Minimises impacts on access and use of Woody Island and its surrounding habitats. • Location allows recreational fishing to continue on the north-west side of Woody Island. • Increases representation of vulnerable coral and subtidal garden habitat types as well as unvegetated sandy habitat types. • Key area in the MNP network for representation of intertidal coral.
Final ZP Identifier	**MNP17 - Pialba Reef**
Consultation RIS Identifier	MNP17 - Pialba
Existing zoning	CPZ09
Change from existing ZP	Establish a new MNP zone.
Total area	0.7 km^2

Justification	• Protects a 0.7 km^2 representative area of inshore coral reef habitat (subtidal coral, low energy subtidal sand, calcareous platform and gravelly shores) on the southern foreshore of Hervey Bay.
	• Includes an example of a healthy fringing coral reef formation, that:
	  ○ is estimated to be 6,500 years old
	  ○ supports seven of the eleven known species of *Turbinaria* coral recorded in the Indo-Pacific region, including Vulnerable *Turbinaria reniformes* (IUCN red list of threatened species) and a suite of branching soft corals such as *Cladiella sp*
	  ○ is highly resilient, despite its proximity to developed areas and exposure to runoff from flood events.
	• Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these inshore coral reef habitat types.
	• Location minimises impacts on public uses of the shoreline (e.g. fishing from the beach).

	• Incorporates the entire reef system. • Increases representation of vulnerable coral reef habitats and low energy subtidal mud, sand or gravel habitat.
Final ZP Identifier	**MNP18 - Little Woody Island**
Consultation RIS Identifier	MNP18 - Little Woody Island
Existing zoning	MNP15
Change from existing ZP	Retain existing MNP zone.
Total area	15 km^2
Justification	• Protects a 15 km^2 representative area of diverse, high-quality habitats (one creek system, saltmarsh, mangroves, seagrass, corals, subtidal gardens, low energy beaches and bars) within the northern Great Sandy Strait. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these diverse habitat types. • Includes a significant shorebird high tide roost site known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of both the critically endangered eastern curlew (*Numenius madagascariensis*) and whimbrel (*Numenius phaeopus*). • Protects area important to transiting turtles and vulnerable Australian humpback dolphins (*Sousa sahulensis*). • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Historically included significant sponge gardens growing on a course gritty substrate along with soft corals, hydroids, gorgonians, sea pens, worm shell reefs and a low density cover of hard corals, however these were heavily impacted by floods in 2011 and are yet to recover.
Final ZP Identifier	**MNP19 - Duck Island**
Consultation RIS Identifier	MNP19 - Duck Island
Existing zoning	MNP16, CPZ09
Change from existing ZP	Minor modification of existing MNP zone boundary.
Total area	0.4km^2
Justification	• Protects a representative area of estuarine habitat (low energy sandy beaches and bars, seagrass and a small amount calcareous platform) within the northern Great Sandy Strait. • Protects a representative example of (and refuge for) the flora and fauna species associated with these diverse habitat types.

	• Includes a significant shorebird high tide roost site known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of the vulnerable bar-tailed godwit (*Limosa lapponica*) and critically endangered eastern curlew (*Numenius madagascariensis*). • Overlays part of the Great Sandy Strait Ramsar internationally important wetland. • Revised boundary more accurately incorporates the habitats originally intended for inclusion when the marine park was established.
Final ZP Identifier	**MNP20 - Mangrove Point**
Consultation RIS Identifier	MNP20 - Mangrove Point
Existing zoning	MNP17, CPZ09
Change from existing ZP	Extend existing MNP zone to the east.
Total area	7 km^2
Justification	• Protects a 7 km^2 representative area of estuarine habitat (mangrove, saltmarsh, intertidal low energy beach and bars, low energy subtidal mud, sand or gravel and a small amount of intertidal and shallow subtidal seagrass) within the northern Great Sandy Strait. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these estuarine habitat types. • High use foraging area for endangered loggerhead and vulnerable green turtles, and basking area for green turtles (creek area near the most north-west boundary point of the MNP zone). • Includes habitat for the vulnerable water mouse (*Xeromys myoides*) and is a feeding area for shorebirds. • Adjoins a significant shorebird high tide roost site that supports internationally significant numbers (i.e. 1% of the East Asian-Australasian Flyway population) of the critically endangered eastern curlew (*Numenius madagascariensis*), as well as the vulnerable bar-tailed godwit (*Limosa lapponica*) and whimbrel (*Numenius phaeopus*). • Overlays part of the Great Sandy Strait Ramsar internationally important wetland. • Increases representation of vulnerable seagrass and unvegetated low energy (sandy beaches and bars, and subtidal mud, sand or gravel) habitats.
Final ZP Identifier	**MNP21 - Susan River**
Consultation RIS Identifier	MNP21 - Susan River
Existing zoning	CPZ09
Change from existing ZP	Establish a new MNP zone.
Total area	4 km^2

Justification	• Protects a 4 km^2 representative area of upper estuarine mangrove dominated habitat (mangrove, saltmarsh, claypan and mudflat habitats) within the Susan River. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these upper estuarine habitat types. • Includes stands of cannonball mangroves (*Xylocarpus granatum*) which are at the southern limit of their distribution. • Includes Grey (*Avicennia marina*) and River (*Aegiceras corniculatum*) mangrove stands, a recognised habitat for the vulnerable Illidge's ant-blue butterfly (*Acrodipsas illidgei*). • Adjacent to several significant shorebird high tide roost sites known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of the critically endangered eastern curlew (*Numenius madagascariensis*) and sharp-tailed sandpiper (*Calidris acuminata*). • Overlays part of the Susan River declared Fish Habitat Area. • Location of zone boundary aims to minimise impacts on the commercial mud crab fishery. • Increases representation of vulnerable mangrove and saltmarsh, as well as unvegetated claypan and mudflat habitats.
Final ZP Identifier	**MNP22 - Turkey, Bookar, Walsh Islands**
Consultation RIS Identifier	MNP22 - Bookar, Walsh, Turkey Islands
Existing zoning	MNP18, MNP19, MNP20, CPZ09
Change from existing ZP	Consolidate existing MNP18 and MNP20 and the eastern side of MNP19 into one expanded MNP zone.
Total area	19 km^2
Justification	• Protects a 19km^2 representative area of mangrove island and estuarine habitats (mangrove, saltmarsh, seagrass, mudflat, sandy habitats) within the central Great Sandy Strait. • Provides a representative example of (and refuge for) the flora and fauna species associated with these mangrove island and estuarine habitat types. • Includes foraging areas for endangered loggerhead turtles (*Caretta caretta*), vulnerable dugong and Australian humpback dolphins. • Includes a significant shorebird high tide roost site known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of the critically endangered eastern curlew (*Numenius madagascariensis*), grey-tailed tattler (*Tringa brevipes*) and whimbrel (*Numenius phaeopus*). • Overlays part of both the Great Sandy Strait Ramsar internationally important wetland and Maaroom declared Fish Habitat Area. • Location avoids primary navigation channels. • Addresses long-term boundary uncertainty and compliance matters. • Utilises geographic coordinates to improve boundary definition. • Increases representation of vulnerable mangrove, saltmarsh and intertidal and shallow subtidal seagrass habitat types and unvegetated, low energy habitats (sandy beaches and bars and subtidal mud, sand or gravel), claypans and mudflats and gravelly shores habitat types. • Key area in the MNP network for representation of mangroves and saltmarsh habitats.

Final ZP Identifier	**MNP23 - Garrys Anchorage**
Consultation RIS Identifier	N/A (Additional refinement of the marine park outer boundary post consultation now includes the existing MNP zone)
Existing zoning	MNP22
Change from existing ZP	Retain existing MNP zone.
Total area	0.3 km^2
Justification	• Protects a 0.3 km^2 representative area of mangroves, mudflats and low energy sandy beaches and bars in the central Great Sandy Strait. • Overlays part of the Maaroom declared Fish Habitat Area. • Overlays the K'gari (Fraser Island) World Heritage Area.
Final ZP Identifier	**MNP24 - Cowra Point**
Consultation RIS Identifier	MNP23 - Cowra Point
Existing zoning	CPZ09
Change from existing ZP	Establish a new MNP zone.
Total area	5 km^2
Justification	• Protects a 5 km^2 representative area of shallow estuarine habitats (saltmarsh, exposed mangroves, intertidal and shallow subtidal seagrass, sandy beaches and bars, claypans and mudflats) within the southern Great Sandy Strait. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these shallow estuarine habitat types. • Directly adjacent to Great Sandy Conservation Park, providing integrated protected area status and protection across the marine and terrestrial interface. • Protects shallow water habitats, important for foraging vulnerable green turtles and very high densities of vulnerable dugong. • Includes habitat for the vulnerable water mouse (*Xeromys myoides*). • Overlays part of the Kauri Creek declared Fish Habitat Area. • Eastern boundary aligns with proposed expansion to Go Slow Area for turtles and dugong. • Location avoids navigation channels and transit lane. • Additional MNP zone in southern part of Great Sandy Strait. • Protects areas of mangrove and saltmarsh abutting a natural area with potential for landward migration of these habitats in response to sea level rise. • Increases representation of, and provides for connectivity between, vulnerable mangrove, seagrass and saltmarsh habitats.

Final ZP Identifier	**MNP25 - Kauri Creek**
Consultation RIS Identifier	MNP24 - Kauri Creek
Existing zoning	MNP23
Change from existing ZP	Retain existing MNP zone.
Total area	2.5 km^2
Justification	• Protects a 2.5 km^2 representative area of mid and upper estuarine habitats (mangrove, saltmarsh, claypan, rock bar, mudflat and sandy habitats) within a larger mainland waterway at the southern end of the Great Sandy Strait. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these mid and upper estuarine habitat types. • Directly adjoins the Wide Bay Military Training Area which limits landside access and land-based impacts to the creek. • Includes habitat for the vulnerable water mouse (*Xeromys myoides*). • Overlays part of both the Great Sandy Strait Ramsar internationally important wetland and the Kauri Creek declared Fish Habitat Area. • Protects areas of vulnerable mangrove and saltmarsh habitat types abutting a natural area with potential for landward migration of these habitats in response to sea level rise.
Final ZP Identifier	**MNP26 - Myers Creek**
Consultation RIS Identifier	MNP25 - Myers Creek
Existing zoning	MNP24, CPZ09
Change from existing ZP	Extend existing MNP zone to the north, south and west.
Total area	3 km^2
Justification	• Protects a 3 km^2 representative area of shallow water estuarine habitats (saltmarsh, seagrass, claypan, mudflats, sandy beach and bar habitats, coffee rock ledge) on the western side of the Inskip Peninsula. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these shallow estuarine habitat types. • Provides more comprehensive protection of the entire Myers Creek estuary. • Protects shallow water habitats used by vulnerable green turtles. • Overlays part of the Kauri Creek declared Fish Habitat Area. • Protects areas of vulnerable saltmarsh habitat type abutting a natural area with potential for landward migration of this habitat in response to sea level rise. • Provides connectivity across complementary vulnerable habitats.

	• Increases representation of vulnerable coffee rock (Teebar Ledge), unvegetated low energy sandy and claypans and mudflats habitats.
Final ZP Identifier	**MNP27 - Wolf Rock**
Consultation RIS Identifier	MNP26 - Wolf Rock
Existing zoning	MNP29, BUZ01, CPZ18, GUZ01C
Change from existing ZP	Extend existing MNP zone.
Total area	18 km^2
Justification	• Protects an 18 km^2 representative area of high energy subtidal sand or gravel, deep holes and gutters (consolidated) and subtidal rocky reef at Wolf Rock, near Double Island Point. • Protects an area of nationally significant habitat for the critically endangered east coast population of grey nurse sharks (*Carcharias taurus*). • Provides more effective protection of the grey nurse shark aggregation area. • Protects habitat features that include the significant geological formations/rock structures of Wolf Rock, the Pinnacles and Round Rock. • Protects part of the Double Island Point headland, which is a key geological feature of the marine park and a key 'anchor point' for the Cooloola sand mass. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Supports high species diversity including iconic species such as turtles, manta rays, Queensland groupers, leopard sharks, and hard and soft corals and associated reef fauna communities. • Location minimises impacts to land-based fishers accessing rocks at the base of Double Island Point and commercial trawl fishers in the south-eastern part of the zone. • Increases representation of high energy subtidal sand or gravel, consolidated deep holes and gutters (is the key area in the MNP zone network for representation of this habitat type) and subtidal rocky reef.
Final ZP Identifier	**MNP28 - Griffen Creek**
Consultation RIS Identifier	MNP27 - Griffen Creek
Existing zoning	MNP28
Change from existing ZP	Retain existing MNP zone.
Total area	1 km^2
Justification	• Protects a 1 km^2 representative area of shallow water estuarine habitats (saltmarsh, claypans and mudflats habitats) within a small mainland waterway in the southern part of the marine park.

	• Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these shallow estuarine habitat types. • Includes habitat for the vulnerable water mouse (*Xeromys myoides*). • Directly adjoins the Wide Bay Military Training Area which limits land-side access and land-based impacts to the creek. • Overlays part of the Great Sandy Strait Ramsar internationally important wetland. • Protects areas of vulnerable saltmarsh habitat type abutting a non-developed area allowing potential for landward migration of this habitat in response to sea level rise.
Final ZP Identifier	**MNP29 - Searys Creek**
Consultation RIS Identifier	MNP28 - Searys Creek
Existing zoning	MNP25, CPZ09
Change from existing ZP	Extend existing MNP zone to the north and west.
Total area	2 km^2
Justification	• Protects a 2 km^2 representative area of shallow water estuarine habitats (saltmarsh, mangroves, claypans and mudflats, and sand bar habitats) near the southern extent of the marine park. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these shallow estuarine habitat types. • Provides more comprehensive protection of the entire Searys Creek estuary. • Includes habitat for the vulnerable water mouse (*Xeromys myoides*) and incorporates areas of shorebird high tide roosting habitat. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Overlays part of the Tin Can Inlet declared Fish Habitat Area. • The boundary allows fishing to continue in the main channel and western side of Tin Can Inlet. • Location allows for maintenance and potential future upgrade of electricity infrastructure that crosses Tin Can Inlet from North Cooloola Point to Teewah Point. • Protects areas of vulnerable mangrove and saltmarsh habitat types abutting a natural area with potential for landward migration of these habitats in response to sea level rise. • Increases representation of vulnerable saltmarsh and claypans and mudflats habitat types in MNP zones.
Final ZP Identifier	**MNP30 - Cooloola Creek**
Consultation RIS Identifier	MNP29 - Cooloola Creek
Existing zoning	MNP26, CPZ09

Change from existing ZP	Extend existing MNP zone to the north-west.
Total area	2 km^2
Justification	• Protects a 2 km^2 representative area of shallow water estuarine habitats (saltmarsh, claypan, mangroves, and sand bar habitats) near the southern extent of the marine park. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these shallow estuarine habitat types. • Provides more comprehensive protection of the entire Cooloola Creek system, including its extensive foreshore flats. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Overlays part of the Tin Can Inlet declared Fish Habitat Area. • Allows fishing to continue in the main channel and western side of the inlet. • Allows for foreshore use and fishing adjacent to the camping area at Poverty Point. • Location allows for maintenance and potential future upgrade of electricity infrastructure that crosses Tin Can Inlet from North Cooloola Point to Teewah Point. • Protects areas of vulnerable mangrove and saltmarsh habitat types abutting a natural area with potential for landward migration of these habitats in response to sea level rise. • Increases representation of unvegetated, low energy sandy and claypans and mudflats habitats.
Final ZP Identifier	**MNP31 - Carland Creek**
Consultation RIS Identifier	MNP30 - Carland Creek
Existing zoning	MNP27, CPZ09
Change from existing ZP	Extend existing MNP zone to the north.
Total area	3 km^2
Justification	• Protects a 3 km^2 representative area of shallow water estuarine habitats (saltmarsh, claypan, mudflats, mangroves, and sand bar habitats) at the southern extent of the marine park. • Protects the connectivity between these habitats and provides a representative example of (and refuge for) the flora and fauna species associated with these shallow estuarine habitat types. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Overlays part of the Tin Can Inlet declared Fish Habitat Area. • Avoids the Cooloola Cove area. • Allows for foreshore use and fishing adjacent to the camping area at Poverty Point.

	• Protects areas of vulnerable mangrove and saltmarsh habitat types abutting a natural area with potential for landward migration of these habitats in response to sea level rise. • Increases representation of unvegetated, low energy sandy and claypans and mudflats habitats.
Existing MNP zones to be removed	
Existing ZP Identifier	**MNP05 - Gregory River**
Change from existing ZP	Remove existing MNP zone and rezone as CPZ (part of CPZ19 – Burrum River)
Justification	• Majority of MNP zone was mapped upstream of tidal limits, and into freehold land which are excluded from the marine park. • Weir was included in area of MNP zone and locality is significantly modified.
Existing ZP Identifier	**MNP07** - **Cherwell River**
Change from existing ZP	Remove existing MNP zone and rezone as HPZ (part of HPZ13 – Cherwell and Upper Burrum Rivers)
Justification	• Majority of MNP zone was mapped upstream of tidal limits which is excluded from the marine park • Zoning would preclude works being undertaken in the railway bridge corridor which was included in the MNP zone. • Current development in the locality is not consistent with MNP zoning.
Existing ZP Identifier	**MNP08** - **Burrum River**
Change from existing ZP	Remove existing MNP zone and rezone as HPZ (part of HPZ13 – Cherwell and Upper Burrum Rivers)
Justification	• Majority of MNP zone was mapped upstream of weir which prevents movement of aquatic species and regulation of water flow to the lower reaches of the river. • Remaining area of MNP zone would be small and inefficient. • Surrounding land use not conducive to expanding the MNP zone downstream.
Existing ZP Identifier	**MNP21** - **Unnamed Island, south-west of Turkey Island**
Change from existing ZP	Remove existing MNP zone and rezone as CPZ (part of CPZ21 – Great Sandy Strait)
Justification	• The close proximity of the Turkey, Bookar, Walsh Islands MNP zone (identifier MNP22) ensures protection of estuarine habitat types in this locality.

Conservation Park Zones

Final ZP Identifier	**CPZ01 - Baffle Creek**
Consultation RIS Identifier	CPZ01 - Baffle Creek
Existing zoning	CPZ01, GUZ01A
Change from existing ZP	Minor modification of existing zone boundary.
Total area	13 km^2
Justification	• Protects 12 km^2 representative areas of mangrove, saltmarsh, intertidal and shallow subtidal seagrass, and both high and low energy habitat types (sandy beaches/bars, claypans, mudflats, rocky shores, subtidal mud and rocky reef). • Only estuary in region recognised as near pristine with no impoundments along the length of the waterway. • Surrounding areas largely undeveloped and unmodified. • Incorporates areas of shorebird high tide roosting habitat for species such as beach stone curlew (*Esacus neglectus)* and greater sand plover (*Charadrius leschenaultii*). • Zoning limits ecosystem disturbance in area popular for fishing. • Partially overlaps the Baffle Creek declared Fish Habitat Area. • Modified boundary better incorporates the mouth of Baffle Creek.
Final ZP Identifier	**CPZ02 - Littabella Creek**
Consultation RIS Identifier	CPZ02 - Littabella Creek
Existing zoning	CPZ02
Change from existing ZP	Retain existing CP zone.
Total area	4 km^2
Justification	• Protects 4 km^2 representative areas of mangrove habitat and low energy habitats (sandy beaches, bars, claypans and mudflats). • Provides protection for relatively well-protected and undeveloped catchment which includes Littabella National Park. • Incorporates areas of shorebird high tide roosting habitat. • Incorporates areas of mangrove wetlands, particularly near the mouth of Littabella Creek.
Final ZP Identifier	**CPZ03 - Southern Gutter**
Consultation RIS Identifier	CPZ03 - Southern Gutter

Existing zoning	CPZ16, GUZ01B
Change from existing ZP	Minor modification of existing zone boundary.
Total area	4 km^2
Justification	• Protects a 4 km^2 representative area of unconsolidated deep holes and gutters along the Mary River paleochannel (ancient river channel) that extends through Hervey Bay. • Incorporates deep channel areas along the that many species use as routes between areas of habitat. • Incorporates habitat for deep water reef communities that may offer value as refugia for coral species affected by climate change. • Modification of boundary to geographic coordinates to aid boundary definition and compliance.
Final ZP Identifier	**CPZ04 - Mon Repos**
Consultation RIS Identifier	CPZ04 - Burnett Heads to Mon Repos
Existing zoning	HPZ01, GUZ01B
Change from existing ZP	Establish a new CP zone.
Total area	3 km^2
Justification	• Protects an internationally significant and critically important endangered loggerhead turtle nesting, inter-nesting and transit area along the Woongarra coastline of Hervey Bay. • Includes the valuable turtle rookery at Mon Repos, ensuring appropriate recognition of this area for threatened species. • Protects an important nesting, inter-nesting and transit area for vulnerable green and flatback turtles (*Natator depressus*). • Adjacent to the Mon Repos Conservation Park terrestrial protected area, thereby improving connectivity across terrestrial and marine protected areas, noting turtles nest below and above the level of highest astronomical tide and hence utilise habitat in the Mon Repos Conservation Park and the marine park. • Protects areas adjacent to inshore fringing coral reef and rocky basalt foreshore habitat (boulder dominated rocky shores, intertidal and subtidal corals habitats).
Final ZP Identifier	**CPZ05 - Platypus Bay**
Consultation RIS Identifier	CPZ06 - Platypus Bay and CPZ13 – Wathumba Creek
Existing zoning	CPZ12 (Wathumba Creek), HPZ03, GUZ01B
Change from existing ZP	Establish a new CP zone and link to extension of existing Wathumba Creek CP zone.

Total area	59.5 km^2
Justification	• Protects a 58 km^2 representative area of low energy habitats (sandy beaches and bars, subtidal sand) in the north-eastern part of Hervey Bay/western side of K'gari. • Protects an area of shoreline coffee rock habitat approximately 3km long. • Part of a key stopover and resting area for humpback whales, including mother-calf pairs utilising shallower, sheltered areas closer to shore, during their southern migration to Antarctica. • Includes habitat used by basking and transiting endangered loggerhead and vulnerable green turtles. • Protects habitat integrity by allowing only limited extractive use with commercial net fishing (other than bait netting) prohibited. • Incorporates the dynamic creek mouth area of Wathumba Creek in CP zone where natural accretion and erosion affects the zone boundary. • Provides for connectivity of habitats and movement of species across the mouth of the Wathumba Creek estuary. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Partially overlays K'gari (Fraser Island) World Heritage Area. • Partially overlays Fraser Island declared Fish Habitat Area.
Final ZP Identifier	**CPZ06 - Innes Park**
Consultation RIS Identifier	CPZ05 - Woongarra Coast
Existing zoning	CPZ03, GUZ01B, MNP02
Change from existing ZP	Modifications to existing CP zone northern and southern boundaries.
Total area	2 km^2
Justification	• Protects a 1.1 km^2 representative area of intertidal and subtidal coral habitat, and calcareous platform along the Woongarra coastline of Hervey Bay. • Protects a 0.9 km^2 representative area of low energy subtidal mud, sand or gravel habitat, and boulder dominated rocky shores. • Incorporates areas of shorebird high tide roosting habitat. • Northern and southern boundaries revised to align with adjacent zone boundary modifications. • Boundary modifications facilitate local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing.
Final ZP Identifier	**CPZ07 - Elliott Heads**
Consultation RIS Identifier	CPZ07 – Elliott Heads
Existing zoning	CPZ04, GUZ01B

Change from existing ZP	Retain northern section of the existing CP zone (existing CP zone is split into three new CP zones)
Total area	2 km^2
Justification	• Protects a 0.4 km^2 representative area of intertidal and subtidal coral habitats along the Woongarra coastline of Hervey Bay. • Protects a 0.7 km^2 representative area of boulder dominated rocky shores and an equivalent area of low energy subtidal mud, sand or gravel. • Southern boundary of CP zone adjoins new HPZ07.
Final ZP Identifier	**CPZ08 - Waddy Point**
Consultation RIS Identifier	CPZ08 - Waddy Point
Existing zoning	CPZ13, HPZ03
Change from existing ZP	Retain existing CP zone and extend northern boundary
Total area	7 km^2
Justification	• Protects a 7 km^2 representative area of high energy habitats (sandy beaches, subtidal sand or gravel) on the east coast of K'gari. • Northern boundary extended to include Ngkala Rocks within the CP zone. • Located within K'gari (Fraser Island) World Heritage Area. • Directly adjacent to Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface.
Final ZP Identifier	**CPZ09 - Twenty-Five Fathom Hole**
Consultation RIS Identifier	CPZ09 - Twenty-Five Fathom Hole
Existing zoning	CPZ15, GUZ01B
Change from existing ZP	Extend existing CP zone.
Total area	11 km^2
Justification	• Protects a 6 km^2 deep subtidal seagrass habitat area important to threatened species, including turtles and vulnerable dugong, in central Hervey Bay. • Protects a 3.5 km^2 representative area of deep holes and gutters (unconsolidated) and a 1.5km^2 representative area of unvegetated habitats (low energy sand and mud) along the Mary River paleochannel that extends through Hervey Bay. • Incorporates deep channel areas that many species use as routes between areas of habitat and supports connectivity between habitats

	within the CP zone and the adjoining MNP zone (MNP04 - Central Hervey Bay). • Incorporates habitat for deep water reef communities that may offer value as refugia for coral species affected by climate change. • Allows continued access to a popular recreational fishing site.
Final ZP Identifier	**CPZ10 - Riverview**
Consultation RIS Identifier	CPZ10 - Elliott River North
Existing zoning	CPZ04
Change from existing ZP	Retain section of existing CP zone (existing CP zone is split into three new CP zones)
Total area	1 km^2
Justification	• Protects a 0.8 km^2 representative area of vulnerable saltmarsh habitat on the northern side of the mouth of the Elliott River. • Incorporates an area of shorebird high tide roosting habitat. • Partially overlays the Elliott River declared Fish Habitat Area. • Southern boundary of CP zone adjoins new GUZ09.
Final ZP Identifier	**CPZ11 - Elliott River**
Consultation RIS Identifier	CPZ11 - Elliott River
Existing zoning	CPZ04
Change from existing ZP	Retain section of existing CP zone (existing CP zone is split into three new CP zones).
Total area	7 km^2
Justification	• Protects a 3.4 km^2 representative area of estuarine habitat (saltmarsh and mangroves) on the western side of Hervey Bay. • Protects a 3.6 km^2 representative area of diverse low energy habitats (sandy beaches and bars, claypans, mudflats, rocky and gravelly shores) at the mouth of and within the Elliott River. • Protects habitat integrity by allowing only limited extractive use with commercial net fishing (other than bait netting) prohibited. • Includes several significant shorebird high tide roost sites known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of the critically endangered eastern curlew (*Numenius madagascariensis*) and whimbrel (*Numenius phaeopus*). • Partially overlays the Elliott River declared Fish Habitat Area. • Includes majority of existing CP zone within the Elliott River.
Final ZP Identifier	**CPZ12 - Offshore Wathumba**

Consultation RIS Identifier	CPZ12 - West of Wathumba
Existing zoning	HPZ03, GUZ01B
Change from existing ZP	Establish a new CP zone.
Total area	7 km^2
Justification	• Protects a 6.7 km^2 representative area of subtidal gardens and low energy habitats (subtidal sand, mud or gravel) on the eastern side of Hervey Bay off the K'gari coastline, that is important for biodiversity and productivity of infauna. • Includes habitat used by transiting endangered loggerhead and vulnerable green turtles. • Protects habitat integrity by allowing only limited extractive use. • Partially overlays the key Hervey Bay aggregation area for humpback whales. • Partially overlays K'gari (Fraser Island) World Heritage Area. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Limits impact on offshore trawl fishery.
Final ZP Identifier	**CPZ13 - Coonarr Creek**
Consultation RIS Identifier	CPZ15 - Coonarr Creek
Existing zoning	CPZ05, HPZ02
Change from existing ZP	Extend existing CP zone offshore.
Total area	1 km^2
Justification	• Protects a 0.5 km^2 representative area of saltmarsh and mangrove habitat within Coonarr Creek on the western coastline of Hervey Bay. • Protects a 0.6 km^2 representative area of low energy habitats (sandy beaches, bars, subtidal mud, sand or gravel). • Incorporates the dynamic creek mouth area in the CP zone where natural accretion and erosion affects zone boundaries. • Provides for connectivity of habitats and movement of species across the mouth of the estuary. • Incorporates areas of shorebird high tide roosting habitat. • Partially overlays the Kinkuna declared Fish Habitat Area.
Final ZP Identifier	**CPZ14 - Four Mile Reef**
Consultation RIS Identifier	CPZ14 - Four Mile Reef

Existing zoning	HPZ02, GUZ01B
Change from existing ZP	Establish a new CP zone.
Total area	22 km^2
Justification	• Buffers MNP10 and protects Four Mile Reef, the only fully subtidal and deepest coral reef (10m below Lowest Astronomical Tide) within the marine park, in a highly protected zone type to reduce impacts from edge effects. • Protects a 22 km^2 representative area of shallow and deep subtidal seagrass (>15 depth) within western Hervey Bay. • Protects an important resting, transit and feeding area for vulnerable dugong and turtles. • Location of northern and eastern boundary placed to minimise impacts on commercial fisheries.
Final ZP Identifier	**CPZ15 - K'gari Eastern Beach**
Consultation RIS Identifier	CPZ16 - K'gari Eastern Beach
Existing zoning	CPZ14
Change from existing ZP	Retain existing CP zone.
Total area	43 km^2
Justification	• Protects a 42 km^2 representative area of high energy habitats (sandy beaches, subtidal sand or gravel, rocky headlands and platforms) along the eastern coastline of K'gari. • Protects a small area of vulnerable coffee rock. • Occurs within the K'gari (Fraser Island) World Heritage Area. • Directly adjacent to Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Overlays a key migratory pathway for endangered loggerhead turtles returning to nest from southern areas including Moreton Bay. • Overlays a key pathway for vulnerable dugong migrating from southern areas including Moreton Bay. • Southern boundary aligns with commercial net fishing closures in the area.
Final ZP Identifier	**CPZ16 - Awinya Creek**
Consultation RIS Identifier	CPZ17 - Awinya Creek
Existing zoning	CPZ11, HPZ04, GUZ01B
Change from existing ZP	Extend existing CP zone offshore.

Total area	0.5 km^2
Justification	• Protects a 0.5 km^2 representative area of low energy habitats (subtidal mud, gravel, sandy beaches and bars) on the western coastline of K'gari. • Incorporates the dynamic creek mouth area in CP zone where natural accretion and erosion affects the zone boundary. • Provides for connectivity of habitats and movement of species across the mouth of the estuary. • Prohibits commercial net fishing from the area at the mouth of the creek. • Occurs within the K'gari (Fraser Island) World Heritage Area. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface.
Final ZP Identifier	**CPZ17 - Theodolite Creek**
Consultation RIS Identifier	CPZ18 - Theodolite Creek
Existing zoning	CPZ06, HPZ02
Change from existing ZP	Retain existing CP zone.
Total area	2 km^2
Justification	• Protects a 1.7 km^2 representative area of estuarine habitat (saltmarsh, mangroves) and low energy sandy beaches and bars within western Hervey Bay. • Largely unmodified estuary. • Includes several significant shorebird high tide roost sites known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of the critically endangered eastern curlew (*Numenius madagascariensis*) and whimbrel (*Numenius phaeopus*). • Partially overlays the Kinkuna declared Fish Habitat Area.
Final ZP Identifier	**CPZ18 - Woodgate**
Consultation RIS Identifier	CPZ19 - Offshore of Woodgate
Existing zoning	CPZ07
Change from existing ZP	Minor reduction in size of existing CP zone via modification to western (inshore) boundary.
Total area	4.5 km^2

Justification	• Protects a 1.5 km^2 intertidal and shallow subtidal seagrass habitat area important to turtles and vulnerable dugong within western Hervey Bay. • Protects a 3 km^2 representative area of unvegetated habitats (low energy subtidal mud, sand or gravel). • Includes the Woodgate artificial reef. • Inshore boundary of CP zone moved offshore (approximately 150m from HAT) to allow for consideration of future coastal protection works. • Protects habitat integrity by allowing only limited extractive use with commercial net fishing (other than bait netting) prohibited.
Final ZP Identifier	**CPZ19 - Burrum River**
Consultation RIS Identifier	CPZ20 - Burrum River
Existing zoning	CPZ08, MNP05, MNP06
Change from existing ZP	Reduction in size of existing CP zone via downgrade to HP zone of areas in upper reaches of the Cherwell and Burrum rivers. Incorporates the areas of existing MNP05 and MNP06 that have been removed. Refer MNP zone section for details.
Total area	18 km^2
Justification	• Protects a 4.5 km^2 representative area of estuarine habitat area (saltmarsh and mangrove) and intertidal and shallow subtidal seagrass habitat important to turtles and vulnerable dugong on the south-western side of Hervey Bay. • Protects a 13.3 km^2 representative area of low energy habitats (rocky shores and bars, sandy beaches and bars, claypans, mudflats, gravelly shores). • Protects habitat integrity by allowing only limited extractive use with commercial net fishing (other than bait netting) prohibited. • Includes several significant shorebird high tide sites known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of the critically endangered eastern curlew (*Numenius madagascariensis*), as well as roost areas for species such as whimbrels (*Numenius phaeopus*) and the vulnerable beach stone curlew (Esacus neglectus). • Partially overlays the Burrum declared Fish Habitat Area.
Final ZP Identifier	**CPZ20 - Coongul Creek**
Consultation RIS Identifier	CPZ21 - Coongul Creek
Existing zoning	CPZ10, HPZ03, GUZ01B
Change from existing ZP	Extend existing CP zone offshore.
Total area	2.3 km^2
Justification	• Protects a 2.2 km^2 representative area of low energy habitats (sandy beaches and bars, subtidal mud, sand or gravel) on the western coastline of K'gari.

	• Incorporates the dynamic creek mouth area in CP zone where natural accretion and erosion affects zone boundaries. • Provides for connectivity of habitats and movement of species across the mouth of the estuary. • Prohibits commercial net fishing from the area at the mouth of the creek. • Occurs within the K'gari (Fraser Island) World Heritage Area. • Directly adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface.
Final ZP Identifier	**CPZ21 - Great Sandy Strait**
Consultation RIS Identifier	CPZ22 - Great Sandy Strait
Existing zoning	CPZ09, HPZ02, MNP16, MNP18, MNP19, MNP20, MNP21, GUZ03
Change from existing ZP	Retain majority of existing CP zone in Great Sandy Strait. Incorporates the area of existing MNP21 that has been removed. Refer MNP zone section for details.
Total area	744 km^2
Justification	• Protects a 214 km^2 representative area of estuarine habitat including (saltmarsh, mangroves) and intertidal and shallow subtidal seagrass important to turtles and vulnerable dugong. • Protects a 1.5 km^2 representative area of vulnerable coffee rock. • Protects a 4.7 km^2 representative area of intertidal and subtidal corals, and subtidal gardens. • Protects a 517 km^2 representative area of low energy habitats (rocky shores and bars, sandy beaches and bars, claypans, mudflats, gravelly shores, subtidal mud, sand or gravel). • Overlays part of the Great Sandy Strait Ramsar internationally important wetland. • Complements and buffers fifteen MNP zones throughout the Great Sandy Strait. • Important estuarine complex with largely intact catchments and banks, such as Teebar Creek and Kauri Creek. • Includes habitat important for dolphins including the vulnerable Australian humpback dolphin of which there are two discrete populations that reside in the Great Sandy Strait. • Significant fish habitat. • Incorporates a number of significant shorebird high tide roost sites and intertidal feeding habitat. • Mostly within the Dugong Protection Area declared under the Fisheries Act. • Protects habitat for threatened species such as the vulnerable water mouse (*Xeromys myoides*) and Illidge's ant-blue butterfly (*Acrodipsas illidgei*). • Areas adjoin the Great Sandy National Park and Poona National Park, providing integrated national park status and protection area across the marine and terrestrial interface. • Partially overlays the K'gari (Fraser Island) World Heritage Area. • Partially overlays Susan River, Maaroom, Fraser Island, Kauri Creek and Tin Can Inlet declared Fish Habitat Areas.

Final ZP Identifier	**CPZ22 - Beelbi Creek**
Consultation RIS Identifier	CPZ23 - Beelbi Creek
Existing zoning	CPZ09, HPZ02
Change from existing ZP	Retain portion of existing CP zone within Beelbi Creek and extend offshore to buffer MNP14.
Total area	1.2 km^2
Justification	• Protects a 0.9 km^2 representative area of low energy habitats (sandy beaches and bars, claypans, mudflats) in the south-western part of Hervey Bay. • Protects a small representative area of estuarine habitat (saltmarsh, mangroves) and intertidal and subtidal seagrass. • Partially overlays the Beelbi declared Fish Habitat Area. • Complements and buffers southern boundary of MNP14. • Directly adjacent to Burrum Coast National Park, providing integrated national park status and protection area across the marine and terrestrial interface.
Final ZP Identifier	**CPZ23 - O'Regan Creek**
Consultation RIS Identifier	CPZ24 - O'Regan Creek
Existing zoning	CPZ09, HPZ02
Change from existing ZP	Retain existing portion of CP zone within O'Regan Creek and extend offshore.
Total area	0.5 km^2
Justification	• Protects a 0.2 km^2 representative area with stands of numerous mangrove species in the south-western part of Hervey Bay. • Protects small areas of saltmarsh and low energy habitats (sandy beaches and bars). • Includes several significant shorebird high tide roost sites known to support nationally significant numbers (i.e. 0.1% of the East Asian-Australasian Flyway population) of species including the critically endangered eastern curlew (*Numenius madagascariensis*), vulnerable bar-tailed godwit (*Limosa lapponica*), vulnerable beach stone curlew (*Esacus neglectus)*, endangered lesser sand plover (*Charadrius mongolus*) and double-banded plover (*Charadrius bicinctus*). • Directly adjacent to the O'Regan Creek Conservation Park terrestrial protected area.
Final ZP Identifier	**CPZ24 - Rainbow Beach**
Consultation RIS Identifier	CPZ25 - Rainbow Beach

Existing zoning	CPZ17, GUZ01C
Change from existing ZP	Minor modification and reduction of existing CP zone.
Total area	2 km^2
Justification	• Protects a 0.4 km^2 representative area of vulnerable coffee rock in the southern part of the marine park. • Protects a 0.9 km^2 representative area of unvegetated habitats (low energy subtidal mud, sand or gravel). • Protects 0.7 km^2 representative area of high energy habitats (sandy beaches). • Adjoins the Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface.
Final ZP Identifier	**CPZ25 - Snapper Creek**
Consultation RIS Identifier	CPZ26 - Snapper Creek
Existing zoning	CPZ09
Change from existing ZP	Retain portion of existing CP zone within Snapper Creek.
Total area	2.1 km^2
Justification	• Protects a 1 km^2 representative area of vulnerable saltmarsh habitat within a small mainland waterway in Tin Can Inlet in the southern part of the marine park. • Protects a 1.1 km^2 representative area of unvegetated habitats (low energy subtidal mud, sand and gravel, claypans and mudflats). • Boundary adjoins MNP28 to further protect shallow water estuarine habitats. • Overlays part of the Great Sandy Strait Ramsar internationally important wetland.
Final ZP Identifier	**CPZ26 - Double Island Point**
Consultation RIS Identifier	CPZ27 - Double Island Point West
Existing zoning	CPZ18, HPZ06, GUZ01C
Change from existing ZP	Modification of existing CP zone to align with the expanded MNP27.
Total area	1.2 km^2
Justification	• Protects a small representative area of high energy habitats (subtidal rocky reef, rocky headlands, platforms, sandy beaches, subtidal sand or gravel) at the southern extent of the marine park - Double Island Point.

	• Protects a 0.9 km^2 representative area of low energy habitats (sandy beaches and bars, subtidal mud, sand or gravel). • Protects part of the Double Island Point headland, which is a key geological feature of the marine park and a key 'anchor point' for the Cooloola sand mass. • Complements and buffers the Wolf Rock MNP zone (MNP27) to protect an area of nationally significant habitat for the critically endangered east coast population of grey nurse sharks (*Carcharias taurus*). • Directly adjacent to Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface.
Final ZP Identifier	**CPZ27 - Teewah**
Consultation RIS Identifier	CPZ28 - Double Island Point East
Existing zoning	CPZ18, GUZ01C
Change from existing ZP	Modification of existing CP zone to align with the expanded MNP27.
Total area	1 km^2
Justification	• Protects a 1 km^2 representative area of high energy habitats (rocky headlands, platforms, subtidal rocky reef, subtidal sand or gravel, sandy beaches) at the southern extent of the marine park - Double Island Point. • Protects part of the Double Island Point headland, which is a key geological feature of the marine park and a key 'anchor point' for the Cooloola sand mass. • Complements and buffers the Wolf Rock MNP zone (MNP27) to protect an area of nationally significant habitat for the critically endangered east coast population of grey nurse sharks (*Carcharias taurus*). • Directly adjacent to Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface.
Final ZP Identifier	**CPZ28 - Southern Tin Can Inlet**
Consultation RIS Identifier	CPZ29 - Tin Can Inlet
Existing zoning	CPZ09
Change from existing ZP	Retain portion of existing CP zone in southern Tin Can Inlet.
Total area	7 km^2
Justification	• Protects a 6.9 km^2 representative area of low energy habitats (rocky beaches and bars, sandy beaches and bars, claypans, mudflats, subtidal mud, sand or gravel) in the southern part of Tin Can Inlet. • Complements and buffers two MNP zones in Tin Can Inlet (MNP30 and MNP31).

	• Overlays part of the Great Sandy Strait Ramsar internationally important wetland. • Partially overlays Tin Can Inlet declared Fish Habitat Area. • Directly adjacent to Great Sandy National Park, providing integrated national park status and protection area across the marine and terrestrial interface.

Habitat Protection Zones

Final ZP Identifier	**HPZ01 - Flat Rock**
Consultation RIS Identifier	HPZ01 - Flat Rock
Existing zoning	CPZ01
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.01 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the zone. • Facilitates maintenance (with permission) of a public beach using beach nourishment at Flat Rock. • Maintains protection of habitats.
Final ZP Identifier	**HPZ02 - Sandy Cape**
Consultation RIS Identifier	HPZ02 - Northern K'gari
Existing zoning	HPZ03, GUZ01B, GUZ01C
Change from existing ZP	Modification of HP zone.
Total area	80 km^2
Justification	• Includes vulnerable green and endangered loggerhead turtle key feeding, courtship, breeding and inter-nesting areas. • Overlays a key migratory pathway for loggerhead turtles returning to nest from southern areas including Moreton Bay. • Overlays a key pathway for vulnerable dugong migrating from southern areas including Moreton Bay. • Directly adjoins the Great Sandy National Park. • Maintains protection of habitats and recognition of their value. • Complements and buffers MNP zones at the northern end of K'gari (MNP02, MNP03).

	• Minimises impacts from edge effects.
Final ZP Identifier	**HPZ03 - Rooney Point**
Consultation RIS Identifier	HPZ02 - Northern K'gari
Existing zoning	HPZ03, GUZ01B
Change from existing ZP	Modification of HP zone.
Total area	44 km^2
Justification	• Includes vulnerable green and endangered loggerhead turtle key basking and transiting areas. • Part of a key stopover and resting area for humpback whales, including mother-calf pairs utilising shallower, sheltered areas closer to shore, during their southern migration to Antarctica. • Maintains protection of habitats and recognition of their value. • Complements and buffers MNP zone at the northern end of K'gari (MNP03) and new CP zone (CPZ05) at the north-eastern extremity of Hervey Bay. • Minimises impacts from edge effects.
Final ZP Identifier	**HPZ04 - Bargara**
Consultation RIS Identifier	HPZ03 - Bargara
Existing zoning	CPZ03, HPZ01, GUZ01B, MNP01
Change from existing ZP	Change portion of CP zone along the Bargara township to HP zone.
Total area	2 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Maintains protection of habitats.
Final ZP Identifier	**HPZ05 - Coral Cove**
Consultation RIS Identifier	HPZ04 – Palmer Creek
Existing zoning	MNP03, CPZ03

Change from existing ZP	Change portion of CP zone in Palmer Creek to HP zone, and change strip of MNP zone along the coastline to HP zone.
Total area	0.3 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates management (with permission) of urban development works, e.g. stormwater outlets. • Maintains protection of habitats.
Final ZP Identifier	**HPZ06 - Platypus Bay**
Consultation RIS Identifier	HPZ05 - Platypus Bay
Existing zoning	HPZ03, GUZ01B
Change from existing ZP	Extend portion of HP zone in Platypus Bay.
Total area	88 km^2
Justification	• Includes vulnerable green and endangered loggerhead turtle key basking and transiting areas. • Part of a key stopover and resting area for humpback whales, including mother-calf pairs utilising shallower, sheltered areas closer to shore, during their southern migration to Antarctica. • Maintains protection of habitats and recognition of their value. • Complements and buffers new CP zones along the eastern coastline of K'gari (CPZ05, CPZ12). • Minimises impacts from edge effects.
Final ZP Identifier	**HPZ07 - Elliott Heads**
Consultation RIS Identifier	HPZ06 - Elliott Heads
Existing zoning	CPZ04, GUZ01B
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.2 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Maintains protection of habitats.

Final ZP Identifier	**HPZ08 - Kinkuna**
Consultation RIS Identifier	HPZ07 - Coonarr
Existing zoning	HPZ02, GUZ01B
Change from existing ZP	Retain northern portion of HP zone.
Total area	2 km^2
Justification	• Maintains protection of habitats.
Final ZP Identifier	**HPZ09 - Southwestern Hervey Bay**
Consultation RIS Identifier	HPZ08 - Hervey Bay
Existing zoning	HPZ02, CPZ06, CPZ07, CPZ08, CPZ09, GUZ01B
Change from existing ZP	Retain existing HP zone with modifications to boundaries.
Total area	244 km^2
Justification	• Maintains protection of habitats including areas of shallow seagrass habitat within western Hervey Bay that are important to turtles and vulnerable dugong. • Overlaps several declared Fish Habitat Areas in the southwestern area of Hervey Bay. • Adjoins to Burrum Coast National Park. • Complements and buffers MNP (MNP11, MNP14) and CP zones (CPZ14, CPZ18) in the southwestern area of Hervey Bay. • Minimises impacts from edge effects.
Final ZP Identifier	**HPZ10 - Woralie**
Consultation RIS Identifier	HPZ09 - Bowarrady Creek
Existing zoning	HPZ03
Change from existing ZP	Retain portion of HP zone between Awinya and Coongul creeks.
Total area	9 km^2

Justification	• Includes vulnerable green and endangered loggerhead turtle key basking and transiting areas. • Partially overlaps the declared Fraser Island Fish Habitat Area. • Directly adjoins the Great Sandy National Park. • Maintains protection of habitats. • Complements and buffers CP zones at the mouth of two creeks on the eastern coastline of K'gari (CPZ16, CPZ20).
Final ZP Identifier	**HPZ11 - Northern Fork Bank**
Consultation RIS Identifier	MNP11
Existing zoning	GUZ01B
Change from existing ZP	Establish a new HP zone.
Total area	27 km^2
Justification	• Protects habitats including areas of shallow seagrass habitat within southern Hervey Bay that are important to turtles and vulnerable dugong. • Includes an important resting, transit and feeding area for dugong and turtles. • Allows recreational and most forms of commercial fishing (except trawling). • Complements and buffers two MNP zones in southern Hervey Bay (MNP09, MNP13). • Minimises impacts from edge effects.
Final ZP Identifier	**HPZ12 - Pelican Bank**
Consultation RIS Identifier	HPZ10 - Moon Point
Existing zoning	HPZ03, CPZ09, GUZ01B
Change from existing ZP	Retain portion of HP zone around Pelican Bank.
Total area	63 km^2
Justification	• Protects habitats including areas of vulnerable coffee rock within southern Hervey Bay. • Maintains recognition of habitat value. • Overlaps part of the Fraser Island declared Fish Habitat Area. • Directly adjoins the Great Sandy National Park. • Complements and buffers MNP (MNP13) and CP zones (CPZ20, CPZ21) in southern Hervey Bay. • Minimises impacts from edge effects.

Final ZP Identifier	**HPZ13 - Cherwell and Upper Burrum Rivers**
Consultation RIS Identifier	HPZ11 - Cherwell and Burrum Rivers
Existing zoning	CPZ08, MNP07, MNP08.
Change from existing ZP	Change portion of CP zone to HP zone. Incorporates the areas of existing MNP07 and MNP08 that have been removed. Refer MNP zone section for details.
Total area	3 km^2
Justification	• Private works proposed to be undertaken in the existing CP zone are generally not supported. • Alignment with declared Fish Habitat Area management is expected to provide improved certainty and lessen confusion for proponents as applications for private access structures are more likely to be supported in the HP zone. • Maintains recognition of habitat value.
Final ZP Identifier	**HPZ14 - Gatakers Bay**
Consultation RIS Identifier	HPZ12 - Gatakers Bay
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.02 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates dredging (with permission) for improved all-tide access to the public boat ramp. • Maintains recognition of habitat value.
Final ZP Identifier	**HPZ15 - Beelbi Creek**
Consultation RIS Identifier	N/A - change made after consultation
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.01 km^2

Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Enables local government to apply for approvals to undertake works to upgrade the existing erosion management infrastructure at the township of Toogoom which is under increasing pressure. • Overlaps part of the Beelbi declared Fish Habitat Area.
Final ZP Identifier	**HPZ16 - Point Vernon West**
Consultation RIS Identifier	N/A - change made after consultation
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.03 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Allows local government to deliver (with permission) necessary and well-planned erosion management and climate change resilience works that are impacting on a public road on the western side of Point Vernon.
Final ZP Identifier	**HPZ17 - Dayman Spit**
Consultation RIS Identifier	HPZ13 - Dayman Spit
Existing zoning	CPZ09, GUZ02
Change from existing ZP	Change portion of CP zone to HP zone.
Total area	1.3 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government to undertake (with permission) sand extraction for beach nourishment to address climate change impacts. • Maintains recognition of habitat value.
Final ZP Identifier	**HPZ18 - Wanggoolba Creek**
Consultation RIS Identifier	HPZ14 - Wanggoolba Creek
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.

Total area	0.3 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates widening and deepening (with permission) of the channel for all tide access, including for emergency services. • Overlaps part of the Maaroom declared Fish Habitat Area. • Maintains recognition of habitat value.
Final ZP Identifier	**HPZ19 - Maaroom**
Consultation RIS Identifier	HPZ15 - Maaroom
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.02 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Maintains protection of habitats.
Final ZP Identifier	**HPZ20 - Hook Point**
Consultation RIS Identifier	HPZ16 - Hook Point
Existing zoning	HPZ04, CPZ14
Change from existing ZP	Minor modification of eastern and southern boundaries of HP zone.
Total area	60 km^2
Justification	• Modifications aid definition and location of zone boundaries on water. • Directly adjoins the Great Sandy National Park. • Overlaps part of the Fraser Island declared Fish Habitat Area. • Maintains protection of habitats. • Complements and buffers part of the CP zone along the western coast of K'gari (CPZ15). • Boundaries complement fishing closures on the east coast of K'gari.
Final ZP Identifier	**HPZ21 - Boonooroo**

Consultation RIS Identifier	HPZ17 - Boonooroo
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.02 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Maintains protection of habitats.
Final ZP Identifier	**HPZ22 - Tuan**
Consultation RIS Identifier	HPZ18 - Tuan
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.04 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Maintains protection of habitats.
Final ZP Identifier	**HPZ23 - Poona**
Consultation RIS Identifier	HPZ19 - Poona
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.1 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone.

	• Facilitates local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Allows for a works permit to be considered for capital dredging to improve access to the Poona public boat ramp. • Maintains protection of habitats.
Final ZP Identifier	**HPZ24 - Tinnanbar**
Consultation RIS Identifier	HPZ20 - Tinnanbar
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.1 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Maintains protection of habitats.
Final ZP Identifier	**HPZ25 - Inskip**
Consultation RIS Identifier	HPZ21 - Rainbow Beach North
Existing zoning	HPZ05, CPZ17, GUZ01C
Change from existing ZP	Minor modifications of HP zone.
Total area	4 km^2
Justification	• Maintains protection of habitats.
Final ZP Identifier	**HPZ26 - Rainbow Beach**
Consultation RIS Identifier	HPZ22 - Rainbow Beach
Existing zoning	CPZ17
Change from existing ZP	Change small area of CP zone to HP zone.

Total area	0.1 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government or landholders to undertake (with permission) management actions including those required to address coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Maintains protection of habitats.
Final ZP Identifier	**HPZ27 - Tin Can Bay**
Consultation RIS Identifier	HPZ23 - Tin Can Bay
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to HP zone.
Total area	0.3 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates local government or landholders to undertake (with permission) management actions including those required to address existing and future coastal erosion and/or climate change impacts such as beach nourishment and sand pushing. • Maintains protection of habitats.
Final ZP Identifier	**HPZ28 - Coloured Sands**
Consultation RIS Identifier	HPZ24 - Rainbow Beach South
Existing zoning	HPZ06, CPZ17, GUZ01C
Change from existing ZP	Minor modifications of HP zone.
Total area	5 km^2
Justification	• Directly adjoins the Great Sandy National Park. • Maintains protection of habitats. • Complements and buffers two CP zones along Rainbow Beach and on the western side of Double Island Point (CPZ24, CPZ26). • Minimises edge effects.

General Use Zones

Final ZP Identifier	**GUZ01 - Kolan**
Consultation RIS Identifier	GUZ01 - Northern section, MNP01
Existing zoning	GUZ01A, CPZ01
Change from existing ZP	Retain existing GU zone.
Total area	230 km^2
Justification	• Allows for activities such as fishing in the commercial trawl fisheries to be undertaken.
Final ZP Identifier	**GUZ02 - Rosedale**
Consultation RIS Identifier	GUZ02 - Rosedale
Existing zoning	CPZ01
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.03 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates (with permission) aquaculture intake and outlet structures for land-based aquaculture operations. • Zone boundary aligns with existing Baffle Creek declared Fish Habitat Area exclusion.
Final ZP Identifier	**GUZ03 - Winfield**
Consultation RIS Identifier	GUZ03 - Winfield
Existing zoning	CPZ01
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.02 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Zone boundary aligns with exclusion from Baffle Creek declared Fish Habitat Area of substantially developed shoreline.

Final ZP Identifier	**GUZ04 - Boaga**
Consultation RIS Identifier	GUZ04 - Boaga
Existing zoning	CPZ01
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.01 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Zone boundary aligns with exclusion from Baffle Creek declared Fish Habitat Area of substantially developed shoreline.
Final ZP Identifier	**GUZ05 - Winfield East**
Consultation RIS Identifier	GUZ05 - Winfield East
Existing zoning	CPZ01
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.02 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Zone boundary aligns with existing Baffle Creek declared Fish Habitat Area exclusion.
Final ZP Identifier	**GUZ06 - Offshore K'gari North**
Consultation RIS Identifier	GUZ06 - Offshore K'gari North and GUZ08 - Offshore Indian Head, MNP06
Existing zoning	GUZ01C
Change from existing ZP	Retain portion of existing GU zone.
Total area	267 km^2
Justification	• Allows for activities such as fishing in the commercial trawl fisheries to be undertaken.
Final ZP Identifier	**GUZ07 - Hervey Bay**

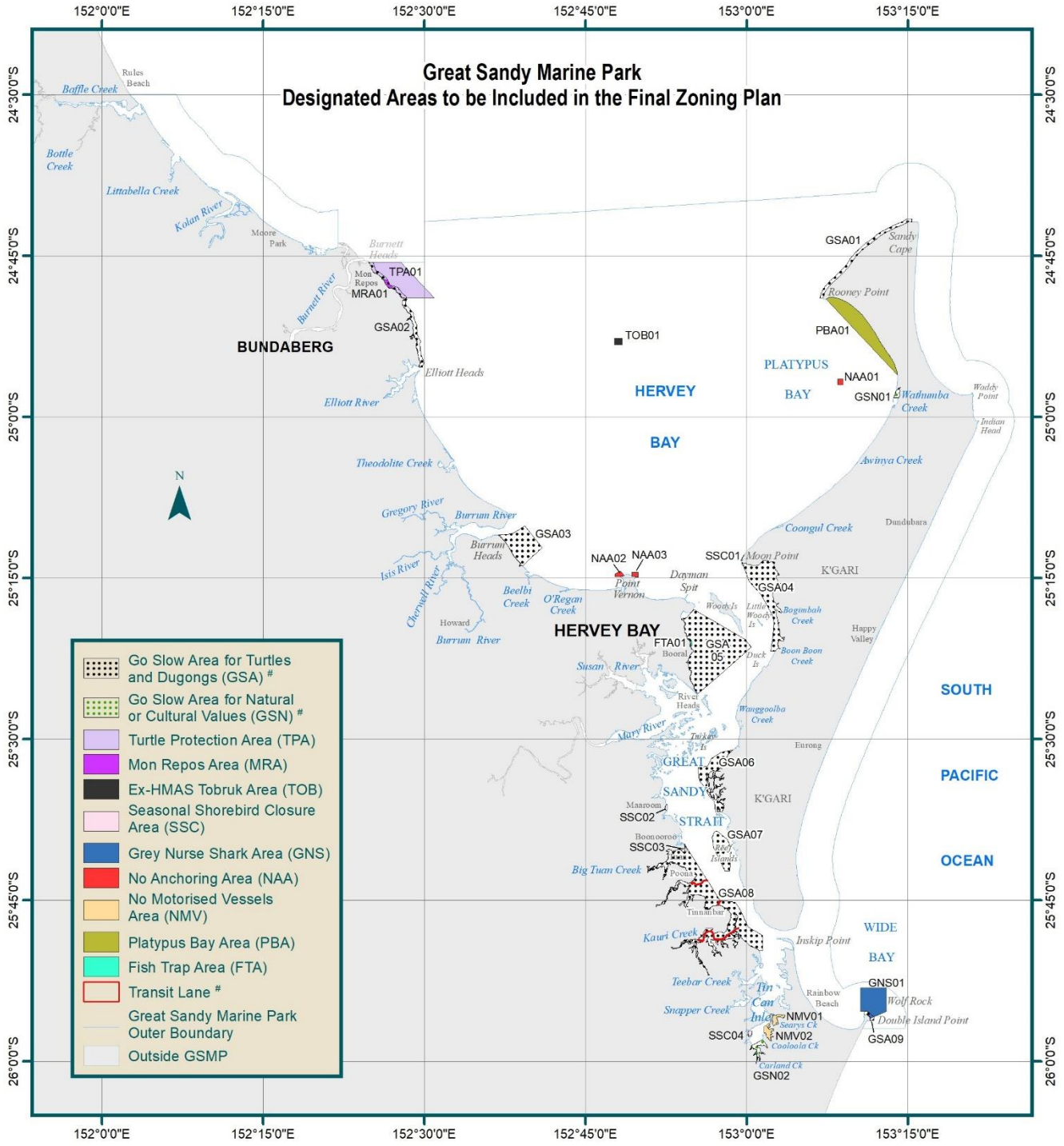
Consultation RIS Identifier	GUZ07 - Hervey Bay, GUZ08, MNP10, CPZ14
Existing zoning	GUZ01B, CPZ03, CPZ04, HPZ02, MNP01, MNP02, MNP03
Change from existing ZP	Retain existing GU zone.
Total area	2875 km^2
Justification	• Allows for activities such as fishing in the commercial trawl fisheries to be undertaken.
Final ZP Identifier	**GUZ08 - Elliott River**
Consultation RIS Identifier	GUZ09 - Elliott River
Existing zoning	CPZ04
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.02 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Facilitates (with permission) construction of aquaculture intake and outlet structures for land-based aquaculture operations. • Zone boundary aligns with modified exclusion area from Elliott River declared Fish Habitat Area.
Final ZP Identifier	**GUZ09 - Riverview North**
Consultation RIS Identifier	GUZ10 - Riverview North
Existing zoning	CPZ04
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.14 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Allows for maintenance works and possible future upgrade for Elliott Heads to Riverview water supply pipeline. • Zone boundary aligns with modified exclusion from Elliott River declared Fish Habitat Area for a water supply pipeline and substantially developed shoreline.

Final ZP Identifier	**GUZ10 - Riverview South**
Consultation RIS Identifier	GUZ11 - Riverview South
Existing zoning	CPZ04
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.02 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Zone boundary aligns with exclusion from Elliott River declared Fish Habitat Area of substantially developed shoreline.
Final ZP Identifier	**GUZ11 - Walkers Point**
Consultation RIS Identifier	GUZ12 - Walkers Point
Existing zoning	CPZ08
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.13 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Zone boundary aligns with modified exclusion from Elliott River declared Fish Habitat Area of substantially developed shoreline.
Final ZP Identifier	**GUZ12 - Buxton**
Consultation RIS Identifier	GUZ13 - Buxton
Existing zoning	CPZ08
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.1 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Zone boundary aligns with modified exclusion of Elliott River declared Fish Habitat Areas of substantially developed shoreline.
Final ZP Identifier	**GUZ13 - Offshore K'gari South**

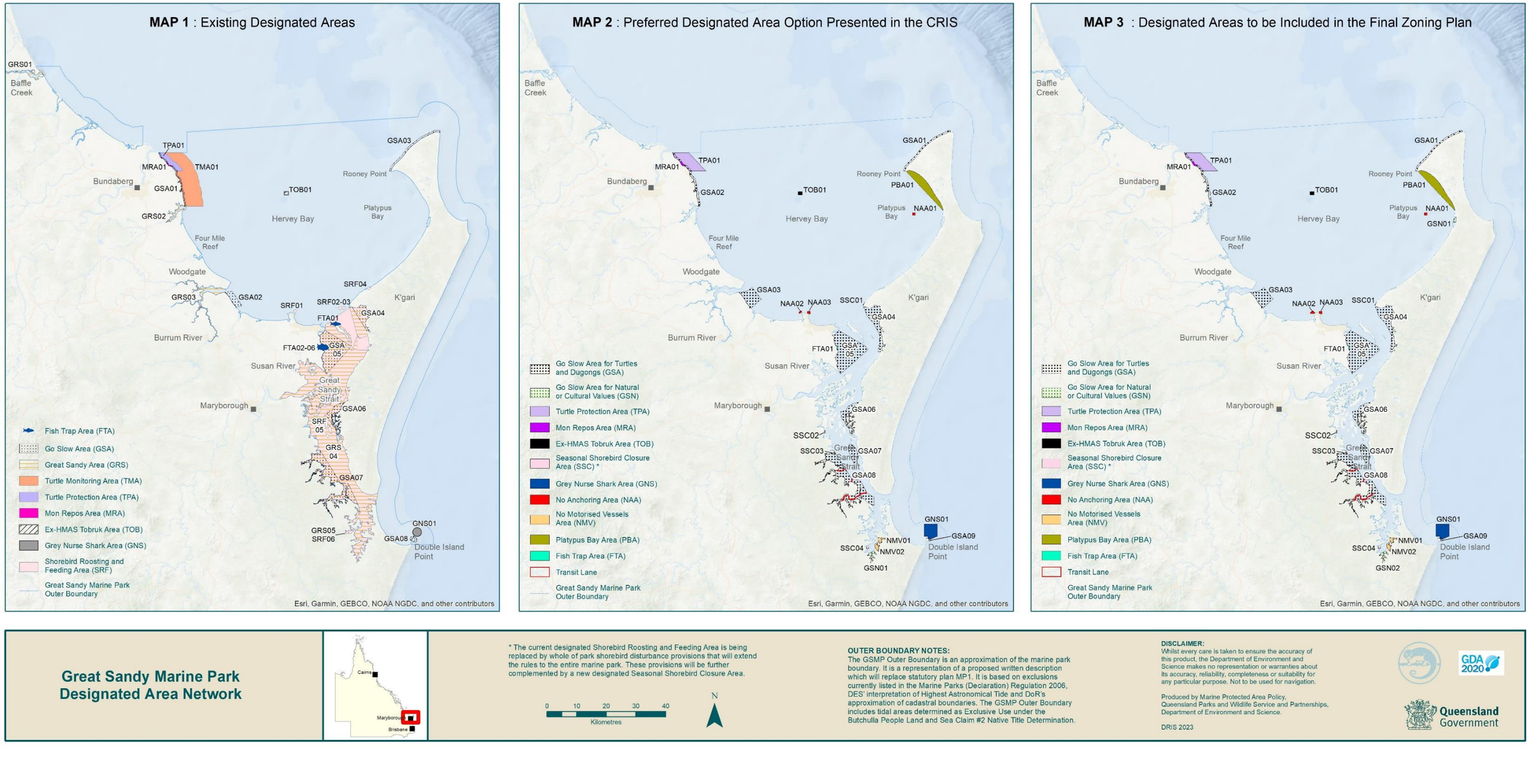
Consultation RIS Identifier	GUZ14 - Offshore K'gari
Existing zoning	GUZ01C, CPZ09, CPZ17, HPZ04, HPZ05, HPZ06
Change from existing ZP	Retain portion of existing GU zone.
Total area	405 km^2
Justification	• Allows for activities such as fishing in the commercial trawl fisheries to be undertaken.
Final ZP Identifier	**GUZ14 - Hervey Bay Foreshore**
Consultation RIS Identifier	GUZ15 - Hervey Bay Foreshore
Existing zoning	GUZ02, CPZ09
Change from existing ZP	Extend existing GU zone further offshore.
Total area	1 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Expanded width of GU zone allows for better management of coastal protection works.
Final ZP Identifier	**GUZ15 – Urangan**
Consultation RIS Identifier	GUZ16 – Urangan
Existing zoning	GUZ02, CPZ09
Change from existing ZP	Extend existing GU zone further offshore.
Total area	0.08 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Expanded width of GU zone allows for better management of coastal protection works.
Final ZP Identifier	**GUZ16 - Urangan South**
Consultation RIS Identifier	HPZ13 - Dayman Spit HPZ

Existing zoning	GUZ02, CPZ09
Change from existing ZP	Extend existing GU zone further offshore.
Total area	0.01 km^2
Justification	• Allows for works associated with the Urangan Boat Harbour to be undertaken.
Final ZP Identifier	**GUZ17 - Teewah Point**
Consultation RIS Identifier	GUZ17 - Teewah Point
Existing zoning	CPZ09
Change from existing ZP	Change small area of CP zone to GU zone.
Total area	0.27 km^2
Justification	• Entry and use provisions for CP zone prohibit some works being undertaken in the existing zone. • Allows for maintenance works and possible future upgrade for power corridor supplying power to Rainbow Beach.
Existing GU zones to be removed	
Existing ZP Identifier	GUZ03
Change from existing ZP	Remove existing GU zone and rezone to CP zone (now included in CPZ21 - Great Sandy Strait).
Justification	• Prior to declaration of the marine park, the area was identified as a future site for a marina by the River Heads Progress Association. • The management A FHA at the site prevents marina development; the Wide Bay Burnett Regional Plan does not identify a future marina at the site; no marina proposal has been progressed, and; a previous seabed lease at the site no longer exists.

Appendix 7. Great Sandy Marine Park Final Zoning Plan (designated areas)



Appendix 8. Comparison of Great Sandy Marine Park existing designated areas, preferred designated areas presented in the CRIS, and designated areas to be included in the Final Zoning Plan.



Great Sandy Marine Park Designated Area Network

* The current designated Shorebird Roosting and Feeding Area is being replaced by whole of park shorebird disturbance provisions that will extend the rules to the entire marine park. These provisions will be further complemented by a new designated Seasonal Shorebird Closure Area.

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OUTER BOUNDARY NOTES:
The GSMP Outer Boundary is an approximation of the marine park boundary. It is a representation of a proposed written description which will replace statutory plan MP1. It is based on exclusions currently listed in the Marine Parks (Declaration) Regulation 2006, DES' interpretation of Highest Astronomical Tide and DoR's approximation of cadastral boundaries. The GSMP Outer Boundary includes tidal areas determined as Exclusive Use under the Butchulla People Land and Sea Claim #2 Native Title Determination.

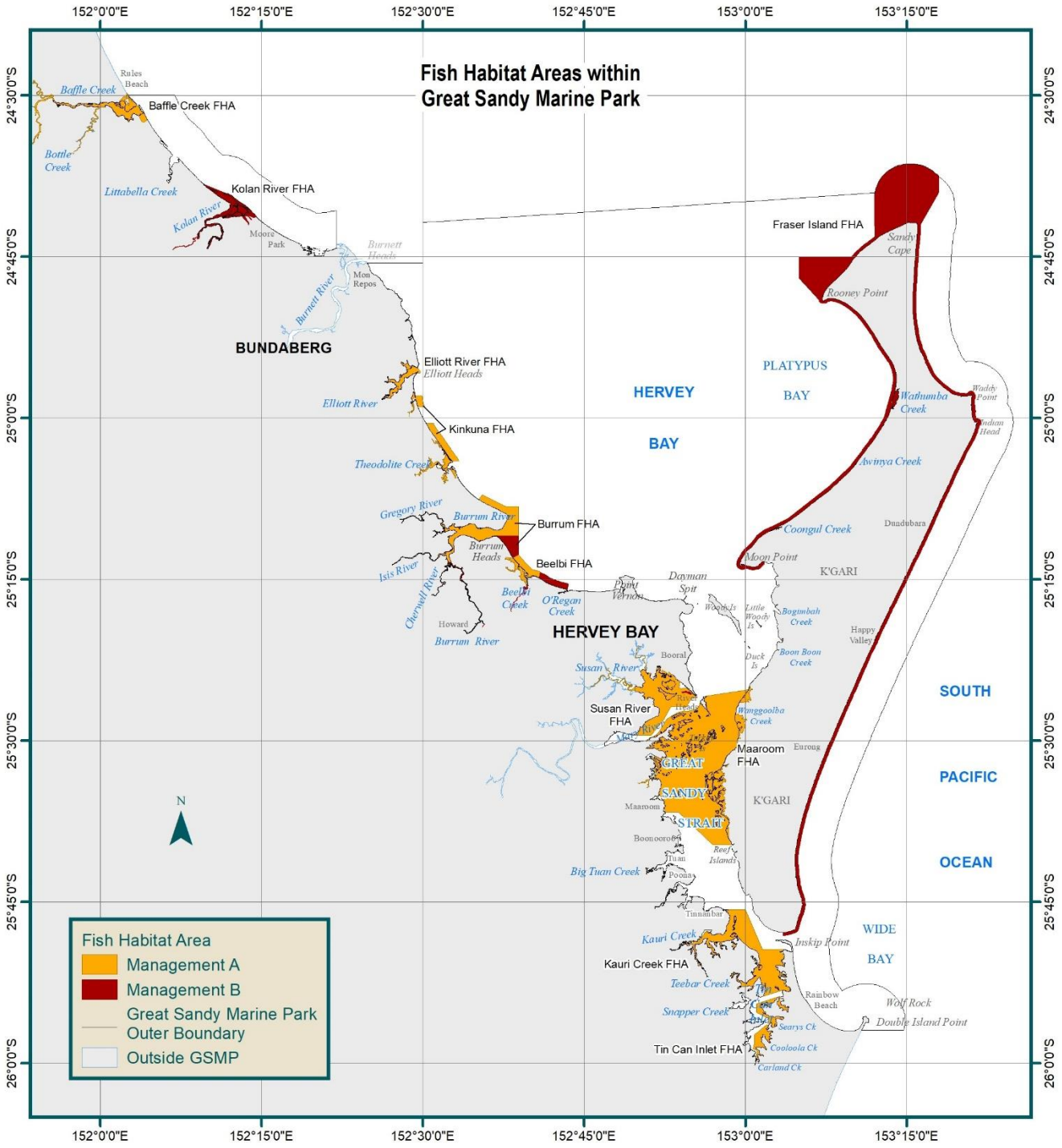
Produced by Marine Protected Area Policy, Queensland Parks and Wildlife Service and Partnerships, Department of Environment and Science.

DRIS 2023

GDA 2020

Queensland Government

Appendix 9. Declared Fish Habitat Areas in Great Sandy Marine Park



Appendix 10. Legislative amendments required to support changes to declared Fish Habitat Area boundaries within Great Sandy Marine Park.

Name of declared FHA	Locality	FHA legislative change	Reason
Baffle Creek	Baffle Creek	Statutory plan - Align FHA exclusions at Rosedale aquaculture facility and Boaga with marine park GU zone. Statutory plan - Amend small area at Flat Rock Picnic Area from management A to management B to allow applications for beach nourishment. Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number.	Complementarity with zoning plan change – FHA boundary to align with amended marine park zone boundary.
Beelbi	Toogoom	Statutory Plan – Amend a small area in Beelbi Creek from management A to management B to allow applications for coastal protection works. Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number.	Complementarity with zoning plan change – management B area to align with amended marine park zoning.
Burrum	Burrum River	Statutory plan - Amend seaward boundary of Burrum FHA exclusion at Buxton and Walker Point to match marine park coordinates. Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number.	Complementarity with zoning plan change – FHA boundary to align with amended marine park zone boundary.
Burrum	Gregory River	Statutory Plan - Amend outer boundary at upstream extent, move 30m downstream. Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number.	Complementarity with zoning plan change – FHA boundary to align with amended marine park zone boundary.
Elliott River	Elliott River	Statutory plan - Change Elliott River FHA exclusions at Melcer Road aquaculture facility to match new GU zone in marine park. Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number.	Complementarity with zoning plan change – FHA boundary to align with amended marine park zone boundary.
Elliott River	Elliott River	Statutory plan - Show exclusion for Elliott Heads to Riverview water pipeline (expanded from 15m to 30m either side of the pipeline). Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number.	Complementarity with zoning plan change – FHA exclusion to align with new marine park GU zone boundary.

Fraser Island	Breaksea Spit	Statutory plan - Amend outer boundary to limit of Queensland Coastal Waters and rename to K'gari. Amend schedule 3 of the Fisheries (General) Regulation 2019 with new name and plan revision number.	Current boundary as shown on the FHA plan extends beyond Queensland Coastal Waters. Fraser Island has been renamed to K'gari (the Butchulla People's name for the island)
Maaroom	Wanggoolba Creek	Statutory plan – Show exclusion around the marked navigation channel to allow for future channel upgrade. Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number.	Complementarity with zoning plan change – FHA exclusion to align with new marine park HPZ boundary.
Susan River	Susan River	Statutory plan - Remove current 'mooring area' and replace with a larger management B area. Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number and to remove the provision that excludes the 'mooring area' shown on the statutory plan from the FHA.	Allow for future vessel buoy moorings, subject to approval, in area with identified demand.
Tin Can Inlet	Searys Creek	Statutory plan - Amend FHA boundary to exclude for future possible upgrade of road (as per marine park boundary). Statutory plan – Exclude power line corridor to allow for possible future upgrade (as per marine park GU zone boundary). Amend schedule 3 of the Fisheries (General) Regulation 2019 with new plan revision number.	Complementarity with zoning plan change – FHA boundary to align with amended marine park zone boundary.
Various	Boat Ramps	Schedule 3 of the Fisheries (General) Regulation 2019 - List 30m boat ramp exclusions where they occur in FHAs (Baffle Creek, Beelbi, Burrum, Elliott River, Kauri Creek and Kolan River FHAs).	Complementarity with marine park exclusions.

Appendix 11. Zone numbers and names to be included in the Final Zoning Plan (DRIS), as presented in the CRIS, and as in the existing zoning plan.

DRIS Zone ID	DRIS Zone Name	Existing Zone ID	CRIS Zone ID	CRIS Zone Name
MNP01	Littabella	x	MNP01	Near Baffle Creek
MNP02	Breaksea Spit	MNP12	MNP02	Breaksea Spit
MNP03	Rooney Point	MNP11	MNP03	Ferguson Spit
MNP04	Central Hervey Bay	x	MNP07	Hervey Bay Paleochannel
MNP05	Burkitts Reef	MNP01	MNP04	Burkitts Reef
MNP06	Hoffmans Rocks	MNP02	MNP05	Hoffmans Rocks
MNP07	Barolin Rock	MNP03	MNP08	Barolin Rock
MNP08	Champagne Pools	MNP13	MNP09	Middle Rocks
MNP09	Southern Hervey Bay	x	MNP11	Fork Bank
MNP10	Four Mile Reef	x	MNP12	Four Mile Reef
MNP11	Offshore Woodgate	MNP04	MNP10	Offshore of Woodgate
MNP12	Offshore Dundubara	x	MNP13	Offshore of Wyuna Creek
MNP13	Fork Bank	MNP10	MNP11	Fork Bank
MNP14	Marsh Creek	MNP09	MNP14	Marsh Creek
MNP15	Isis River	MNP06	MNP15	Isis River
MNP16	Woody Island	MNP14	MNP16	Woody Island
MNP17	Pialba Reef	x	MNP17	Pialba
MNP18	Little Woody Island	MNP15	MNP18	Little Woody Island
MNP19	Duck Island	MNP16	MNP19	Duck Island
MNP20	Mangrove Point	MNP17	MNP20	Mangrove Point
MNP21	Susan River	x	MNP21	Susan River
MNP22	Turkey, Bookar, Walsh Islands	MNP18 MNP19 MNP20	MNP22	Bookar, Walsh, Turkey Islands
MNP23	Garrys Anchorage	MNP22	x	x
MNP24	Cowra Point	x	MNP23	Cowra Point
MNP25	Kauri Creek	MNP23	MNP24	Kauri Creek
MNP26	Myers Creek	MNP24	MNP25	Myers Creek
MNP27	Wolf Rock	MNP29	MNP26	Wolf Rock

DRIS Zone ID	DRIS Zone Name	Existing Zone ID	CRIS Zone ID	CRIS Zone Name
MNP28	Griffen Creek	MNP28	MNP27	Griffen Creek
MNP29	Searys Creek	MNP25	MNP28	Searys Creek
MNP30	Cooloola Creek	MNP26	MNP29	Cooloola Creek
MNP31	Carland Creek	MNP27	MNP30	Carland Creek
CPZ01	Baffle Creek	CPZ01	CPZ01	Baffle Creek
CPZ02	Littabella Creek	CPZ02	CPZ02	Littabella Creek
CPZ03	Southern Gutter	CPZ16	CPZ03	Southern Gutter
CPZ04	Mon Repos	x	CPZ04	Burnett Heads to Mon Repos
CPZ05	Platypus Bay	CPZ12	CPZ06, CPZ13	Platypus Bay, Wathumba Creek
CPZ06	Innes Park	CPZ03	CPZ05	Woongarra Coast
CPZ07	Elliott Heads	CPZ04	CPZ07	Elliott Heads
CPZ08	Waddy Point	CPZ13	CPZ08	Waddy Point
CPZ09	Twenty-Five Fathom Hole	CPZ15	CPZ09	Twenty-Five Fathom Hole
CPZ10	Riverview	CPZ04	CPZ10	Elliott River North
CPZ11	Elliott River	CPZ04	CPZ11	Elliott River
CPZ12	Offshore Wathumba	x	CPZ12	West of Wathumba
CPZ13	Coonarr Creek	CPZ05	CPZ15	Coonarr Creek
CPZ14	Four Mile Reef	x	CPZ14	Four Mile Reef
CPZ15	K'gari eastern beach	CPZ14	CPZ16	K'gari eastern beach
CPZ16	Awinya Creek	CPZ11	CPZ17	Awinya Creek
CPZ17	Theodolite Creek	CPZ06	CPZ18	Theodolite Creek
CPZ18	Woodgate	CPZ07	CPZ19	Offshore of Woodgate
CPZ19	Burrum River	CPZ08	CPZ20	Burrum River
CPZ20	Coongul Creek	CPZ10	CPZ21	Coongul Creek
CPZ21	Great Sandy Strait	CPZ09	CPZ22	Great Sandy Strait
CPZ22	Beelbi Creek	CPZ09	CPZ23	Beelbi Creek
CPZ23	O'Regan Creek	CPZ09	CPZ24	O'Regan Creek
CPZ24	Rainbow Beach	CPZ17	CPZ25	Rainbow Beach
CPZ25	Snapper Creek	CPZ09	CPZ26	Snapper Creek

DRIS Zone ID	DRIS Zone Name	Existing Zone ID	CRIS Zone ID	CRIS Zone Name
CPZ26	Double Island Point	CPZ18	CPZ27	Double Island Point West
CPZ27	Teewah	CPZ18	CPZ28	Double Island Point East
CPZ28	Southern Tin Can Inlet	CPZ09	CPZ29	Tin Can Inlet
HPZ01	Flat Rock	x	HPZ01	Flat Rock
HPZ02	Sandy Cape	HPZ03	HPZ02	Northern K'gari
HPZ03	Rooney Point	HPZ03	HPZ02	Northern K'gari
HPZ04	Bargara	HPZ01	HPZ03	Bargara
HPZ05	Coral Cove	x	HPZ04	Palmer Creek
HPZ06	Platypus Bay	HPZ03	HPZ05	Platypus Bay
HPZ07	Elliott Heads	x	HPZ06	Elliott Heads
HPZ08	Kinkuna	HPZ02	HPZ07	Coonarr
HPZ09	Southwestern Hervey Bay	HPZ02	HPZ08	Hervey Bay
HPZ10	Woralie	HPZ03	HPZ09	Bowarrady Creek
HPZ11	Northern Fork Bank	x	x	x
HPZ12	Pelican Bank	HPZ03	HPZ10	Moon Point
HPZ13	Cherwell and Upper Burrum Rivers	x	HPZ11	Cherwell and Burrum Rivers
HPZ14	Gatakers Bay	x	HPZ12	Gatakers Bay
HPZ15	Beelbi Creek	x	x	x
HPZ16	Point Vernon West	x	x	x
HPZ17	Dayman Spit	x	HPZ13	Dayman Spit
HPZ18	Wanggoolba Creek	x	HPZ14	Wanggoolba Creek
HPZ19	Maaroom	x	HPZ15	Maaroom
HPZ20	Hook Point	HPZ04	HPZ16	Hook Point
HPZ21	Boonooroo	x	HPZ17	Boonooroo
HPZ22	Tuan	x	HPZ18	Tuan
HPZ23	Poona	x	HPZ19	Poona
HPZ24	Tinnanbar	x	HPZ20	Tinnanbar
HPZ25	Inskip	HPZ05	HPZ21	Rainbow Beach North
HPZ26	Rainbow Beach	x	HPZ22	Rainbow Beach

DRIS Zone ID	DRIS Zone Name	Existing Zone ID	CRIS Zone ID	CRIS Zone Name
HPZ27	Tin Can Bay	x	HPZ23	Tin Can Bay
HPZ28	Coloured Sands	HPZ06	HPZ24	Rainbow Beach South
GUZ01	Kolan	GUZ01A	GUZ01	Northern section
GUZ02	Rosedale	x	GUZ02	Rosedale
GUZ03	Winfield	x	GUZ03	Winfield
GUZ04	Boaga	x	GUZ04	Boaga
GUZ05	Winfield East	x	GUZ05	Winfield East
GUZ06	Offshore K'gari North	GUZ01C	GUZ06 GUZ08	Offshore K'gari north Offshore Indian Head
GUZ07	Hervey Bay	GUZ01B	GUZ07	Hervey Bay
GUZ08	Elliott River	x	GUZ09	Elliott River
GUZ09	Riverview North	x	GUZ10	Riverview North
GUZ10	Riverview South	x	GUZ11	Riverview South
GUZ11	Walkers Point	x	GUZ12	Walkers Point
GUZ12	Buxton	x	GUZ13	Buxton
GUZ13	Offshore K'gari South	GUZ01C	GUZ14	Offshore K'gari
GUZ14	Hervey Bay foreshore	GUZ02	GUZ15	Hervey Bay foreshore
GUZ15	Urangan	GUZ02	GUZ16	Urangan
GUZ16	Urangan South	GUZ02	HPZ13	Dayman Spit HPZ
GUZ17	Teewah Point	x	GUZ17	Teewah Point

Appendix 12. Cost benefit analysis

Rezoning the Great Sandy Marine Park

Cost-benefit analysis to inform the regulatory impact statement

A Report prepared for the Department of Environment and Science

4 April 2023

AITHER

Contents

Tables

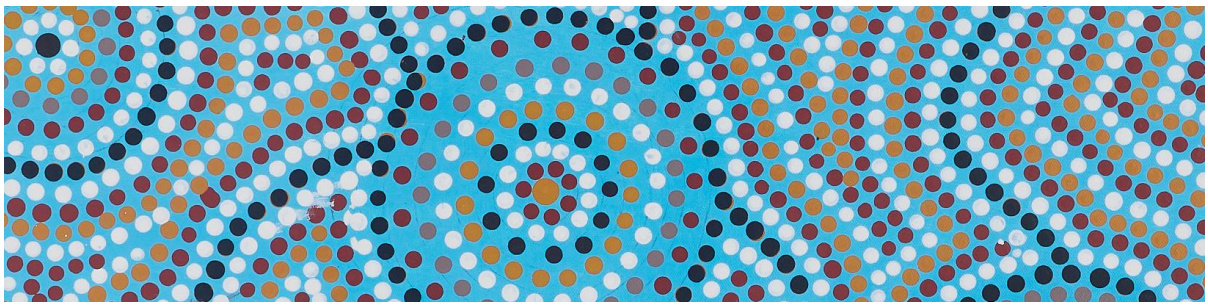
Figures

Acknowledgment of Country

Aither acknowledges First Nations people as the First Peoples of Australia and the Traditional Custodians of its lands and waters. We pay respect to the deep connection First Nations people hold with Country, and celebrate the continuing effect of cultural knowledge and practices on Country and communities across Australia.

We pay our respect to Elders past and present, whose knowledge and leadership has protected Country and allowed First Nations spirituality, culture and kinship to endure through the ages.

We recognise the injustices and hardship faced by First Nations communities and reflect on opportunities for all Australians to play a part in reconciliation and the development of mutual understanding and respect across cultures.



Executive Summary

Economic analysis demonstrates that removing the designated Great Sandy Area from the Great Sandy Marine Park (GSMP) Zoning Plan will provide a net benefit for Queensland. The benefits are primarily driven by increased recreational fishing opportunities from the removal of commercial large mesh gill and ring net fishing. These findings hold for a wide range of assumptions relating to future commercial catch volumes, implementation options and other sensitivities.

The Great Sandy Marine Park Zoning Plan

The GSMP in the Wide Bay-Burnett Region of Queensland covers an area of approximately 6,000 km2. The GSMP contains exceptionally high environmental and conservation value. It surrounds the internationally significant K'gari World Heritage Area and includes the Great Sandy Strait, a Ramsar Wetland of International Significance.

The GSMP was created to support the long-term protection of the natural and cultural values of the area, while also providing opportunities for a wide range of other activities. Activities within the GSMP are managed through the Marine Parks (Great Sandy) Zoning Plan 2017. The Zoning Plan identifies different marine park zones and the activities that can occur within each zone.

The Queensland Government is currently undertaking a review of the Great Sandy Marine Park Zoning Plan (the zoning plan). A draft zoning plan was released for consultation in 2022. The draft plan identifies multiple proposed changes to zoning, including removing the designated Great Sandy Area (GSA). The designated GSA allows commercial net fishing with large mesh gill nets and ring nets in areas of the GSMP where it would otherwise be prohibited.

Removing the designated Great Sandy Area

This report outlines the economic assessment of the removal of the designated GSA. The waterways covered by the designated GSA have high ecological values and form part of a Dugong Protection Area. However, the designated GSA currently allows commercial fishing activities which would otherwise be prohibited by the Conservation Park (CP) zones that apply in this area. This includes the designated Great Sandy Area within Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet. Removing this designated area would prohibit commercial net fishing with large mesh gill nets and ring nets in the CP zones within these waterways. Removing the designated GSA may also be used to prohibit tunnel netting in these areas, however this is a lower concern than the large mesh gill and ring nets and may be allowed to continue.

Restricting commercial net fishing in the GSA is intended to protect the area's significant ecological values and improve recreational fishing opportunities and other recreational activities. However, removing commercial fishing activities from the GSA will negatively affect the commercial fishing industry in the region. Before implementing the proposed changes, the Queensland Government needs to understand and consider the expected costs to the commercial fishing industry and the expected benefits to recreational fishers.

Assessing the costs and benefits of removing the designated GSA

Cost-benefit analysis (CBA) was used to assess the costs and benefits of different scenarios related to the removal of the designated GSA and the consequent prohibition of commercial fishing. The costs

included those to the commercial fishing sector, while the benefits identified were to the recreational fishing sector. The CBA did not include the benefits of improved ecological outcomes and other recreational activities due to data limitations.

The effect of removing the current designated GSA is to reduce commercial fishing catch. The Department of Agriculture and Fisheries (DAF) logbook data measures commercial fish catch and effort for the GSA. The CBA uses average catch data for 2019-2021 to estimate future catch within the region. The economic value of commercial net catch in the region was taken from a report for Fisheries Queensland on economic and social indicators for commercial fisheries (BDO, 2022).

The reduction in commercial fishing due to the removal of the designated GSA is expected to increase recreational fishing activity. Recreational fishers identify that improved catch rates and fish size, and reduced competition with commercial fishers, increased their enjoyment of fishing trips and the number of trips taken. DAF's 2019-20 Statewide recreational fishing survey provided data on recreational fishing activity. Values for recreational fishing trips were taken from a report for Fisheries Queensland on the economic contribution of recreational fishing by Queenslanders to Queensland (BDO, 2021). The CBA also includes benefits to the tourism industry from increased recreational fishing from interstate and international visitors.

Findings from the assessment of the removal of the designated Great Sandy Area

Overall, the results show that removing the designated GSA and prohibiting commercial large mesh gill netting, ring netting, and tunnel netting in this area leads to a net benefit for Queensland. Based on 2019-2021 commercial catch volumes, there is a net present value to Queensland of $6.3 million[1] and a benefit-cost ratio of 2.2 from the proposed changes. This includes:

- $3.8 million in losses for the commercial fishing industry
- $10.8 million in benefits to recreational fishers in Queensland
- $0.6 million in benefits to the local tourism industry
- $1.4 million in additional operating costs to DES.

These estimated costs and benefits change depending on the commercial catch assumptions, the proposed implementation approach, and other sensitivities. However, under all scenarios and assumptions tested, removing the designated GSA leads to an overall net benefit to Queensland. A threshold analysis was also undertaken to test the lowest increase in recreational fishing needed to outweigh the costs to the commercial fishing industry. The threshold analysis shows that less than a 3 per cent annual increase in recreational fishing trips is needed to achieve a net benefit from the removal of the designated GSA. Currently, 108,000 trips are estimated to occur in the GSA. Accounting for population growth, an increase of 3 per cent equates to 4,000 additional trips per year to the GSA compared to the base case.

[1] Using a 7% discount rate over a 30 year appraisal period

1. Introduction

1.1. Purpose and scope

The Queensland Government is currently undertaking a review of the Great Sandy Marine Park (GSMP) Zoning Plan ("the zoning plan"). A draft zoning plan with proposed changes to the current zoning was released for consultation in 2022. The draft zoning plan identifies multiple proposed changes, including the removal of the designated Great Sandy Area (GSA). This will have the effect of removing some commercial net fishing from Baffle Creek, Elliot River, the Burrum River system, Great Sandy Strait, and Tin Can inlet within the Great Sandy Marine Park. The commercial net fishing removed from the GSA waterways would include fishing with large mesh gill nets and ring nets, and potentially also fishing with tunnel nets. The costs and benefits associated with the removal of the designated GSA are the focus of this report.

The key drivers for the proposed removal of the designated GSA are:

- the protection of ecological values by prohibiting commercial fishing nets that present the highest risk of entanglement for threatened species
- addressing conflict between the commercial and recreational fishing sectors
- improving recreational fishing opportunities and other recreational activities.

The proposed removal of the designated GSA will negatively affect the commercial fishing industry in the region by reducing commercial fishing opportunities. The reduction in commercial fishing opportunities is expected to lead to reduced incomes and the potential closure of some fishing businesses. The Queensland Government therefore needs to understand the potential costs to the commercial fishing industry, as well as the potential benefits to recreational fishers, before implementing the proposed changes.

Cost-benefit analysis (CBA) was used to assess the costs to the commercial net fishing sector from the removal of the designated GSA and the associated reduction in commercial net fishing opportunities. The CBA also estimated the potential benefits to the recreational fishing sector. The benefits from improved ecological outcomes and other recreational activities could not be assessed due to a lack of robust data. The findings from the CBA will be used to support a regulatory impact statement (RIS) to the Queensland Office of Best Practice Regulation (OBPR). The decision on the proposed changes will be agreed after the assessment of the RIS, which will include the findings from the CBA. The findings from the CBA could also be used to support the development of potential structural adjustment measures to support the transition out of commercial fishing in the region.

1.2. The Great Sandy Marine Park and Great Sandy Area

The Great Sandy Marine Park (GSMP) is in the Wide Bay-Burnett Region of Queensland, covering an area of approximately 6,000 km2. The area covered by the GSMP extends from Baffle Creek in the north to Double Island Point in the south. The GSPM includes the waters of Hervey Bay, Great Sandy Strait, Tin Can Inlet, and the waters off the east coast of K'gari (Fraser Island) seaward to the extent of Queensland state waters (three nautical miles). The area within the GSMP has exceptionally high environmental and conservation values. It surrounds the internationally significant K'gari World

Heritage Area and includes the Great Sandy Strait, a Ramsar Wetland of International Significance. The GSMP is managed by the Department of Environment and Science (DES).

The GSMP was created to support the long-term protection of the natural and cultural values of the area while also providing opportunities for a wide range of other activities. These activities include recreational and commercial fishing, charter fishing, boating, whale watching, research, coastal works, tourism, SCUBA diving and snorkelling.

Activities within the GSMP are managed through the Marine Parks (Great Sandy) Zoning Plan 2017. The Zoning Plan identifies different zones within the marine park and the activities which can occur within each zone. There are currently five zone types that apply to the GSMP:

- General Use (light blue) – allows for a range of activities including trawling
- Habitat Protection (dark blue) – sensitive habitats with no trawling permitted but other commercial fishing activities allowed
- Conservation Park (yellow) – limited fishing and crabbing allowed, commercial netting, trawling and harvest fishing all prohibited in these zones
- Buffer Zone (olive green) – high conservation value, "look but no take" with an exception for trolling for pelagic species
- Marine National Park (green) – high conservation value, "look but no take".

Designated areas overlap these zones and are used to manage issues that occur at specific locations. For example, go-slow areas are intended to reduce the risk of boat strikes in areas where turtles and dugong feed and rest. The rules applying in designated areas are in addition to zoning rules, not instead of them. There are currently nine designated zones in the GSMP including the GSA which is the focus of this assessment.

The GSA is a designated area with special provisions within the conservation park (CP) zone areas Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait, and Tin Can Inlet. In the GSA, licensed commercial net fishing activities are currently allowed. The GSA therefore allows commercial net fishing to occur where, except for bait netting, it would normally be prohibited by the underlying CP zone. The GSA waterways also have high ecological values and provide critical habitats for a range of threatened species, such as turtles and dugongs. The Great Sandy Strait and Burrum River form part of a Dugong Protection Area. Commercial fishing in the GSA may therefore have a negative effect on the ecological values and species within this area. A recent ecological risk assessment conducted by the Queensland Department of Agriculture and Fisheries identified that commercial fishing with large mesh gill nets and ring nets presents a high risk to threatened species, particularly from entanglement (DAF, 2021).

A 2019 discussion paper on the management of the Marine Park identified that commercial net fishing activities within the GSA waterways was one of the most significant issues of concern from respondents. The draft zoning plan released for public consultation in 2022 proposed the removal the designated Great Sandy Area from the Conservation Park (CP) zones within Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait, and Tin Can Inlet. The removal of the designated GSA would effectively prohibit commercial net fishing using large mesh gill nets and ring nets from those waterways. These proposed changes are the focus of this current assessment.

1.3. Overview of cost-benefit analysis

The assessment uses a cost-benefit analysis (CBA) framework. CBA is the Queensland and Australian Government's accepted economic method for evaluating government policy and investment decisions. CBA helps to better understand how policies affect the well-being of people in the community by providing a rigorous and transparent framework for quantifying and aggregating benefits and costs to inform decision-making.

CBA is a useful public policy tool as it demonstrates the net benefits of a Proposal to the community while acknowledging the need to prioritise scarce public resources to achieve these benefits. Decision-making is supported by key decision metrics, including Net Present Value (NPV) and Benefit-Cost Ratio (BCR)[2] that allow objective comparisons to be made.

Economic CBA is concerned with overall effects on welfare, as measured through people's willingness to pay for certain outcomes. This requires a consideration of a proposal's value to society beyond just its financial effect. For example, a national park may generate modest financial revenues and returns but can be highly valued for recreational and environmental purposes. Economic CBA therefore considers broad social and environmental benefits and disbenefits of a proposed investment.

[2] Net Present Value (NPV) is the difference between the present value of benefits and the present value of costs, while the Benefit-Cost Ratio (BCR) is the ratio of the present value of total benefits to the present value of total costs. For a given discount rate, a positive NPV and BCR greater than 1 indicate that the benefits are expected to outweigh the costs.

2. Assessment of proposed changes to the designated Great Sandy Area

The CBA has been undertaken based on the proposed removal of the designated Great Sandy Area, as described in the draft zoning plan. To undertake the CBA, it is necessary to clearly define both the base case and the proposed options for assessment. The approach to identifying and defining the base case and options for assessment are described here.

2.1. Base case for assessment

The base case represents the state of the world if there was no change to zoning for commercial fishing in the GSA, i.e., the existing designated Great Sandy Area would be maintained. The base case must be clearly defined to enable a robust assessment of the costs and benefits of proposed changes to zoning for commercial fishing. The approach to defining commercial and recreational fishing activity under the base case is described here.

2.1.1. Commercial fishing

In 2021 there were significant changes to the management of Queensland's commercial fisheries, which has led to increased uncertainty over the future volume of commercial fishing catch within the GSA. In September 2021, the new East Coast Inshore Fishery (ECIF) Harvest Strategy was implemented. The strategy sets total allowable catch levels (TACC) for key species within the fishery for five specific regions. Some TACCs are split into individual transferable quota units, which commercial fishers must hold to retain a certain volume of these species. Other TACCs are managed competitively with no individual quotas. The GSMP lies within management region 5 of the ECIF. It is therefore unclear how the commercial fish catch will change in future under the base case in response to these changes. Specific outcomes might include:

- Commercial catch remains at the current 2019-2021 average levels with no major change as a result of the new strategy
- Commercial catch rates increase over time but stay within the level of the current TACC as the fisheries sector restructures and adjusts to the new strategy.
- The level of catch in the region declines as a result of the new strategy or in response to challenging economic conditions.

The most robust data available at the time the analysis was undertaken was the 2019-2021 commercial logbook data. The logbook data includes catch volumes and days spent fishing for each licensed commercial fishing operation by location. This data has therefore been used to develop the base case for assessment. Under the base case it is assumed that there is no major change in commercial catch in future. These assumptions have been tested through the sensitivity analysis to understand the implications if commercial catch were to increase or decrease in future without the proposed changes.

2.1.2. Recreational fishing

Recreational fishing under the base case is assumed to increase in line with population growth for the Fraser Coast Region. However, recreational fishing effort is also assumed to be closely connected to commercial fishing outcomes. Recreational fishers identify that improved catch rates, fish size, and reduced competition with commercial fishers increase their enjoyment of fishing trips (Marine, 2021) and the number of trips taken (Pascoe et al., 2014). The analysis is therefore based on an inverse relationship between commercial and recreational fishing activities within the GSA. This means that under the base case recreational fishing effort declines when commercial fishing increases, and conversely increases when commercial fishing declines. This relationship is also used to estimate recreational fishing activity under the proposed options. The approach to modelling this relationship is described in more detail in section 3.3.2. This assumes that the reduction in commercial fishing leads to increased trips, but based on the literature it is likely that the reduction in commercial fishing will also lead to increased value from each trip undertaken. Given the potential issues with double counting from using both methods, only the increase in trips has been estimated. This may therefore be underestimating some of the benefits to recreational fishers.

2.2. Options modelled in the CBA

The proposed change being assessed through the CBA is the removal of the designated GSA. The designated GSA currently allows commercial fishing activities which would otherwise be prohibited by the Conservation Park (CP) zones that apply in this area. This includes the designated Great Sandy areas within Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait, and Tin Can Inlet.

Removing this designated area would prohibit some forms of commercial net fishing from the CP zones within these waterways. Three specific policy options for implementing this proposed change have been tested:

- **Option 1:** All forms of commercial net fishing (except bait netting) are prohibited, and the quotas held by fishers operating in the area are removed from the TACC, permanently reducing the volume of fish caught in Region 5 of the East Coast Inshore Fishery.
- **Option 2:** Commercial tunnel netting (N10 fishery) is not prohibited, and the tunnel net catch increases as a result of reduced competition from other net fishing types
- **Option 3:** All forms of commercial net fishing (except bait netting) are prohibited, but quotas held by fishers operating in the area are allowed to be sold/transferred for use in other regions. Commercial fish catch therefore increases in other parts of ECIF Region 5, although a 5-year delay has been assumed for this transfer to occur.

These options represent potential high, medium and low outcomes for total changes in commercial net catch volumes as a result of the proposed changes to the designated GSA.

3. Quantification approach

The approach taken to quantifying the costs and benefits of the proposed changes is aligned with best practice CBA guidelines provided by Queensland Treasury. An overview of the approach is provided here, while detailed assumptions and limitations are provided in Appendix A.

3.1. General assumptions and parameters

CBA is undertaken within an incremental and discounted cash flow framework. Implicit in its approach are several key inputs, including a discount rate, appraisal period, geographic scope, and price year. These inputs and assumptions can have a material effect on the results of the cost-benefit analysis and should align with contemporary economic evidence and the type of intervention under analysis.

Queensland Treasury and The Office of Impact Analysis both provide guidance on appropriate values for these inputs that are informed by prevailing economic conditions and a desire for consistency of outputs across various cost-benefit analyses. A structured approach was taken to ensure adopted inputs reflect both Treasury guidance and those used for other CBAs in Queensland. Values and sources for these inputs are provided in Table 1.

Table 1 General inputs and assumptions used in the cost-benefit analysis model

Input	Source	Value(s)
Discount rate	Queensland Treasury and OIA	7 per cent real, (3 per cent and 10 per cent sensitivities)
Appraisal period	Queensland Treasury and OIA	30 years of operation, (20 years and 10 years as sensitivities)
Geographic scope	Queensland Treasury	State of Queensland
Base (price year)	DES Project team	Real 2023 dollars
Policy timeline	DES Project team	New zoning arrangements in operation from 2024

3.2. Implementation and operating costs

DES will incur costs to implement the proposed zoning changes. The proposed source for these inputs and relevant considerations are outlined in Table 2.

Table 2 Implementation and operating costs

Input	Source	Values
Implementation costs	DES	No implementation costs have been included as all resources and equipment needed for implementing and monitoring the proposed changes are already in place

Input	Source	Values
Operating costs	DES	Additional operating costs include one additional Ranger at a cost of $79,000 per year plus an additional $35,000 per year in other operating expenses.

3.3. Expected changes in commercial and recreational fishing

3.3.1. Changes in commercial fishing effort

The effect of prohibiting commercial fishing from the current designated GSA is to reduce commercial fishing catch. The extent to which this occurs depends on both the future commercial catch volumes expected to occur under the base case, and the approach to implementing the proposed changes.

Commercial fish catch and effort for the GSA are measured through the Department of Agriculture and Fisheries (DAF) logbook data. This data is recorded in 6 nautical mile grids across all of Queensland. For this assessment, data on catch and effort for the net fishery was provided for the specific grids which overlap with the GSA (see Figure 1). This data was then adjusted to reflect the extent of the GSA contained within each grid and the assumed spatial distribution of effort within each grid. This adjustment was provided by DES and is included in the Technical Data appendix.

Commercial catch data for 2019-2021 has been used to estimate future catch and effort within the region under the base case, as set out in section 2.1. Information on the current TACC for the ECIF Region 5 was also provided by DAF. The TACC was used to limit increases in commercial catch under some of the sensitivity analysis, described further in section 4.3.

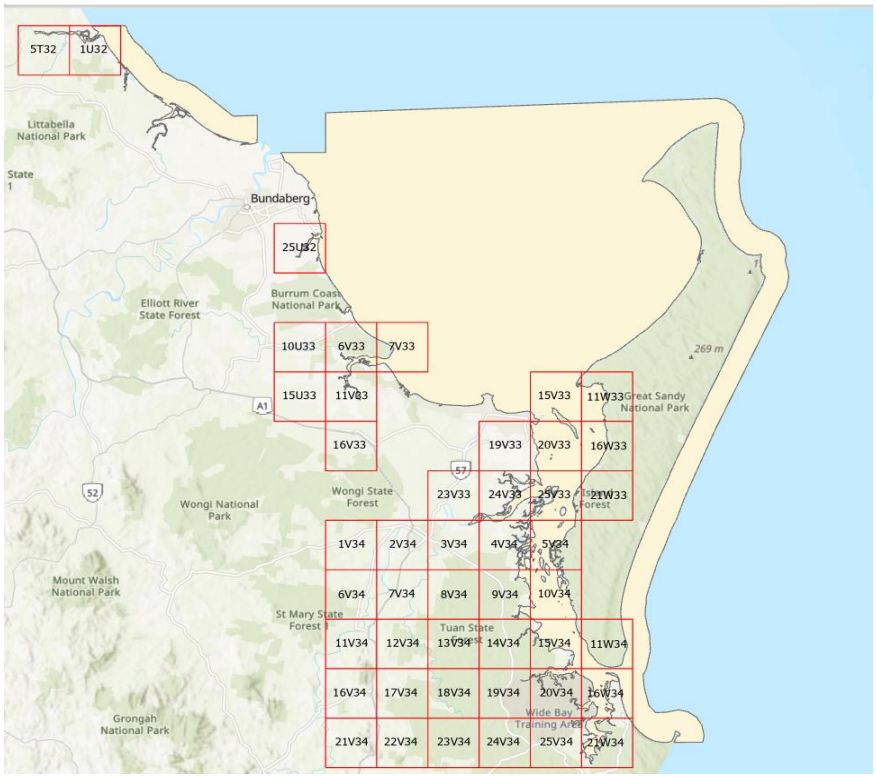


Figure 1 Site grids used to identify commercial catch and effort data

3.3.2. Changes in recreational fishing

Recreational fishing by Queenslanders

Current recreational fishing effort data for Queensland recreational fishers is available from DAF's 2019-20 Statewide recreational fishing surveys (SRFS). This data is only captured at a regional level, with 'region x', as shown in Figure 2, the smallest scale data available for the area of interest. Some adjustments have been made to the regional level effort data so that recreational fishing activity within the GSA can be estimated:

- Previous SRFSs included estimates of recreational fishing effort at different depths, this has been used to estimate the percentage of recreational fishers who are fishing in areas of <9m water depth.
- Bathymetry data from Geoscience Australia has been used to estimate the spatial extent of fishing areas <9m deep with the Wide Bay Burnett Region.
- The spatial area of the GSA was compared to the extent of <9m fishing areas to estimate the size of the GSA as a proportion of the <9m area.

Based on these adjustments, 21 per cent of the recreational fishing activity within the survey region is estimated to occur within the GSA. This approach has been used to estimate the recreational fishing effort within the GSA in 2019-20. It should be noted that two areas, Baffle Creek and Elliot River, are outside of the area of recreational fishing data shown. However, the spatial extent has been included in the proportion calculated, and it is assumed that similar recreational effort occurs in these areas. The recreational fishing data area for Baffle Creek and Elliot River covers the whole of inland South-East Queensland, so it is unlikely to be useful in estimating effort in these areas.

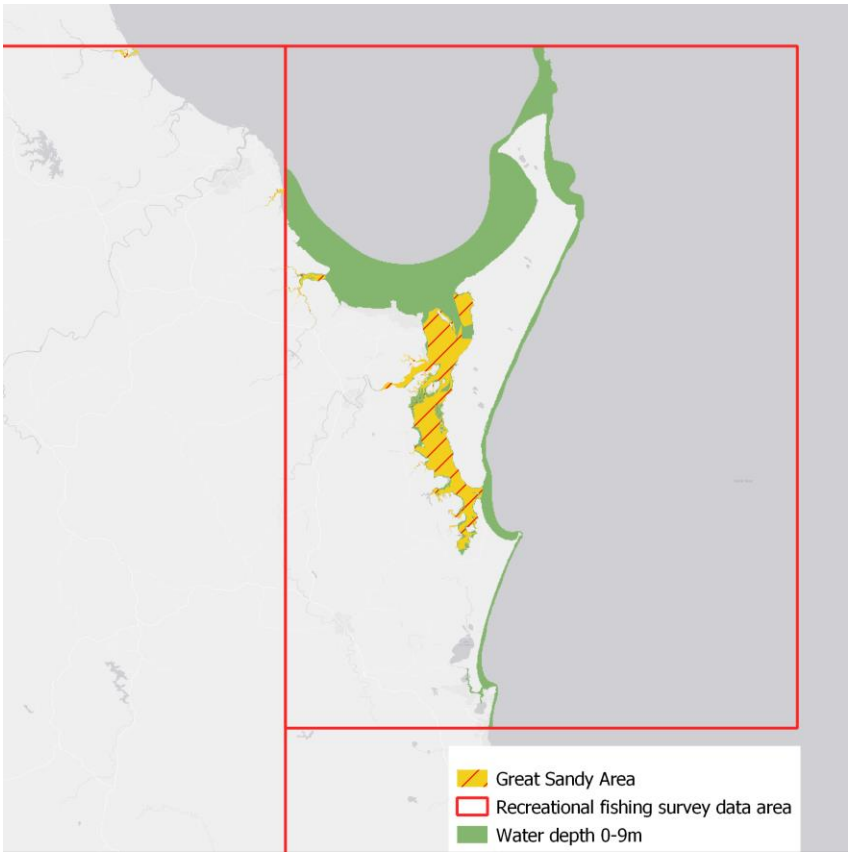


Figure 2 Approach used to refine recreational survey data

Changes in commercial fishing activity under both the base case and the proposed options are expected to lead to a change in recreational fishing activity within the GSA. This is expected to be driven by changes in available species size and weight, ease of catching species, and competition for fishing spots. The removal of the designated GSA is therefore expected to increase fish abundance and size. In particular previous studies in Queensland have shown that increases in recreational catch per trip can induce additional recreational fishing trips.

The findings from a study of the effects of rezoning in Moreton Bay Marine Park have been applied to this assessment. For recreational fishers, the study estimated that when their catch increases by 100 per cent, there would be a 6 per cent increase in the number of trips undertaken (Pascoe, Dell, Tonks, & Kenyon, 2014). This has been used to estimate the expected increase in recreational fishing trips in the Great Sandy Area that would result from the prohibition on commercial fishing.

The total possible increase in recreational trips has been capped at 25 per cent. This is to ensure that the benefits do not overstate the potential upside in recreational fishing activity, which would be limited to some extent by access to the waterways of the current GSA.

Changes in recreational fishing for tourists

The approach outlined above estimates the increase in recreational fishing effort for Queensland recreational fishers. However, there is also expected to be an impact on recreational fishers from outside of Queensland. The data on recreational fishing activity within the GSA by tourists is limited. Survey data from Fraser Coast in 2019 found that 19 per cent of tourists currently visit the region to engage in recreational fishing activities.

It was therefore assumed that of the tourists visiting the Fraser Coast region, 19 per cent engage in recreational fishing activity within the region. Of this number, it is assumed that 21 per cent are fishing with the GSA, aligned to the proportion used in the above approach for Queensland recreational fishing activity.

3.4. Valuing changes in commercial and recreational fishing

3.4.1. Commercial fishing

The change in commercial fishing activity is valued based on the net benefit of commercial fishing activity to commercial fishers aligned with CBA best practice. The net benefit to commercial fishers is the difference between the market price of the catch and the costs incurred in catching the fish. Data on the market price of fish, and the associated costs incurred for fishers in the Wide Bay Burnett region, is taken from the BDO (2020) report on fishing activity within Queensland.

For this assessment a net margins approach has been used to estimate producer surplus. The producer surplus to commercial fishers is the difference between how much a business would be willing to accept for a given quantity of catch versus how much a business can receive by selling the catch at its market price. The difference between these amounts is considered the benefit to the business. In general, the minimum amount a business would be willing to accept for its catch is its costs of bringing that catch to market. These costs include capital, consumables (e.g. fuel, ice), and wages. Different costs are used for tunnel netting compared to other net fishing activities, given the very high effort required for tunnel netting.

The net benefit to commercial fishers is estimated for each year under the base case and option, based on the expected commercial fishing effort within the current designated GSA. Based on the assumed decline in commercial fishing under the policy scenarios compared to the base case scenarios, the change in commercial fishing activity is a net cost to Queensland.

3.4.2. Recreational fishing

The value of the change in fishing effort for Queensland recreational fishers is based on the net benefit to those fishers. Net benefit is calculated using an estimate of consumer surplus for recreational fishers in the Wide Bay Burnett region, developed by BDO (2020). The BDO report uses a travel cost method (TCM). TCM is a standard approach used to estimate economic use values associated with ecosystems or sites that do not have a direct market value.

The TCM uses the cost of travel as a proxy for price, to value recreational sites and recreational activities. Household-level data on the cost of travel per trip to a recreational site and the frequency of travel to the site can be used to estimate the functional relationship between the frequency of trips made to a site and travel costs incurred to visit the site. It assumes that people travel further, or travel more often, to locations they consider to provide better recreational experiences or are more valuable to them. Consumer surplus, or the additional non-monetary value of a recreational site to people that utilise it, can be thought of as the amount that visitors are willing to pay over and above the amount they actually pay to use a recreational site as captured through transactions made in the formal market. The value for the relevant recreational fishing region is $70 per person per trip (BDO, 2020). This is consistent with studies using the TCM for valuing recreational fishing in Gladstone Harbour, which found a value of $66 per person per trip (Windle et al., 2017).

This approach can only be used for recreational fishers from Queensland. For those visiting Queensland from other areas, the benefit is accruing to those fishers and therefore is not a benefit to Queensland but represents a benefit to other areas. For visiting recreational fishers from other States or countries, an expenditure-based approach is used, as that represents a benefit to Queensland.

The benefits of tourism to the local or Queensland economy are based on average expenditure per visitor and an assumed profit margin. This quantifies the net benefits of tourism to the region, accounting for any additional costs related to providing these tourism services. Expenditure by recreational fishers from Queensland is not included as it is unlikely to be additional, i.e., they would still be spending the money in Queensland even if they did not increase their recreational fishing activities.

3.5. Qualitative costs and benefits

The purpose of rezoning the GSMP is to support improved environmental and conservation outcomes and improved enjoyment and use of the area for recreational activities. However, there are significant challenges in quantifying the value of the environmental and conservation outcomes. They have therefore not been included in the analysis but are described here for completeness.

3.5.1. Environmental benefits

As well as the waterways of the current Great Sandy Area providing individuals with benefits from recreational fishing use, it is also likely to have significant non-use, or existence, values for the local or broader Queensland community. For example, over time, a reduction in commercial fishing may improve the ecological condition of these waterways, including increasing populations of fish, dugongs and other species. The removal of commercial fishing nets, particularly large mesh gill nets and ring nets, will also significantly reduce the risk of entanglement for threatened species (e.g. dugongs and turtles) in these waterways and the resultant stress, injury and potential for mortality associated with such entanglement events.

The local or broader Queensland community may place a value on these changes. Existence benefits are based on the value that people assign to these types of economic goods (including public goods) even if they never have and never will use them. These non-use values can be driven by a range of factors including the potential for future use, potential use by future generations or by other people, or simply valuing that the good exists. There may also be other ecosystem service benefits provided by improving ecological outcomes in the current GSA. Wetlands, such as in the Great Sandy Strait, provide a range of ecological services, including carbon sequestration and water filtration, which are valuable for the local area.

3.5.2. Recreational benefits other than fishing

Other recreational activities such as diving, boating or bird watching may all increase in the absence of commercial fishing activities or subsequently due to improved ecological outcomes. These potential benefits have not been quantified due to a lack of data. These benefits may be relatively small compared to current recreational fishing benefits; however, they are also likely to increase in importance over time if the ecological condition of the area improves.

3.5.3. Social costs from loss of commercial fishing

Commercial fishing is an important industry for some communities in the local area. The loss of income and job opportunities may have a wider social impact on these communities which is not fully captured through this analysis. These social impacts may include mental health issues for those directly affected, loss of community identity, and reduced access to fresh seafood for local residents.

4. Results

The analysis has been undertaken for the multiple scenarios and sensitivities described above to better capture the uncertainty in the outcomes, particularly for commercial fishing under the base case. A summary of the results is provided in this section, for a range of scenarios and sensitivities.

4.1. Central case results

The central case results are presented for each of the three policy options in Table 3. For the central case the following assumptions and base case scenarios have been used:

- Commercial fish catch is based on 2019-2021 average catch rates
- There is assumed to be no major change over time in commercial fish catch under the base case.

The results in Table 3 show that under all policy options, the benefits from increased recreational fishing outweigh the losses from commercial fishing.

Table 3 Results for central case (7% discount, 30 year period)

Results	Policy option 1 - no transfer of fishing to other regions	Policy option 2 – retention of tunnel netting	Policy option 3 – transfer to other regions over 5 years
Commercial fishing	-$3,760,087	-$3,427,904	-$779,002
Recreational fishing (Queenslanders)	$10,835,469	$10,004,694	$10,835,469
Recreational fishing (tourists)	$590,010	$544,135	$590,010
Total change in value to Queensland	**$7,665,391**	**$7,120,925**	**$10,646,476**
Total costs to DES	**$1,414,631**	**$1,414,631**	**$1,414,631**
NPV	**$6,250,761**	**$5,706,294**	**$9,231,845**
BCR	**2.21**	**2.18**	**5.21**

Specific considerations for each policy option are described below.

Policy option 1

Under this option all commercial fishing that would occur within the GSA under the base case is completely removed. The loss to commercial fishers is relatively low due to the high costs and low margins for the net fishery. This is supported by evidence from the latest assessment of the net economic return to Queensland's commercial fisheries in 20/21 (BDO, 2023). The latest assessment shows that the East Coast Inshore Fin Fish Fishery returned a net economic loss of $11.3 million.

Under this option there is a 7 per cent increase in recreational fishing in the waterways of the current Great Sandy Area due to the decrease in commercial fishing. This is assumed to occur over a five-year period as recreational fishers adjust to the changes and fish stocks recover.

Policy option 2

Under this scenario tunnel netting is allowed to continue within the Great Sandy Strait (GSS). With other commercial net activities removed it is assumed that 10 per cent of the existing commercial catch is expected to continue to be caught through tunnel netting activities. This has a lower benefit than policy option 2. While the commercial losses are lower under this option, this is offset by reduced recreational fishing benefits associated with continued tunnel netting activities.

This is further tested in the sensitivity analysis with 25 per cent of the of existing catch remaining through increased tunnel netting activity. This assumption leads to a lower net benefit. This is due to lower recreational benefits not being sufficiently offset by the reduced commercial losses as well as the lower profitability associated with tunnel netting activities. Tunnel netting is a very intensive fishing method and therefore faces higher costs compared to other net fishing.

Policy option 3

This option has the highest net benefit, as the majority of commercial losses are avoided through relocating activity to other fisheries. There are some losses still occurring as there is assumed to be up to a 5-year delay in relocating to other fishing areas.

This option may be overstating the recreational fishing benefits as it does not account for any negative recreational fishing impacts from the new areas where commercial fishing is increasing. Under option 3 the recreational fishing benefits are therefore assumed to be the same as under option 1. The magnitude of the recreational fishing benefits will depend on the new areas being fished and whether there is any displacement in the recreational fishing activity occurring within these areas. This is further tested through the sensitivity analysis with an assumption that 75 per cent of the commercial fishing activity leads to displacement of activity in other areas. This assumption still provides a BCR of 1.98.

4.2. Threshold analysis

The results demonstrate that under a majority of scenarios and sensitivities, the benefits from increased recreational fishing outweigh the costs to the commercial fishing sector. For this analysis the increase in recreational fishing effort is the key driver for delivering benefits from the proposed changes. Therefore, a threshold analysis was also undertaken to assess the minimum increase in recreational fishing required to achieve a benefit-cost ratio (BCR) of 1.0 (which is when benefits equal costs). The results of the threshold analysis are shown in Table 4.

The threshold analysis shows that across all the policy options, less than a 3 per cent increase in recreational fishing trips to the GSA is needed to outweigh the costs to the commercial fishing sector.

Table 4 Minimum change in recreational effort needed to outweigh costs to commercial fishing for policy option 1 with 2019-2021 data

	Policy option 1 - no transfer of fishing to other regions	Policy option 2 – retention of tunnel netting	Policy option 3 – transfer to other regions over 5 years
Percentage increase in recreational fishing trips compared to current levels	2.9%	2.6%	0.6%
Average annual increase in recreational fishing trips compared to current levels	4,000	3,700	900

4.3. Sensitivity analysis

4.3.1. Commercial catch assumptions

Given the level of uncertainty in future commercial catch if the designated GSA was retained two additional assumptions have been tested:

- Commercial fishing activity increases until commercial catch in the designated GSA reaches a level consistent with the total allowable catch occurring across the whole of region[3]
- Commercial fishing activity decreases by 25 per cent over the analysis period.

Changing commercial catch over time

The results presented above assume no changes in commercial catch in the designated GSA over time under the base case. This assumption represents the central point of a range of possible outcomes. The effects of decreasing or increasing commercial catch over time for policy option 1 are presented in Table 5. The magnitude of change for the other options is similar to those for option 1.

Table 5 Changes in commercial catch over time (7% discount rate, 30 year appraisal)

	Central – no change in commercial net catch over time	Low - Decreasing commercial net catch over time (3% per annum decline up to 25%)	High – Increasing commercial net catch over time (3% per annum up to TACC)
Commercial fishing	-$3,760,087	-$3,063,225	-$5,012,139

[3] Total allowable catch is set at the region level so the level of allowable catch within the Great Sandy Area has been estimated based on the current proportion of regional catch caught within the GSA

	Central – no change in commercial net catch over time	Low - Decreasing commercial net catch over time (3% per annum decline up to 25%)	High – Increasing commercial net catch over time (3% per annum up to TACC)
Recreational fishing (Queenslanders)	$10,835,469	$8,598,551	$13,448,934
Recreational fishing (tourists)	$590,010	$465,604	$739,775
Total change in value to Queensland	**$7,665,391**	**$6,000,930**	**$9,176,570**
Total costs to DES	**$1,414,631**	**$1,414,631**	**$1,414,631**
NPV	**$6,250,761**	**$4,586,299**	**$7,761,939**
BCR	**2.21**	**2.02**	**2.21**

Under the high catch assumption, where commercial fishing activity increases in the designated GSA under the base case, the loss of commercial fishing value is much higher. However, it is still offset by the benefits of increased recreational fishing. The recreational fishing benefits in the high case are also much higher compared to the central case. Under this assumption, where commercial fishing is increasing under the base case, it causes recreational fishing to decline due to increased competition from commercial fishers. Removal of commercial fishing will therefore have a greater impact under the high case.

Under the low catch assumption, commercial fishing is already declining without the removal of the designated GSA and the associated prohibition of commercial fishing. There is a lower benefit from prohibiting commercial fishing in the GSA, as recreational fishers are already seeing a benefit from reduced competition.

4.3.2. Other sensitivities tested

As well as the scenarios described above, additional sensitivity analysis has been undertaken in line with standard CBA guidelines. The sensitivity analysis is presented for the central case assumptions of 2019-21 average catch and no future change in commercial catch rates.

Table 6 Results of sensitivity analysis (shown as BCRs)

Sensitivities	Policy option 1 - no transfer of fishing to other regions	Policy option 2 – retention of tunnel netting	Policy option 3 – transfer to other regions over 5 years
Central case	2.21	2.18	5.21
3% discount	2.33	2.30	6.17
10% discount	2.12	2.08	4.60

Sensitivities	Policy option 1 - no transfer of fishing to other regions	Policy option 2 – retention of tunnel netting	Policy option 3 – transfer to other regions over 5 years
20 year appraisal period	2.14	2.11	4.76
10 year appraisal period	1.92	1.89	3.56
Tunnel netting increases to 25% of current catch	N/A	2.13	N/A
75 per cent of the commercial catch transferred outside of GSA displaces recreational catch	N/A	N/A	1.98
Benefits are 20% higher	2.31	2.29	5.84
Benefits are 20% lower	2.07	2.03	4.49
Costs are 20% higher than expected	2.09	2.06	4.61
Costs are 20% lower than expected	2.34	2.31	5.98
Stress test scenario	1.51	1.47	2.32

These results show that the benefit-cost ratio under all sensitivities is greater than 1, meaning the benefits outweigh the costs of the proposed removal of the GSA. Even under a 'stress test' scenario which selects all the sensitivities with the lowest benefits[4] the benefit-cost ratio is greater than 1.

4.4. Summary

Economic analysis demonstrates that removal of the designated Great Sandy Area within the Great Sandy Marine Park will provide a net benefit for Queensland. These benefits are primarily driven by increased recreational fishing opportunities. These findings hold for a wide range of assumptions relating to future commercial catch volumes, implementation options and other sensitivities.

[4] Declining commercial fishing under the base case, a 10 per cent discount rate, a 10 year appraisal period and 20 per cent higher costs and lower benefits

The threshold analysis shows that less than a 3 per cent increase in recreational fishing trips is needed to deliver a net benefit from removing the designated GSA and associated commercial fishing. Currently, 108,000 trips are estimated to occur in the GSA. Accounting for population growth, an increase of 3 per cent equates to 4,000 additional trips per year to the GSA compared to the base case.

The increased opportunity for recreational fishing and the associated increase in value within the waterways of the current GSA underpins the benefits of the proposed changes. The analysis relies on the assumption that improved availability of fish and improved catch size are important factors for recreational fishers. This assumption is consistent with evidence from a recent national survey of recreational fishing activity. In response to the survey, 29 per cent of recreational fishers identified issues related to catch rate or quality as a key factor leading to them fishing less than they would prefer. Similarly, 20 per cent of respondents identified that undersized catch regularly led to negative fishing experiences. Another 39 per cent identified that undersized catch had led to negative fishing experiences on more than one occasion (FDRC,2023). Overall, it is likely that removing commercial net fishing will lead to increased catch numbers, size and quality for recreational fishers, and that the increased value for recreational fishing will outweigh the costs to the commercial fishing industry.

The three policy options tested in the analysis all demonstrated a net benefit to Queensland from removing the designated GSA. Option 3, which allows the transfer of individual quotas to other regions within the ECIF Region 5, has the potential to deliver the highest net benefit. However, this option is least aligned with the proposed zoning changes' intention and may understate the impact on other recreational fishing areas. Option 1 has a higher BCR than Option 2 and is more aligned with the intention of the proposed zoning changes. Under Option 2, tunnel netting activities are allowed to continue, reducing the benefits to recreational fishers and potentially limiting the intended ecological benefits. Option 1 is most likely to deliver the ecological protection benefits, which are the main driver for the proposed changes to the zoning plan, while still delivering net benefits for Queensland.

Appendix A - Technical Method and Data

Commercial fishing method

The value of commercial fishing

The cost-benefit analysis model takes a producer surplus approach to modelling the value of commercial fishing. The producer surplus to commercial fishers is the difference between how much a business would be willing to accept for a given quantity of catch versus how much they can receive by selling the catch at its market price. The difference between these amounts is considered the benefit to the business. In general, the minimum amount a business would be willing to accept for its catch is its costs of bringing that catch to market. These costs include things like capital, consumables (e.g. fuel, ice), and wages. Therefore, the benefit to a commercial fishing business is equivalent to:

Equation 1

$$Commercial\ fishing\ benefit\ = \sum_{s,m} Catch_{s,m} \cdot \underbrace{(Price_s - Cost_{s.m})}_{Net\ margin}$$

Where:

$m = fishing\ method\ (e.g. commercial\ netting, tunnel\ netting\ etc.)$
$s = species$

When the term in parenthesis considers all relevant costs, it is commonly referred to as a net margin[5].

The present value of commercial fishing in the Marine Park

The cost-benefit analysis is interested in the impact of the proposed changes to residents of Queensland. The model is therefore interested in the aggregate impact to Queensland commercial fishing from proposed changes to the Zoning Plan over time. Hence, the above becomes:

Equation 2

$$PV\ of\ commercial\ fishing = \sum_t \sum_l \sum_{s,m} \min(Catch_{s,m,l,t}, Quota_{s,m,l,t}) \cdot \underbrace{(Price_s - Cost_{s,m})}_{Net\ margin} \cdot (1+r)^{-t}$$

Where:

$t = time\ period$
$m = fishing\ method\ (e.g. commercial\ netting, tunnel\ netting\ etc.)$
$l = impacted\ locations\ (e.g.\ relevant\ QFish\ grids)$
$s = species$
$r = discount\ rate$

This equation says that the present value of commercial fishing in relevant locations of the Great Sandy Marine Park over the appraisal period, is the sum of the expected catch of different species in an affected location, multiplied by the net margin for that particular species (and method), multiplied

[5] Price and cost are generally functions of other variables including catch.

by the discount factor, summed across all impacted locations and time periods. It also assumes that catch cannot exceed the relevant quota, and that the net margin does not change in real terms over time. In the absence of the proposed changes this formula provides the value of commercial fishing under the base case for impacted locations.

Effects of the proposed changes on commercial fishing in the Marine Park

The proposed changes will directly affect the Queensland commercial fishing industry by reducing the area of water available to this activity. The true effect of the proposed changes is also linked to any change in quota under DAF's Sustainable Fisheries Strategy. A range of hypothetical scenarios are possible. For simplicity, this cost-benefit analysis considers the following two scenarios:

1. the quota of impacted businesses is completely removed (Policy scenario 1)
2. the quota of impacted businesses is completely retained (as under the base case).

These scenarios are effectively the upper (1) and lower (2) bounds of expected impacts under the proposed changes. The impacts of (1) are relatively straightforward to model. Under this scenario, any existing catch in the impacted area is assumed to be lost ($Catch_{s,l,t} = 0, \forall\ s,l,t$). The impacts of (2) are less clear and raise several considerations in relation to whether catch volumes can be transferred to other locations. In general, we may expect catch to decrease when transferred to a new location. This decrease can be expressed as a coefficient on the existing catch under the base case.[6] Equation 3 captures these combined scenarios through the coefficient $A_{i,s}$.

Equation 3

$$Catch_{i,s,m,l,t} = A_{i,s} \cdot Catch_{s,m,l,t}$$

Where:

$i = scenario \in \{1\ , 2\}$

$A_{i,s} = commercial\ catch\ coefficient = \begin{cases} 0, & i = 1 \\ \in [0,1], & i = 2 \end{cases}, for\ species\ s$

We assume that $A_{i,s} = 0$ when $i = 1$, or that the catch coefficient is always zero under scenario (1). Under scenario (2), $A_{i,s}$ considers three specific values for $A_{i,s}$. Each value is a separate scenario under the proposed changes and reflects uncertainty regarding the decision of commercial fishers.

Commercial fishing data

The following data has been used in the analysis of the commercial fishing.

Table 7 Estimated commercial net fishing catch for the GSA using DAF logbook data and DES adjustments

Species	2019-2021 Average catch (kg)
Mullet - unspecified	47,849
Barramundi	3,127

[6] For the purposes of the cost-benefit analysis, catch is assumed to be relocated through the sale and transfer of quota to new businesses who already fish the new catch location. This is consistent with evidence from conversations with commercial fishers in 2019 who suggested that local fishing knowledge is important factor in fishing efficiency.

Species	2019-2021 Average catch (kg)
Whiting - unspecified	37,157
Jew fish	185
Mackerel - grey	6,470
Mackerel - school	5,765
Trevally - unspecified	11,269
Threadfin - king	2,964
Garfish - unspecified	7,592
Bream - unspecified	4,692
Queenfish - unspecified	2,077
Flathead - unspecified	2,797
Threadfin - blue	1,100
Blacktip reef shark	1,252
Other	32,572
Total	166,867

Table 8 Commercial fish prices adjusted to real 2023 values (BDO 2020)

Species	Price $/kg (2023)
Mullet - unspecified	4
Barramundi	13
Whiting - unspecified	14
Jew fish	12
Mackerel - grey	13
Mackerel - school	11
Trevally - unspecified	7
Threadfin - king	11
Garfish - unspecified	6
Bream - unspecified	9

Species	Price $/kg (2023)
Queenfish - unspecified	5
Flathead - unspecified	12
Threadfin - blue	6
Blacktip reef shark	5
Other	7
Mullet - unspecified	4

Table 9 Commercial fishing business costs for the Wide Bay Burnett region, real 2023 values (BD0 2020)

Costs	$ (2023)
Wide Bay Burnett Businesses	
Variable costs (daily)	$459
Fixed costs (daily)	$278
Depreciation (daily)	$110
Low Revenue Businesses (Proxy for Tunnel netting)	
Variable costs (daily)	$179
Fixed costs (daily)	$86
Depreciation (daily)	$22

Table 10 Adjustment to commercial fishing grids to align with GSA (DES)

GRID SITE	% of catch within Great Sandy Area	% calculation method
5T32	49%	% based on area calculation
1U32	80%	% adjusted based on DAF analysis Aug 2021
25U32	70%	% adjusted based on DAF analysis Aug 2021
10U33	100%	% based on area calculation
15U33	100%	% based on area calculation
6V33	80%	% adjusted based on DAF analysis Aug 2021
7V33	75%	% adjusted based on DAF analysis Aug 2021

GRID SITE	% of catch within Great Sandy Area	% calculation method
11V33	100%	% based on area calculation
15V33	80%	% adjusted based on DAF analysis Aug 2021
16V33	100%	% based on area calculation
19V33	93%	% based on area calculation
20V33	96%	% based on area calculation
23V33	31%	% based on area calculation
24V33	100%	% based on area calculation
25V33	100%	% based on area calculation
3V34	22%	% based on area calculation
4V34	100%	% based on area calculation
5V34	100%	% based on area calculation
9V34	100%	% based on area calculation
10V34	100%	% based on area calculation
14V34	100%	% based on area calculation
15V34	100%	% based on area calculation
20V34	100%	% based on area calculation
25V34	100%	% based on area calculation
11W33	100%	% adjusted based on DAF analysis Aug 2021
16W33	100%	% adjusted based on DAF analysis Aug 2021
21W33	100%	% based on area calculation
11W34	60%	% adjusted based on DAF analysis Aug 2021
16W34	90%	% adjusted based on DAF analysis Aug 2021
21W34	100%	% based on area calculation

Table 11 Total allowable catch and recorded catch for ECIF Region 5 (DAF)

Species	2023 Quota (kg)	2022 Recorded Catch (kg)	% Used
Black Jew fish	726	4	1%
Dusky Flathead	41,003	28,336.92	69%
Hammerhead Shark	22,000	8,557.22	39%
Other Shark and Ray	150,184	96,590.63	64%

Species	2023 Quota (kg)	2022 Recorded Catch (kg)	% Used
Sea Mullet	1,614,000	1,022,551.94	63%
Spotted Mackerel	20,650	12,593.62	61%
Tailor	120,000	69,238.16	58%
Yellowfin Bream	81,000	53,878.26	67%
Barramundi	21,193	14,341.05	68%
Grey Mackerel	20,393	7,540.57	37%
King Threadfin	14,110	10,409.35	74%
School Mackerel	69,085	48,642.45	70%
Whiting	162,000	87,040.18	54%
Total	2,336,344	1,459,724	62%

Recreational fishing method

The value of recreational fishing

The cost-benefit analysis model takes a consumer surplus approach to estimating the value of recreational fishing. Consumer surplus to recreational fishers is defined as the difference between their willingness to pay for recreational fishing and the cost of recreational fishing. This is effectively the 'profit' gained by a recreational fisher from a fishing trip.

Equation 4

$$Recreational\ fishing\ value\ = Trips \cdot \underbrace{(WTP - Cost)}_{consumer\ surplus}$$

This approach does not account for wider economic benefits generated by recreational fishers due to expenditure.

The present value of recreational fishing in the Marine Park

The cost-benefit analysis is interested in the aggregate impact on recreational fishing in Queensland from proposed changes to the Zoning Plan over time. Hence, the above becomes:

Equation 5

$$PV\ of\ recreational\ fishing_l\ = \sum_l Trips_l \cdot (WTP_l - Cost) \cdot \left[\frac{(1+n_l)}{(1+r)}\right]^t$$

Where:

$WTP = willingness\ to\ pay$
$n = population\ growth\ rate$
$r = discount\ rate$
$l = location$

DAF estimates total fishing effort in regions across Queensland through the Statewide recreational fishing surveys (SRFS). The SRFS estimates fishing effort in fishing days rather than trips. The cost-benefit analysis model converts fishing days to trips based on an assumed number of trips per fishing day.

BDO EconSearch (2021) estimate the consumer surplus per recreational fishing trip for the various DAF regions used in the SRFS using the travel cost method. This includes specific consumer surplus values for the Wide Bay Burnett region. The cost-benefit analysis transfers consumer surplus values from BDO EconSearch (2021) for the Wide Bay Burnett region to the study context.[7]

These inputs may over or underestimate the value of recreational fishing. To manage this uncertainty, sensitivity analysis of model inputs is completed based on consultation with relevant technical experts, and a desktop review of online resources.

In the absence of the proposed changes, this formula provides the value of recreational fishing under the base case for impacted locations.

Effects of the proposed changes on recreational fishing in the Marine Park

Under the proposed changes, the number of recreational fishing trips in affected areas is expected to increase due to transfers of commercial catch to recreational fishers. The model assumes that relevant decreases in commercial catch become wholly available to recreational fishers.[8] The model also makes the simplifying assumption that catch rates for recreational fishers have a linear relationship with available fish (weight). Finally, the model also calculates the change in recreational catch on a per-trip basis to allow for the effects of changes in population growth on catch rates to be captured. Hence, the change in recreational catch due to lost commercial catch is expressed as:

Equation 6

$$Change\ in\ recreational\ catch_t = \frac{(Change\ in\ commercial\ catch_t + Base\ recreational\ catch)}{Base\ recreational\ catch} \cdot \frac{1}{Trips_t}$$

Where:

$t = time\ period\ of\ change\ (e.g. year)$

Changes in catch rates are then used to estimate induced demand (additional trips). Pascoe et al. (2014) statistically estimate induced demand associated with changes to recreational catch rates in Moreton Bay Marine Park. The cost-benefit analysis transfers estimates from Pascoe et al. (2014) to this study context.[9] Changes in trips are approximately linear with catch rates. Hence, the change in trips is expressed as:

Equation 7

$$Change\ in\ trips_t = min([\beta_0 + \beta_1 \cdot Change\ in\ recreational\ catch_t]\ ,\ M)$$

Where:

$\beta_0, \beta_1 = coefficients$

[7] Noting the limitations associated with transferring values from one context to another, this study was chosen for its geographic proximity to the study site and its recency.

[8] Species that are not relevant to recreational fishers are removed from the calculation.

[9] Noting the limitations associated with transferring values from one context to another, this study was chosen for its geographic proximity to the study site.

$M = assumed\ maximum\ increase\ in\ trips\ from\ current\ base$

β_0 and β_1 are derived directly from Pascoe et al. (2014). M is an assumed value that is based on discussions with the broader project team regarding the capacity of the Marine Park to support an upper limit of trips. This value is tested as part of the threshold analysis.

The combination of Equation 5, Equation 6, and Equation 7 allow the value of recreational fishing in the Marine Park under the proposed changes to be estimated.

Recreational fishing data

The following data has been used in the estimation of recreational fishing.

Table 12 Queensland recreational fishing assumptions

Parameter	Value	Source
Baseline recreational fishing catch in recreation fishing region x (to estimate increase in catch)	378,986	DAF (2019-2020) Statewide Recreational Fishing Survey Data
Baseline recreational fishing effort days in region x (to estimate increase in trips)	482,858	DAF (2019-2020) Statewide Recreational Fishing Survey Data
Average trips per effort day	1.0	Assumed
Growth in recreational fishing per year under the base case due to population growth	1.7%	QGSO (2022) Population growth, regional Queensland, 2020–21
Coefficient for impacted recreational area	0.21	Assumed based on effort fished at <9m (2013 SRFS) and spatial extent of GSA
Induced demand (Change in trip frequency as a function of catch)		
β_0	-0.0002	Pascoe et al (2014)
β_1	0.057	
Maximum change from current base	25%	Assumed
Consumer surplus per person per trip for DAF Region x	$80	BDO (2021)

Table 13 Tourist recreational fishing data

Parameter	Value	Source
Proportion of trips for recreational fishing	19%	Fraser Coast Visitor Activities provided by FCC, source from TRA (2019)
Domestic overnight		
Total trips to Fraser Coast	869,000	Tourism Research Australia NVS 2022
Average expenditure per trip	762	Tourism Research Australia NVS 2022
Domestic Queensland trips that are from intrastate	74%	Tourism Research Australia NVS 2022
Intrastate trips to Fraser Coast	641,406	Calculated
Domestic Queensland trips that are from interstate	26%	Tourism Research Australia NVS 2022
Interstate trips to Fraser Coast	227,594	Calculated
Trip growth rate	3%	Assumed
International overnight		
International trips to Queensland	519,746	Tourism Research Australia IVS 2022
International Queensland trips that are to Fraser Coast	7%	Tourism Research Australia IVS 2019
International trips to Fraser Coast	36,378	Calculated
Average expenditure per trip	398	Tourism Research Australia IVS 2019
Assumed profit margin	5%	Assumed

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We care for one another.

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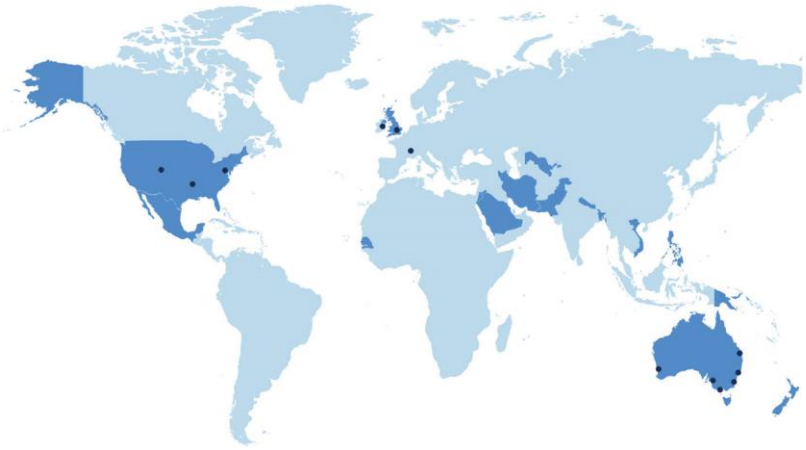

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Document History

Revision:

Revision no.	2
Author/s	Sarah Leck, Thomas Swain
Checked	Justin Story
Approved	Martijn Gough

Distribution:

Issue date	4 April 2023
Issued to	the Department of Environment and Science
Description	Final Report

Citation:

Aither 2023, GSMP Rezoning, report prepared for the Department of Environment and Science

www.aither.com.au

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Appendix 13. Outcomes of consultation

DEPARTMENT OF ENVIRONMENT AND SCIENCE

GREAT SANDY MARINE PARK ZONING PLAN REVIEW

CONSULTATION REPORT
MARCH 2023

ENHANCE research

Queensland Government

The Great Sandy Marine Park Zoning Plan Review

Consultation report overview

The Department of Environment and Science (DES) is conducting a review of the zoning plan for the Great Sandy Marine Park. The release of the draft zoning plan and Regulatory Impact Statement represents the third stage of the review of the plan. Earlier stages involved information gathering and data analysis, as well as release of a discussion paper for public consultation.

The consultation informing this report took place between September 23 and October 23 2022 and was shared either through an online survey, with an open text final comments section or by written submissions (via email or post).

This report combines and analyses the insights from the completed online surveys and written submissions. The structure of the report follows the Regulatory Impact Statement (RIS) structure as shown below.

Sections of the Regulatory Impact Statement (RIS)

- 6.1 Habitat Protection
- 6.2 Conflict in waterways of the designated Great Sandy Area
- 6.3 Protection of threatened species
- 6.4 Protection of cultural values
- 6.5 Management of Platypus Bay to complement K'gari management
- 6.6 Coastal management and alignment with declared Fish Habitat Areas
- 6.7 Maximum penalties for offences
- 6.8 Other zoning plan amendments
- 6.9 Marine Park outer boundary

OVERALL ENGAGEMENT

ONLINE SURVEY 86-92% answered questions about 6.1

About half of the written submissions discuss this topic

SNAPSHOT OVERVIEW (1)
- SECTION 6.1 HABITAT PROTECTION

HABITAT PROTECTION AND AN INTEGRATED ZONING FRAMEWORK

KEY FINDINGS

- The majority of people who completed the online survey chose to respond to questions relating to this topic and indicate strong and broad support for the revised zoning network that increases protection of marine park habitats.
- The proposed changes to the Marine National Park (green) zone network are the particular focus of the zoning-related feedback.
- Those submissions and survey responses opposing the revised zoning configuration generally identify impacts to recreational and commercial fishing and a view that the current zoning is sufficient as the key reasons for their opposition.
- The conservation sector is particularly supportive of the improved protection offered by the draft zoning network and advocate for a greater proportion of the park to be protected in Marine National Park (green) zones to align with contemporary international protected area targets.
- The recreational fishing representative body and many fishing clubs are broadly supportive of the expanded Marine National Park (green) zone network, however, concern with the boundary alignment of some of these zones has been identified and alternative boundary alignments are recommended.
- Many recreational fishers share concerns about the loss of access to their individually-valued fishing locations as a result of specific proposed Marine National Park (green) zones.
- The proposed extension of the Wolf Rock Marine National Park (green) zone to include The Pinnacles is of significant concern to the recreational fishing sector as this site is a valuable recreational fishing location.
- Commercial fishers express significant concerns with proposed changes, identifying changes that will greatly impact on the commercial fishing industry, businesses and livelihoods, and noting a resultant reduction in the availability of fresh local seafood for purchase by the public.
- Some commercial fishers suggest boundary changes and alternative locations for the proposed Marine National Park (green) zone that may reduce impacts on their individual fishing operations.
- The spear fishing community is generally concerned that the expanded Marine National Park zone network will significantly impact their use of most of the accessible and safe inshore reefs.
- Other feedback raises concerns of the impact of expanding the Marine National Park (green) zone network and the transfer of fishing effort into areas still open to fishing.

ONLINE SURVEY RESULT

63% Agree
With proposed increase of the Marine National Park (green) zones from 3.9 to 12.8% of the park

79% Agree
With proposed new or expanded Conservation Park (yellow) zones

75% Agree
With proposed new or expanded Habitat Protection (dark blue) zones

OVERALL ENGAGEMENT

ONLINE SURVEY 86-92% answered questions about 6.1

About half of the written submissions discuss this topic

SNAPSHOT OVERVIEW (2)
- SECTION 6.1 HABITAT PROTECTION

HABITAT PROTECTION AND AN INTEGRATED ZONING FRAMEWORK

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- MNP06 North of Ngkala Rocks – impacts to commercial and recreational fishing areas
- MNP10 Offshore Woodgate - proposed northern and eastern extension will impact on commercial (particularly blue swimmer crab) and recreational fishing areas.
- MNP11 Fork Bank - proposed northern extension will impact on key recreational fishing sites (submissions propose
- alternative boundary alignments).
- MNP12 Four Mile Reef - impacts commercial (particularly marine aquarium fishers) and recreational fishers.
- MNP16 Woody Island - impacts recreational fishers (submissions propose alternative boundary alignments).
- MNP18 Little Woody Island – expansion suggested to include Bogimbah Creek in exchange for proposed zoning downgrade at Wanggoolba Creek
- MNP22 Bookar, Walsh and Turkey Islands - impacts on commercial mud crab fishing areas.
- MNP23 Cowra Point - impacts the Tinnanbar community through loss of access to a local sheltered area used for recreational fishing (submissions propose an alternate Marine National Park zone location).
- MNP25 Myers Creek - impacts on recreational fishers, particularly the inclusion of Teebar Ledge.
- MNP26 Wolf Rock - impacts on commercial and recreational fishers, particularly the incorporation of The Pinnacles.
- Bogimbah Creek Conservation Park (yellow) zone – suggestions have been made to upgrade this zone to a Marine National Park (green) zone to offset the zoning downgrade proposed for Wanggoolba Creek.

ONLINE SURVEY RESULT

63% Agree
With proposed increase of the Marine National Park (green) zones from 3.9 to 12.8% of the park

79% Agree
With proposed new or expanded Conservation Park (yellow) zones

75% Agree
With proposed new or expanded Habitat Protection (dark blue) zones

OVERALL ENGAGEMENT

ONLINE SURVEY 86-92% answered questions about 6.1

About half of the written submissions discuss this topic

SNAPSHOT OVERVIEW (3)
- SECTION 6.1 HABITAT PROTECTION

ESTABLISH DESIGNATED NO ANCHORING AREAS

No specific survey questions were asked however feedback from final comments or written submissions on this issue indicate:

- General support for increased protection of three areas of reef habitat from anchor damage by implementing designated No Anchoring Areas.
- The proposed designated No Anchoring Areas near Point Vernon and Gatakers Bay are the subject of most comment, with some stakeholders, including coral researchers, suggesting these two designated areas should be expanded to include all coral in these areas.
- Some concern for the impact of the designated No Anchoring Area on safe anchoring between Wathumba and Rooney Point. This concern has likely resulted from a misinterpretation of the size of the proposed No Anchoring Area near Wathumba Creek.

PROHIBIT BEAM TRAWLING FROM LOWER MARY RIVER

No specific survey questions were asked however feedback from final comments or written submissions on this issue indicate:

- There is strong support from the conservation and recreational fishing sectors for the prohibition of beam trawling from the lower reaches of the Mary River.
- Some stakeholders suggest prohibiting beam trawling in the Susan River also.

PROHIBIT BLOOD WORMING FROM GREAT SANDY STRAIT

No specific survey questions were asked however feedback from final comments or written submissions on this issue indicate:

- The proposal to prohibit blood worming from the Great Sandy Strait was strongly supported by the conservation sector but received little mention in other written submissions.

PROTECTION OF CREEK MOUTHS

No specific survey questions were asked however feedback from final comments or written submissions on this issue indicate:

- General positive sentiment towards increased protection of creek mouths.
- There is some disagreement with proposed levels of protection due to impact on commercial fishers.

OVERALL ENGAGEMENT

Online Surveys 88-92% answered questions about this

About one third of the written submissions discuss this topic.

SNAPSHOT OVERVIEW

- SECTION 6.2 CONFLICT IN THE WATERWAYS OF THE GREAT SANDY AREA (1)

REMOVAL OF COMMERCIAL LARGE MESH GILL NETS AND RING NETS FROM DESIGNATED GREAT SANDY AREA AND WATERWAYS

KEY FINDINGS

- Overall broad support for removal of commercial large mesh gill and ring nets from designated Great Sandy Area waterways, with the conservation and recreational fishing sectors particularly supportive.
- Many who support the proposal believe that tunnel netting should also be removed from the Great Sandy Strait.
- The commercial fishing sector strongly opposes the proposal and rejects the suggestion that the gill nets that are used propose significant entanglement risk. The proposed changes would have significant impact on the commercial fishing industry within the park by forcing fishing businesses to leave the industry and creating associated flow on effects such as job losses.
- Commercial fishers identify their strong custodianship of the waterways across generations and their ongoing environmental advocacy.
- Significant concern was raised by seafood processors, retailers and consumers regarding the reduced availability of fresh local seafood.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- This is the most contentious and polarising proposal for the zoning plan review.
- The proposed impact mitigation package is viewed with scepticism by the commercial fishing sector both in terms of its ability to effectively compensate fishers as well as manage effort transfer for those fishers who remain.

ONLINE SURVEY RESULT

91% Agree

With proposed removal of commercial large mesh gill and ring nets from from the designated Great Sandy Area waterways (Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet)

OVERALL ENGAGEMENT

Online Surveys 88-92% answered questions about this

About one third of the written submissions discuss this topic.

SNAPSHOT OVERVIEW

- SECTION 6.2 CONFLICT IN THE WATERWAYS OF THE GREAT SANDY AREA (2)

ALLOW CONTINUATION OF COMMERCIAL TUNNEL NETTING IN THE GREAT SANDY STRAIT AND TIN CAN INLET AND SET POCKET NETTING IN THE MARY RIVER

KEY FINDINGS

- Overall, there was little support for the retention of tunnel netting and set pocket netting in these waterways, with tunnel netting being the particular focus of the concerns.
- The conservation and recreational fishing sectors view tunnel netting as a significant and destructive form of commercial net fishing and strongly promote its prohibition.
- The commercial fishing sector supports the continuation of tunnel netting in the Great Sandy Strait and Tin Can Inlet.
- In relation to the set pocket net fishery in the Mary River, the conservation sector suggests 'sunsetting' of the existing licences should be considered to remove this form of netting over time.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- This was the proposed zoning change that received the least public support.

ONLINE SURVEY RESULT

21% Agree

With proposed retention of commercial tunnel netting.

ALLOW USE OF 2 LINES /RODS AND A TOTAL OF 2 HOOKS IN ALL CONSERVATION PARK (YELLOW) ZONES

KEY FINDINGS

- Overall, there was strong support across the commercial and recreational fishing sectors and across most of the community for the proposal to allow fishers to use 2 rods / lines and a total of 2 hooks per person in all Conservation Park (yellow) zones.
- There was some opposition to the proposal from First Nations peoples' representative bodies and conservation organisations who would prefer that a 1 rod / line and 1 hook limit be applied. Some would also prefer this limit to be applied to align with restrictions in other marine parks.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- Objection to the proposal from First Nations peoples' representative bodies and conservation organisations.

ONLINE SURVEY RESULT

80% Agree

With proposed change to allow fishers to use 2 rods / lines and 2 hooks in Conservation Park (yellow) zones

OVERALL ENGAGEMENT

Online Surveys *72-85% answered questions about this*

About a sixth of the written submissions discuss this topic.

SNAPSHOT OVERVIEW (1)
- SECTION 6.3 PROTECTION OF THREATENED SPECIES

MIGRATORY SHOREBIRDS

KEY FINDINGS

- Overall, strong support for the proposed changes to improve protection of migratory shorebirds through the introduction of park-wide measures to protect shorebirds from intentional disturbance, and seasonal access closure periods at four significant shorebird roost sites.
- First Nations peoples' representative bodies support the proposal and request access to Country for Traditional Owners be maintained.
- The conservation sector, and scientific community are particularly supportive, although support from recreational users and fishers, and tourism operators is also relatively high.
- The scientific community suggests better protection of shorebird sites that extend outside the boundary of the marine park and raised concerns with disturbance of shorebirds from coastal development.
- Those who objected to the proposal were mostly recreational fishers, who consider access closures to be an unnecessary measure and would like to maintain unrestricted use of these areas, including at Moon Point and Boonooroo.
- There was a suggestion to modify the boundary at Boonooroo to minimise impacts on local residents.
- There were several suggestions for additional closure areas.

KEY CONTENTIOUS ISSUES/ OTHER COMMENTS

- Proposed changes will restrict use and access, in particular for residents whose property boundaries are adjacent to the Boonooroo seasonal access closure area.
- Concerns that local council dog off leash areas allow disturbance of shorebirds.

ONLINE SURVEY RESULT

84% Agree

With proposed measures to protect shorebirds from intentional disturbance.

76% Agree

With proposed access closure periods at significant shorebird roost sites.

Online Surveys *72-85% answered questions about this*

About a sixth of the written submissions discuss this topic.

SNAPSHOT OVERVIEW (2)
- SECTION 6.3 PROTECTION OF THREATENED SPECIES

GREY NURSE SHARKS

KEY FINDINGS

- Overall, there is strong support for the proposed changes to expand the Wolf Rock Marine National Park (green) zone and designated Grey Nurse Shark area to improve protection of critically endangered grey nurse sharks.
- The conservation sector and scientific community are particularly supportive of the proposal.
- Many recreational fishers agree with the proposal and support from recreational users and tourism operators is also relatively high.
- Recreational fishers who disagree often note the inclusion of The Pinnacles as the reason, due to the popularity of this site and its accessibility. Fishers suggest the use of a Buffer zone over The Pinnacles to allow trolling (with surface lures).
- Commercial fishers predominantly disagree with the proposal.

KEY CONTENTIOUS ISSUES/ OTHER COMMENTS

- The Pinnacles is the site within the proposed expanded Marine National Park (green) zone that was most contentious – predominantly for recreational fishers.
- While some submissions request no change to the existing Marine National Park (green) zone, others suggest the area at The Pinnacles should be changed to a Buffer Zone to allow trolling (with surface lures).

ONLINE SURVEY RESULT

70% Agree

With proposed improved protection of grey nurse sharks.

REDUCE THE THREAT TO TURTLES, DUGONG AND DOLPHINS FROM VESSEL STRIKE

KEY FINDINGS

- Broad support for the proposed changes to designated Go Slow Areas. First Nations peoples' representative bodies, the conservation sector, recreational users, recreational fishers and tourism operators are most supportive of the proposed changes.
- Some commercial fishers disagree with the designated Go Slow Area network, while others support the proposal.
- Various reasons are given by the few respondents who disagree with this proposal, e.g., boat strikes are minimal, current designated Go Slow Areas are sufficient, and threatened species are not present in proposed designated Go Slow Areas.

KEY CONTENTIOUS ISSUES/ OTHER COMMENTS

- Commercial fishers (in particular mud crabbers) generally object to having to comply with designated Go Slow Area speed restrictions as this increases the time taken to service their crab pots.

ONLINE SURVEY RESULT

81% Agree

With proposed expansion of the network of designated go slow areas.

OVERALL ENGAGEMENT

Online Surveys *72-85% answered questions about this*

About a sixth of the written submissions discuss this topic.

SNAPSHOT OVERVIEW (3)
- SECTION 6.3 PROTECTION OF THREATENED SPECIES

IMPROVE PROTECTION OF INTER-NESTING TURTLES

KEY FINDINGS

- Very strong support for expanding the designated Turtle Protection Area off Mon Repos, to protect inter-nesting turtles. Support is highest amongst recreational users, the conservation sector, recreational fishers, and tourism operators.
- Those in the commercial fishing sector are less likely to agree, primarily as this proposal increases the area where commercial trawling is prohibited off Mon Repos for three months a year (1 November to 31 January).

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- None identified.

ONLINE SURVEY RESULT

89% Agree

With proposed increase of the designated Turtle Protection Area.

EXTEND TIMING OF DESIGNATED MON REPOS AREA TO PROTECT LATE SEASON TURTLE HATCHLINGS

KEY FINDINGS

- Very strong support for extending the designated Mon Repos Area rules by one month (to May 31) to protect turtle hatchlings emerging late in the nesting season, from human disturbance. Stakeholders that support this proposal include the conservation sector, recreational users and recreational fishers.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- None identified.

ONLINE SURVEY RESULT

87% Agree

With proposed extended timing of the designated Mon Repos Area by one month (to 31 may) to protect late season turtle hatchlings from disturbance

OVERALL ENGAGEMENT

Online Surveys *69% answered questions about this*

Only a small number of the written submissions discuss this topic.

SNAPSHOT OVERVIEW
- SECTION 6.4 PROTECTION OF CULTURAL VALUES

CARLAND CREEK – DESIGNATED GO SLOW AREA FOR NATURAL AND CULTURAL VALES

KEY FINDINGS
- Moderate support received, with the conservation sector, scientific community and recreational users particularly supportive.
- Minor mention of this proposed change in the written submissions, with comments generally supportive of the proposed designated Go Slow Area.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS
- None identified.

ONLINE SURVEY RESULT

65% Agree

With proposed designated Go Slow Area for natural and cultural values in the Marine National Park (green) zone in Carland Creek.

SEARYS AND COOLOOLA CREEKS – DESIGNATED NO MOTORISED VESSEL AREAS

KEY FINDINGS
- Moderate support for the proposed designated No Motorised Vessel Areas. The conservation sector, scientific community and recreational users are supportive.
- Minor mention of this proposal in the written submissions, with these generally in support of the proposed designated No Motorised Vessel Areas.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS
- None identified.

ONLINE SURVEY RESULT

55% Agree

With proposed designated No Motorised Vessel area in the Marine National Park (green) zones in Searys Creek and Cooloola Creek.

COMBINE THE FIVE SEPARATE DESIGNATED FISH TRAP AREAS AT BOORAL INTO A SINGLE DESIGNATED AREA

KEY FINDINGS
- General sentiment to increase protection of fish trap areas.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS
- Removal of the designated Fish Trap Area at Woody Island.
- Resurvey the coordinates of the fish trap at Woody Island and correctly site the designated area.

ONLINE SURVEY RESULT

No survey questions were asked for this proposed change.

OVERALL ENGAGEMENT

Online Surveys *76% answered questions about this*

About one in ten of the written submissions discuss this topic.

SNAPSHOT OVERVIEW

- SECTION 6.5 MANAGEMENT OF PLATYPUS BAY TO COMPLEMENT K'GARI MANAGEMENT

PROTECTION OF AMENITY VALUES IN NORTH-EAST PLATYPUS BAY

KEY FINDINGS

- Overall, there is strong support for the proposed designated Platypus Bay Area to prohibit motorised water sports and aircraft in the north-east of Platypus Bay to protect the amenity values of this area.
- A small number of submissions recommend the proposal should go further and prohibit all motorised vessels from the designated area.
- Several submissions from the conservation sector and scientific community also highlight the importance of Platypus Bay to migrating humpback whales, recommending that additional provisions should be introduced to protect mother and calf pairs resting in Platypus Bay on their southern migration, e.g. via the use of a designated Go Slow Area.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- If a complete no motorised vessel option (as opposed to only motorised water sports) is progressed there is concern for access to safe anchoring and general boating in the area.
- There are suggestions to ban loud engines to minimise disturbance of migrating humpback whales.

ONLINE SURVEY RESULT

78% Agree

With proposed establishment of a designated area that would prohibit motorised water sports and aircraft to protect amenity values in north-east Platypus Bay.

OVERALL ENGAGEMENT

Online Surveys *72-75% answered questions about this*

Only a small number of the written submissions discuss this topic.

SNAPSHOT OVERVIEW

- SECTION 6.6 COASTAL MANAGEMENT AND ALIGNMENT WITH DECLARED FISH HABITAT AREAS

KEY FINDINGS

- General positive sentiment towards proposed changes with 2 in 3 in agreement among survey respondents. Local governments are particularly supportive of proposed zone changes as they will facilitate the assessment of their applications to undertake works that are deemed necessary to protect foreshore areas.
- A small number of submitters request that the current zoning be retained to maintain the level of protection and simplify the zoning plan, or suggest that coastal management interventions are not needed.
- The recreational fishing sector note that proposed zone downgrades will allow other forms of commercial fishing to occur in locations of the marine park where it is currently prohibited/limited by the existing zoning, with examples given including Dayman Spit and the Burrum River.
- The conservation sector opposes any zone downgrades.
- Respondents who disagree with the proposed changes often cited irrelevant or unrelated reasons. Climate change denial also formed the basis for opposition from several submitters.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- There are specific concerns in relation to the proposal to downgrade the zoning at Wanggoolba Creek. The proposal seeks to better align zoning with channel maintenance dredging that is currently conducted and expected to increase.

ONLINE SURVEY RESULT

67% Agree

With proposed zone changes to facilitate works for coastal management.

72% Agree

With proposed changes to align declared fish habitat area boundaries to improve management consistency.

SNAPSHOT OVERVIEW
- SECTION 6.7 MAXIMUM PENALTIES FOR OFFENDERS

OVERALL ENGAGEMENT

There were no survey questions for this section

a minority of the written submissions discuss this topic.

KEY FINDINGS
- In some cases, the introduction of education initiatives is preferable to imposing higher financial penalties.
- There is a demand for community education of the new zoning plan rules and regulations, specifically those that will apply to the use of vessels.
- Successful implementation of the zoning plan will require enhanced enforcement of the proposed rules and regulations, therefore, further funding should be provided to effectively enforce the zoning plan.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS
- Concern that there will be too many rules which would deter tourists.
- Difficulty in following the new rules and zones, propose sharing an SD card to be inserted in GPS and physical markers on land and water.
- Inconsistencies with maximum penalty points and fines and suggested alignment with the *Aboriginal Cultural Heritage Act 2003.*

SNAPSHOT OVERVIEW
- SECTION 6.8 OTHER ZONING PLAN AMENDMENTS

OVERALL ENGAGEMENT

There were no survey questions for this section

a minority of the written submissions discuss this topic.

KEY FINDINGS
- Written submissions include opposing views on the continuation of the marine aquarium fish fishery in the Little Woody Island Marine National Park (green) zone (existing MNP15).
- Licensed commercial fishers are requesting the continuation of the fishery as a non-conforming use in this zone, however, there are some submissions that are against non-conforming uses being allowed to occur in highly protected zones of the marine park.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS
- Non-conforming uses in highly protected areas of the marine park should either be prohibited immediately or phased out by a specific date.

For Section 6.9 Marine Park outer boundary, no survey questions were asked for this section and no written submissions discussed this section specifically. Comments of relevance have been included in earlier sections such as the designated Fish Trap Area at Woody Island and removal of any currently protected areas.

CONTENTS

BACKGROUND AND APPROACH

BACKGROUND AND OBJECTIVE

BACKGROUND

The Great Sandy Marine Park extends from Baffle Creek in the north to Double Island Point in the south. It includes Hervey Bay, Great Sandy Strait, Tin Can Inlet and the waters off the east coast of K'gari (Fraser Island), seaward to three nautical miles.

Conservation within the marine park is currently managed through a zoning plan consisting of five zone types, nine designated areas, and a system of regulations and permits.

The Queensland Government, through the Department of Environment and Science (DES) conducted a review of the zoning plan and sought feedback from interested parties via a public consultation process.

The consultation was undertaken between Friday 23 September and Sunday 23 October 2022.

STRATEGIC OBJECTIVE

The overall purpose of this consultation is to give the interested parties and the community the opportunity to have their say on the draft zoning plan.

The zoning plan will be finalised following consideration of the feedback received during consultation.

CONSULTATION COMPONENTS

Two discrete components of consultation informed this report:

OPEN PUBLIC SURVEY	WRITTEN SUBMISSIONS
Open Public Consultation Survey	Written submissions from stakeholder groups and individuals
Online survey via the Department's Engagement Platform. Participants had the ability to include short written comments throughout the report if they disagreed with various proposals and there was a large free text section for any final comments.	Written submissions received by the Department via email or post
1,245 registered survey responses	**215*** unique submissions ** ▪ 2 different third party form letters totalling 5,122** ▪ 1 submission comprising 26 signatories * this total does not include the tally of form letters received from individuals ** all unique submissions have been individually coded. While the number of form letters received has been acknowledged, each form letter has been analysed once.

ABOUT THIS REPORT

This report represents the overall insights received from the open public survey and written submissions.

The report has been structured to align with the sections of the Regulatory Impact Statement (RIS), with any additional insights included at the end.

This report includes both quantitative and qualitative analysis and is designed to provide a synthesised overview of the key findings and common themes that emerged.

QUANTITATIVE REPORT INTERPRETATION

Please note the following when interpreting quantitative research results in this report:

- Where question responses do not sum up to 100%, this is due either to rounding or a question allowing multiple responses.
- The base note included below each table and chart throughout the report represents the sample size, which indicates the number of respondents who answered the relevant question.
- Caution is needed in interpreting data with small base sizes of n=30 and under.
- Significance testing has been undertaken between key sub-groups of interest (e.g. primary interest and age) to highlight where differences are true differences beyond the level associated with the relevant sample size. Where there are differences these have been shown as follows:

RED is significantly lower than GREEN

QUALITATIVE REPORT INTERPRETATION

Due to the nature of written submissions, the analysis produced is qualitative in nature. As such, the key themes have been identified and detailed.

While many written submissions did not specify the relevant section of the RIS, the content has been thematically coded where possible to the most relevant section.

It should be noted that quantification of results is not appropriate due to the number of written submissions and thematic analysis approach used, however the strength of mention is reflected in terms of the order of themes or visually represented.

Certain sections of the report contain very few written submissions and therefore the findings should be treated with caution as they reflect the viewpoint of a very small number of responses.

LISTING OF ZONES

Where zones are listed in commentary, if the order is not numeric, they are ordered by extent of mention to provide greater context.

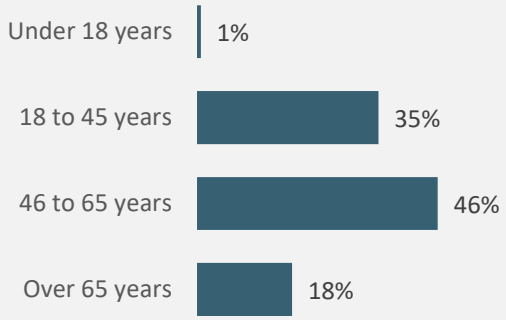
PROFILE OF CONSULTATION PARTICIPANTS

Open Consultation Survey
- Participant profile (1)

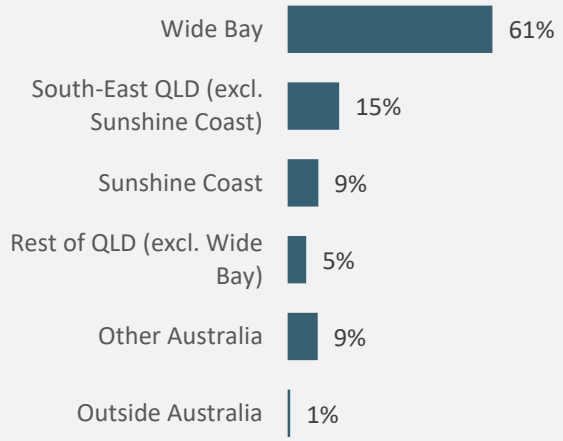
Survey

When interpreting the quantitative survey results, it should be noted the survey was 'opt in' and not random so the results are representative only of the mix of respondents participating and not necessarily the wider general population. The survey also allowed participants to only complete questions of interest therefore the base sizes vary and are reflected in the base notes on each relevant page.

AGE



REGION



89%
Would like to be kept informed about the Great Sandy Marine Park zoning plan review

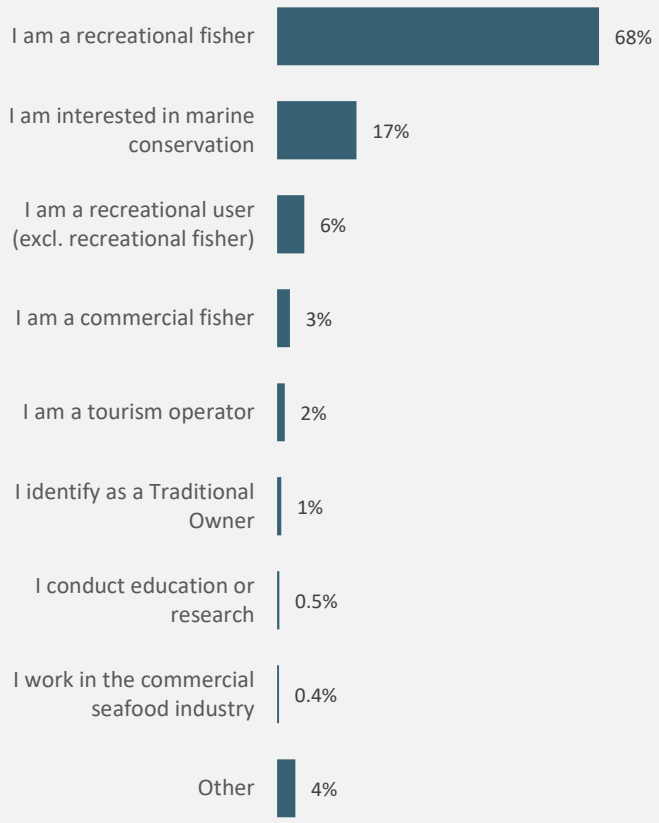
65%
Agree to receive communications, project updates and information from QLD Government

Base: All respondents (n=1,245).

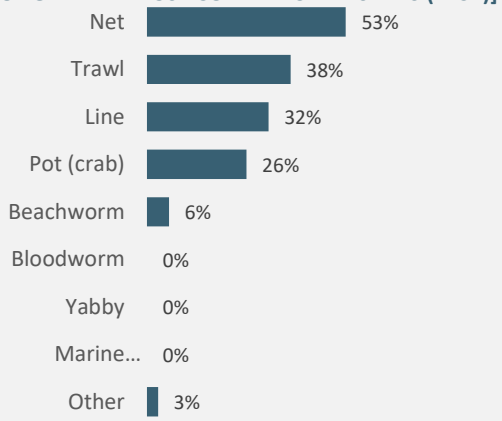
Open Consultation Survey
- Participant profile (2)

Survey

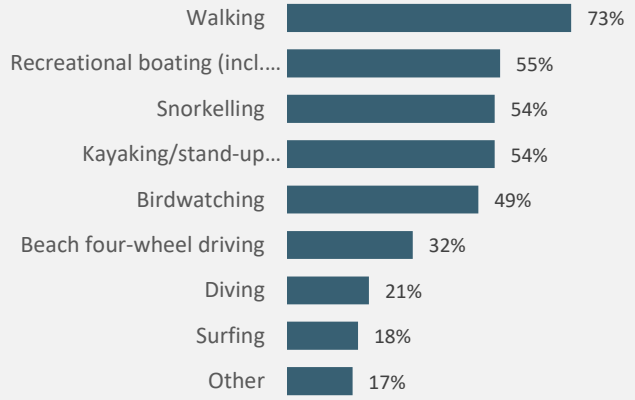
PRIMARY INTEREST IN GREAT SANDY MARINE PARK



COMMERCIAL FISHERY INVOLVED WITH
[AMONG PRIMARY USE COMMERCIAL FISHERS (n=34)]



RECREATIONAL ACTIVITIES UNDERTAKEN
[AMONG PRIMARY USE RECREATIONAL USERS (n=71)]



Base: All respondents (n=1,245). Q. What is your primary use/interest in Great Sandy Marine park? Q. Which commercial fishery or fisheries are you involved with? (Primary Use) Q. What sort of recreational activities do you undertake? (Primary Use)

Written submissions
- Profile

Written Submissions

STAKEHOLDER TYPE	Submissions
Individuals	167
Organisation / club	22
Representative body	13
Business	9
Government (not state gov't dept.)	4
TOTAL	**215**

STAKEHOLDER INTEREST	Submissions
Commercial fishing	44
Variety of interests in marine park	38
Recreational fishing	36
Conservation / NRM	35
Tinnanbar community	26
Access to locally caught seafood	7
Boating	7
Research / education	6
Tourism	5
Government (not state gov't dept.)	4
Community group	3
First Nations peoples' representative bodies	2
User group	2
TOTAL	**215**

INSIGHTS ALIGNED TO THE REGULATORY IMPACT STATEMENT (RIS)

Written submissions
- Overview

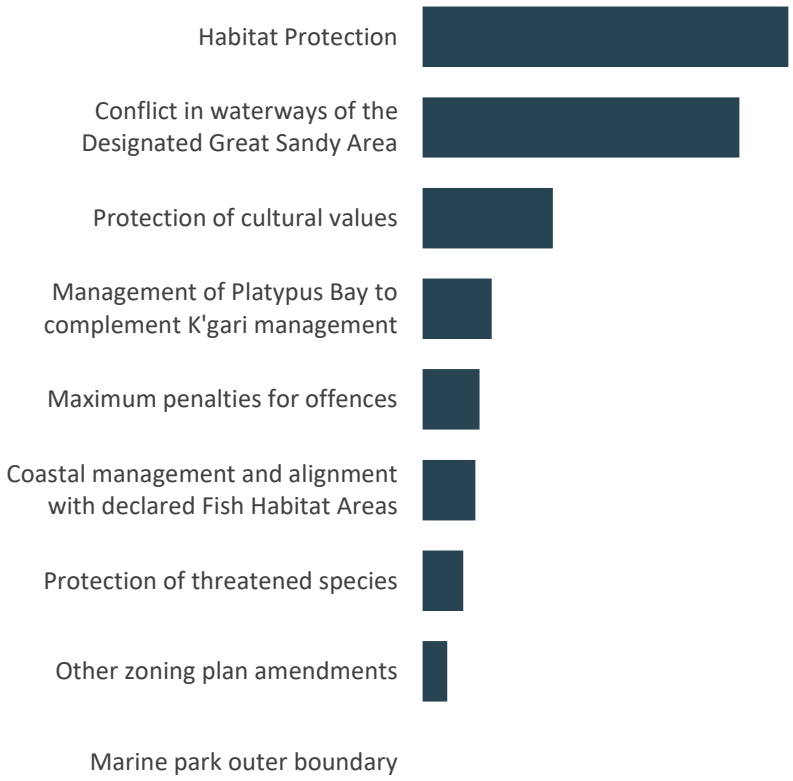
Written Submissions

Overall, most written submissions related to the topics of Habitat Protection, Conflict in the waterways of the designated Great Sandy Area or Protection of Cultural Values. The marine park outer boundary is the least discussed topic.

The general sentiment of written submissions is overall mixed or slightly negative, with many expressing concerns or areas they would like to see addressed.

INTERPRETATION NOTE
It should be noted that the majority of feedback received in the written submissions focused on various elements of the draft zoning plan and certain sections of the RIS, however reference to specific options or preferences was limited. Therefore, this report does not provide recommendations or guidance on options but focuses on highlighting the key themes mentioned, positives and key contentious issues noted.

Written submissions by RIS section



Please note the information on these pages are based qualitative interpretation. Charts do not represent absolute statistics it is only included to provide indication of strength of mention

RIS 6.1 - HABITAT PROTECTION

OVERALL ENGAGEMENT FOR THIS SECTION

Online Surveys *86-92% answered questions about this*

About half of the written submissions

DETAILED OVERVIEW

SECTION 6.1 HABITAT PROTECTION (1)

HABITAT PROTECTION AND AN INTEGRATED ZONING FRAMEWORK

Generally, feedback from the online survey indicates a positive sentiment towards proposed changes to the zoning plan to improve habitat protection and include 12.8% of the area of the marine park in Marine National Park (green) zones. Written submissions that discuss habitat protection raise issues with specific zones, or discuss potential negative impacts on fishing activities (commercial, recreational, spearfishing) if proposed changes are implemented. Some submissions recommend an even greater proportion of the park be protected in the network of Marine National Park (green) zones to better align with international targets and protect vulnerable habitats. On the contrary, some submissions question if changes to the current zoning plan are needed, or to the extent proposed, and request the current levels of protection be maintained.

ONLINE SURVEY RESULTS

At least two in three respondents agree with the proposed changes in relation to Habitat Protection. Some stakeholders disagree with the proposed level of habitat representation and advocate to protect a larger proportion of the park in Marine National Park (green) zones.

63% Agree
With proposed increase of the National Marine Park (green) zones from 3.9 to 12.8% of the park

79% Agree
With proposed new or expanded Conservation Park (yellow) zones

75% Agree
With proposed new or expanded Habitat Protection (dark blue) zones

KEY FINDINGS

- The majority of people who completed the online survey chose to respond to questions relating to this topic and indicate strong and broad support for the revised zoning network that increases protection of marine park habitats.
- The proposed changes to the Marine National Park (green) zone network are the particular focus of the zoning-related feedback.
- Those submissions and survey responses opposing the revised zoning configuration generally identify impacts to recreational and commercial fishing and a view that the current zoning is sufficient, as the key reasons for their opposition.
- The conservation sector is particularly supportive of the improved protection offered by the draft zoning network and advocate for a greater proportion of the park to be protected in Marine National Park (green) zones to align with contemporary international protected area targets.
- The recreational fishing representative body and many fishing clubs are broadly supportive of the expanded Marine National Park (green) zone network, however, concerns with the boundary alignment of some Marine National Park (green) zones have been identified and alternative boundary alignments have been recommended.
- Many recreational fishers raised concerns with the loss of access to their individually-valued fishing locations as a result of specific proposed Marine National Park (green) zones. The proposed extension of the Wolf Rock Marine National Park (green) zone to include The Pinnacles is of significant concern to the recreational fishing sector, as this site is a valuable recreational fishing location.
- Commercial fishers expressed significant concerns with proposed changes, identifying changes that will greatly impact on the commercial fishing industry, businesses and livelihoods, noting a resultant reduction in the availability of fresh local seafood for purchase by the public.
- Some commercial fishers suggest boundary changes and alternative locations for the proposed Marine National Park (green) zones that may reduce impacts on their individual fishing operations.
- The spear fishing community is generally concerned that the expanded Marine National Park (green) zone network will significantly impact their use of most of the accessible and safe inshore reefs.
- Other feedback raised concerns of the impact of expanding the Marine National Park (green) zone network and the transfer of fishing effort into areas still open to fishing.

OVERALL ENGAGEMENT FOR THIS SECTION

Online Surveys *86-92% answered questions about this*

About half of the written submissions

DETAILED OVERVIEW

SECTION 6.1 HABITAT PROTECTION (2)

HABITAT PROTECTION AND AN INTEGRATED ZONING FRAMEWORK

ONLINE SURVEY RESULTS

At least two in three respondents agree with the proposed changes in relation to Habitat Protection. Some disagreement may be due to wanting the changes to go further and protect a larger percentage of the Park.

63% Agree
With proposed increase of the National Marine Park (green) zones from 3.9 to 12.8% of the park

79% Agree
With proposed new or expanded Conservation Park (yellow) zones

75% Agree
With proposed new or expanded Habitat Protection (dark blue) zones

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- MNP06 North of Ngkala Rocks – impacts to commercial and recreational fishing areas
- MNP10 Offshore Woodgate - proposed northern and eastern extension will impact on commercial (particularly blue swimmer crab) and recreational fishing areas.
- MNP11 Fork Bank - proposed northern extension will impact on key recreational fishing sites (submissions propose
- alternative boundary alignments).
- MNP12 Four Mile Reef - impacts commercial (particularly marine aquarium fishers) and recreational fishers.
- MNP16 Woody Island - impacts recreational fishers (submissions propose alternative boundary alignments).
- MNP18 Little Woody Island – expansion suggested to include Bogimbah Creek in exchange for proposed zoning downgrade at Wanggoolba Creek
- MNP22 Bookar, Walsh and Turkey Islands - impacts on commercial mud crab fishing areas.
- MNP23 Cowra Point - impacts the Tinnanbar community through loss of access to a local sheltered area used for recreational fishing (submissions propose an alternate Marine National Park zone location).
- MNP25 Myers Creek - impacts on recreational fishers, particularly the inclusion of Teebar Ledge.
- MNP26 Wolf Rock - impacts on commercial and recreational fishers, particularly the incorporation of The Pinnacles.
- Bogimbah Creek Conservation Park (yellow) zone – suggestions have been made to upgrade this zone to a Marine National Park (green) zone to offset the zoning downgrade proposed for Wanggoolba Creek.

OVERALL ENGAGEMENT FOR THIS SECTION

Online Surveys *86-92% answered questions about this*

About half of the written submissions

DETAILED OVERVIEW

SECTION 6.1 HABITAT PROTECTION (3)

OTHER PROPOSED CHANGES

Other changes proposed in the RIS received fewer comments or feedback within the written submissions. However, there is general support for establishing designated No Anchoring Areas, prohibiting beam trawling from the lower reaches of the Mary River, prohibiting blood worming from the Great Sandy Strait, and increasing protection of several creek mouths.

ESTABLISH DESIGNATED NO ANCHORING AREAS

KEY FINDINGS

No specific survey questions were asked, however feedback from final comments or written submissions on this issue indicate:

- General support for increased protection of three areas of reef habitat from anchor damage by implementing designated No Anchoring Areas.
- The proposed No Anchoring Areas near Point Vernon and Gatakers Bay were the subject of most comment, with some stakeholders, including coral researchers, suggesting these two areas should be expanded to better protect all coral in these areas.
- Some concern for the impact of the No Anchoring Area on safe anchoring between Wathumba Creek and Rooney Point. This concern has likely resulted from a misinterpretation of the size of the proposed No Anchoring Area near Wathumba Creek.

PROHIBIT BEAM TRAWLING FROM LOWER MARY RIVER

KEY FINDINGS

No specific survey questions were asked, however feedback from final comments or written submissions on this issue indicate:

- There is strong support for the prohibition of beam trawling from the lower reaches of the Mary River from the conservation and recreational fishing sectors.
- Some stakeholders suggest prohibiting beam trawling in the Susan River also.

PROHIBIT BLOOD WORMING FROM GREAT SANDY STRAIT

KEY FINDINGS

No specific survey questions were asked, however feedback from final comments or written submissions on this issue indicate:

- The proposal to prohibit blood worming from the Great Sandy Strait was strongly supported by the conservation sector but received little mention in other written submissions.

PROTECTION OF CREEK MOUTHS

KEY FINDINGS

No specific survey questions were asked, however feedback from final comments or written submissions on this issue indicate:

- General positive sentiment towards increasing protection of creek mouths.
- There is some disagreement with the proposed upgrading of zoning in these areas due to the changes limiting/prohibiting some commercial fishing activities.

Habitat protection
- an overview of survey responses

86-92% chose to answer questions about this section

Survey responses

Survey responses

The following pages include analysed results from the online survey. Three specific questions were asked of respondents to gauge their level of agreement with proposed changes. Where participants disagreed, a follow up question offered the opportunity to explain their disagreement. Feedback was also received through the final comments question at the end of the survey which has been coded and included within the relevant section.

SURVEY RESPONSES FROM SPECIFIC QUESTIONS

The following specific questions were asked in the survey:

- Q. To what extent do you agree with the proposed increase of the Marine National Park (green) zone network from 3.9% to 12.8% of the total area of the marine park?
- Q. To what extent do you agree with the proposed new or expanded Conservation Park (yellow) zones?
- Q. To what extent do you agree with the proposed new or expanded Habitat Protection (blue) zones?

CODED RESPONSES FROM FINAL COMMENTS

At the end of the online survey, respondents were able to provide any final comments through an open ended question.

The feedback received through this question provides insights and information to support or refute proposed zoning plan changes or offers alternative perspectives and differing options for departmental consideration.

PROPOSED INCREASE OF MARINE NATIONAL PARK (GREEN) ZONE NETWORK

Over 9 in 10 (92%) respondents chose to answer questions around Marine National Park (green) zones.

Of those who chose to answer, 3 in 5 (63%) agree with the proposed increase in the Marine National Park (green) zone network from 3.9% to 12.8% of the total area of the marine park.

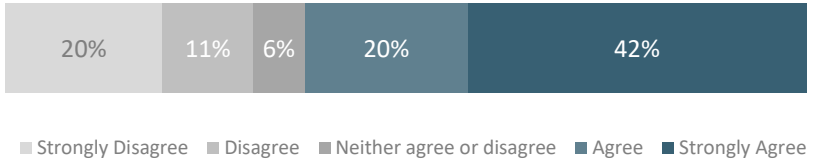
AGREEMENT
Those interested in marine conservation or who are recreational users of the marine park are more likely to agree with the proposed changes than other primary interest groups, particularly commercial fishers.

DISAGREEMENT
Those aged under 45 years are more likely to disagree with the proposed changes than older age groups.

Commercial fishers are most likely to disagree with the changes.

92% chose to answer the questions around Marine National Park (green) zones

AGREEMENT WITH THE PROPOSED INCREASE OF THE GREEN ZONE NETWORK FROM 3.9% TO 12.8% OF THE TOTAL MARINE PARK AREA



Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	11%*	92%	5%	58%	72%	47%*
% Disagree	89%*	6%	84%	34%	21%	53%*
	n=9*	n=201	n=37	n=768	n=67	n=17*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	54%	64%	76%
% Disagree	39%	30%	19%
	n=405	n=519	n=196

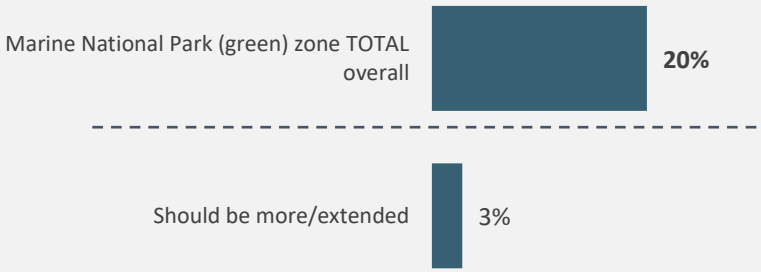
*Caution small sample size. Excluded from significance testing.

Base: All respondents (n=1245). Q. [Habitat protection – Green Zones] Marine National Park (green) zones play an important role in protecting biodiversity and the range of habitats in the marine park. The draft zoning plan includes new and extended green zones that have been placed to maximise conservation while minimising impacts on users of the marine park as much as possible (RIS Section 6.1.1).Would you like to answer a question on this? Base: Those who chose to answer question (n=1143). Q. To what extent do you agree with the proposed increase of the Marine National Park (green) zone network from 3.9% to 12.8% of the total area of the marine park?

SUPPORT FOR PROPOSED MARINE NATIONAL PARK (GREEN) ZONE NETWORK

There is strong support for the proposed expansion of the Marine National Park (green) zone network to include 12.8% of the area of the marine park. The recreational fishing representative body and many fishing clubs are broadly supportive of the expanded Marine National Park (green) zone network, although recommending alternative boundary alignments for some Marine National Park (green) zones. The conservation sector is particularly supportive of the improved protection offered by the revised zoning network and along with others, is advocating for a greater proportion of the park to be protected in Marine National Park (green) zones to align with contemporary international protected area targets.

29%
made final free-text comments about zoning



Please note that codes explaining reasons for support are identified above. The full codeframe is included further in the report on page 130.

63%
Agree with the proposed Marine National Park (green) zone increase

"I congratulate you on expanding the marine protection areas and measures, but I think they do not go far enough. Particularly green zone areas must be expanded a lot further".

"Thank you for your considered proposal and for providing the opportunity for feedback. While the extension of the green zone is an encouraging step forward, I don't believe 12.8% goes far enough in providing protection to the marine environment. A figure > 25% would have a greater chance of preserving the unique habitat and its residents".

"Please provide more habitat protection for intertidal, shallow subtidal and deep subtidal seagrasses, as the current proposal only protects 16% of historical seagrass in MNP. Please ensure the overall rezoning plan meets contemporary Marine Protected Area (MPA) principles and that the plan expands and improves the existing network of protected areas. I strongly do not support downgrading, downsizing or the delisting of protected area status".

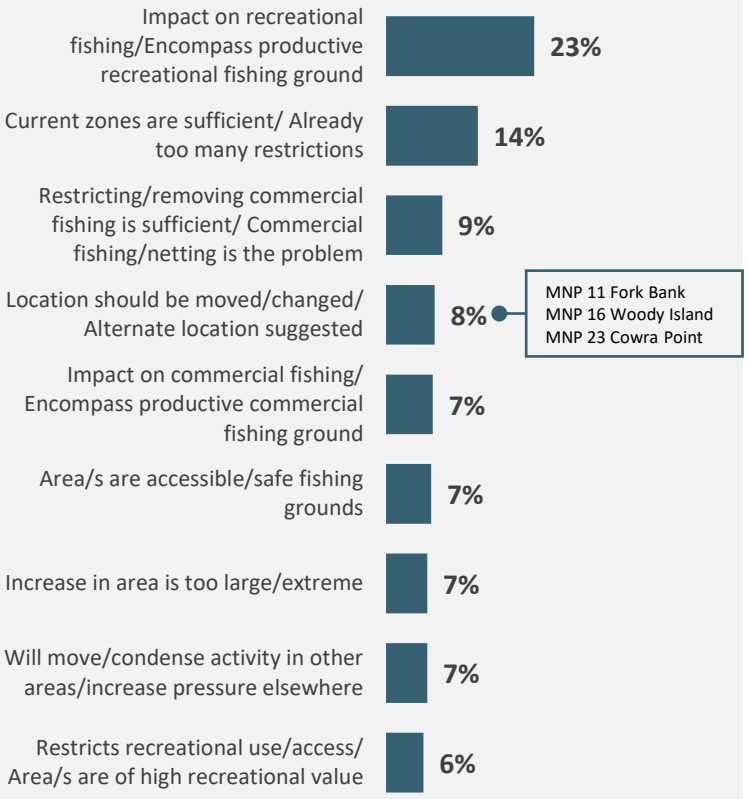
"Increasing the marine sanctuary coverage to a minimum of 12.8% addresses omissions from the current plan. However, more habitat protection is required for seagrass, which is vital for the endangered dugong population. Seagrass is particularly vulnerable, as it is severely impacted by sediment from agricultural practices and from flood run-off".

"Do everything possible to ensure the flourishing of all biodiversity of bird and sea life on a long-term basis. I would like to see the area under complete sanctuary conservation increased to 20% of the area."

Base: Those who chose to answer question (n=1143). Q. To what extent do you agree with the proposed increase of the Marine National Park (green) zone network from 3.9% to 12.8% of the total area of the marine park?
Base: All respondents who made comments about zoning (n=184).
Q. What other comments would you like to make on the draft zoning plan?

DISAGREEMENT WITH PROPOSED MARINE NATIONAL PARK (GREEN) ZONE NETWORK

KEY REASONS FOR DISAGREEMENT



Note: only codes >5% shown.

Base: Those who chose to answer question (n=1143). Q. To what extent do you agree with the proposed increase of the Marine National Park (green) zone network from 3.9% to 12.8% of the total area of the marine park? Base: Those who disagree with proposed green zone increase (n=338). Q. Tell us why and please specify the Marine National Park (green) zone/s you disagree with.

31%
Disagree with the proposed Marine National Park (green) zone increase

Of the 92% of all survey respondents who chose to answer this section of the survey, 31% disagree with the proposed Marine National Park (green) zone increase.

Key reasons for disagreement relate to the impact it will have on recreational fishing including the loss of productive recreational fishing grounds incorporated into new or expanded Marine National Park (green) zones (23%), and perceptions there are already too many restrictions and current zones are sufficient (14%).

43% of those who disagree and made comments also note specific zones, which primarily relate to:

- MNP23 Cowra Point
- MNP06 North of Ngkala Rocks
- MNP13 Offshore of Wyuna Creek
- MNP26 Wolf Rock

"As a catch and release recreational fisherman I would like the freedom to go fishing in my local waters with minimal restrictions. Personally, I experience how good the fish stocks are first hand and they are not at all under pressure but the opposite."

"No need to increase green zones and there is no local data to prove it's needed. More green zones puts additional pressure on everywhere else."

"I disagree with the proposed green zone MNP23 because this area is where I like to fish and crab due to its sheltering from windy conditions when on the water in a small boat."

PROPOSED NEW / EXPANDED CONSERVATION PARK (YELLOW) ZONES

When asked whether a respondent would like to answer questions on Conservation Park (yellow) zones and Habitat Protection (dark blue) zones, over 4 in 5 (86%) chose to answer.

Of those, 4 in 5 (79%) agree with the proposed new or expanded Conservation Park (yellow) zones.

AGREEMENT
Agreement with the proposed changes is significantly higher among those interested in marine conservation, recreational fishers, and recreational users of the marine park.

DISAGREEMENT
Commercial fishers are most likely to disagree with the proposed changes.

86% chose to answer the questions around Conservation Park (yellow) zones and Habitat Protection (dark blue) zones

AGREEMENT WITH THE PROPOSED NEW OR EXPANDED CONSERVATION PARK (YELLOW) ZONES

Response by Primary Interest

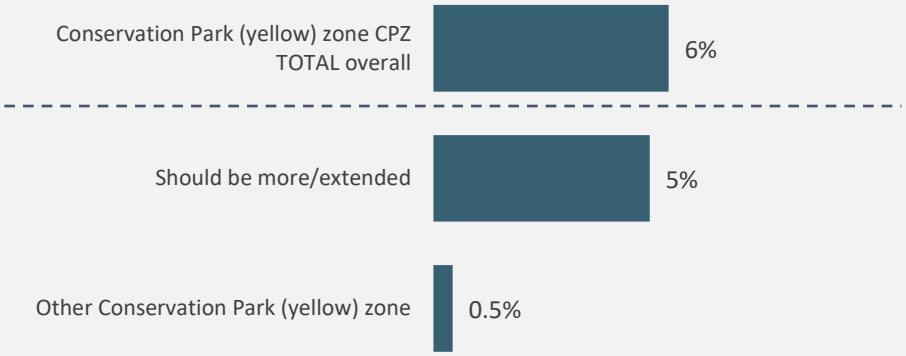
	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% agree	13%*	95%	6%	79%	77%	87%*
% disagree	75%*	3%	75%	14%	16%	7%*
	n=8*	n=196	n=32	n=710	n=61	n=15*

*Caution small sample size. Excluded from significance testing.
Base: All respondents (n=1245). Q. [Habitat protection – Yellow and dark blue zones] The draft zoning plan has an integrated system of different zone types to balance conservation and use throughout the marine park (RIS Appendix 4). Would you like to answer questions on this? Base: Those who chose to answer question (n=1058). Q. To what extent do you agree with the proposed new or expanded Conservation Park (yellow) zones?

SUPPORT FOR NEW / EXPANDED CONSERVATION PARK (YELLOW) ZONES

There is very strong support for proposed new or expanded Conservation Park (yellow) zones, and comments from some respondents advocating for further expansion of proposed Conservation Park (yellow) zones or the introduction of new ones, mainly in relation to removing commercial net fishing (see below and next page).

29% made final free-text comments about zoning



Please note that codes explaining reasons for support are identified above. The full codeframe is included further in the report on page 130.

Base: Those who chose to answer question (n=1058). Q. To what extent do you agree with the proposed new or expanded Conservation Park (yellow) zones?
Base: All respondents who made comments about zoning (n=184).
Q. What other comments would you like to make on the draft zoning plan?

79% Agree with the proposed Conservation Park (yellow) zones

"Please consider more yellow zones for other areas. Burnett River and Kolan River. These habitats deserve the same respect surely. Any type of net fishing is environmental rape. Including amateur cast nets. Net fishing closures are a proven success. Re. Fitzroy River Rockhampton… More people and families will benefit from these changes in years to come. Current fishing practices are clearly unsustainable. More funding and development should be directed towards commercial fish farming and sustainable seafood production".

"Yellow zone should be completely free of all types of commercial netting. Mary, Susan, Burrum and like rivers and estuaries should not have beam trawling or gill nets".

"Extension of the yellow conservation zone to the Mary River barrage should occur".

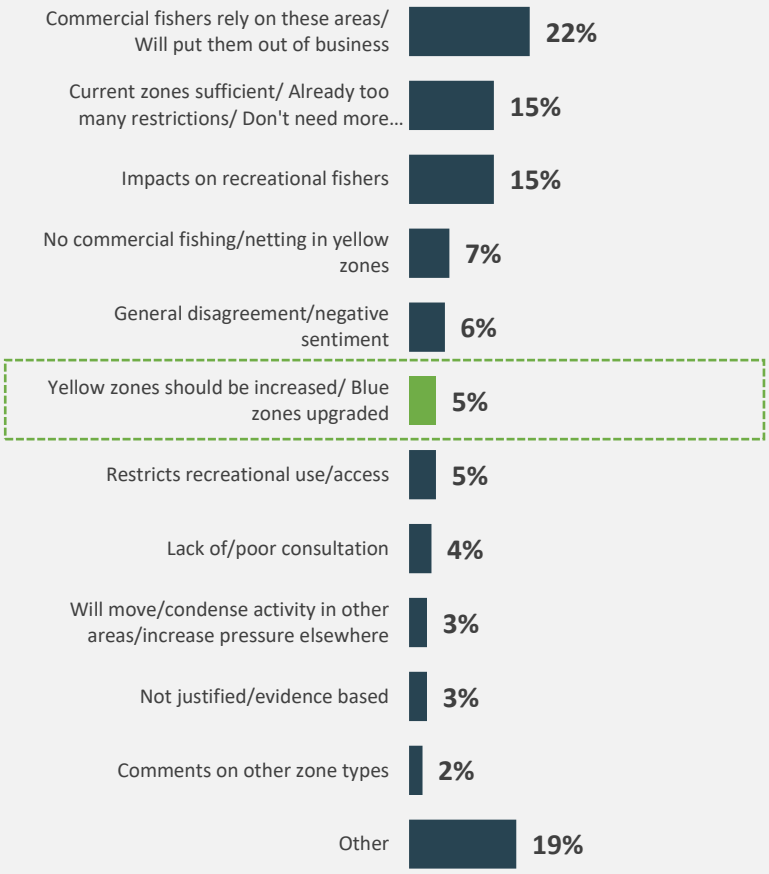
"I noticed on the draft map that the Burrum river is yellow zone but it's tributaries (Cherwell, Isis and Gregory) are not. Does this mean gill netting will be allowed in these rivers? I believe they should be yellow as well and wording changed in the draft to "Burrum river system and tributaries". It could mean that the professional fishing will all move to these systems already under too much pressure".

"Why were the Burnett and Kolan river systems not included in the yellow conservation areas as they are over netted now and fish populations are dwindling, also if the professional netters are thrown out of the Baffle, Burrum , Elliot and Cherwell river systems wont they concentrate on the 2 remaining river systems further depleting stocks , doesn't make any sense".

1. The Burnett River is not in the marine park
2. Part of the Mary River that is within the marine park is currently CP zone. The Mary River barrage is many kilometres upstream and not within the marine park.
3. The RIS states that commercial large mesh gill netting and ring netting will be prohibited in the proposed HP zone in the upper reaches of the Burrum River and Cherwell River via a specific provision.

DISAGREEMENT WITH NEW / EXPANDED CONSERVATION PARK (YELLOW) ZONES

KEY REASONS FOR DISAGREEMENT



Base: Those who chose to answer question (n=1058). Q. To what extent do you agree with the proposed new or expanded Conservation Park (yellow) zones? Those who disagree with proposed yellow zones (n=124). Q. Tell us why and please specify the Conservation Park (yellow) zone/s you disagree with.

15%
Disagree with the proposed Conservation Park (yellow) zones

Among the 86% of respondents who chose to answer this section of the survey, 15% disagree with the proposed new or expanded Conservation Park (yellow) zones.

Key reasons for this surround commercial fishers relying on these areas to maintain their business (22%), perceptions there are ample restrictions and current zones are sufficient (15%), and the restrictions these zones place on recreational fishing (15%).

It should be noted there is also disagreement with proposed Conservation Park (yellow) zones with the view that the spatial scale of these zones is inadequate (5%). Many with this point of view suggest specific areas for extension of Conservation Park (yellow) zones such as between Point Vernon and Elliott Heads.

8% of those who disagree and made comments also note specific zones, which primarily relate to:

- CPZ06 Platypus Bay
- CPZ01 Baffle Creek
- CPZ12 West of Wathumba
- CPZ22 Great Sandy Strait

"Adding more zones will not only wipe out my fishing grounds, it will put more pressure on other areas."

"As mentioned before my livelihood depends on fishing these areas."

"All of these yellow zones will destroy my business and take a huge toll on the supply of fish in the region."

"Yellow zone of the area is again over the top, once commercial fishing stops numbers will come back, normal restrictions that exist for recreational fishing is more than enough to keep sustainable fishing in the straits."

PROPOSED NEW / EXPANDED HABITAT PROTECTION (DARK BLUE) ZONES

Among the 86% who chose to answer this section of the survey, 3 in 4 (75%) agree with the proposed new or expanded Habitat Protection (dark blue) zones.

AGREEMENT

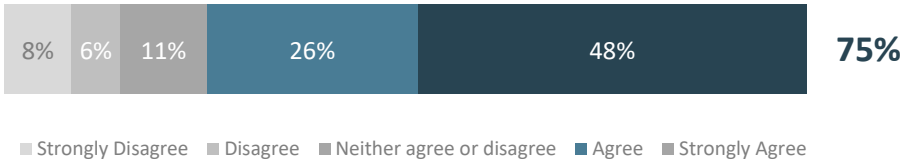
As with agreement to proposed Conservation Park (yellow) zone changes, agreement with proposed Habitat Protection (dark blue) zones is significantly higher among those interested in marine conservation, recreational fishers, and recreational users of the marine park.

DISAGREEMENT

Commercial fishers are most likely to disagree with these proposed changes to Habitat Protection (dark blue) zones (47%) although not universally, with 37% of commercial fishers selecting a neutral response when questioned on their level of agreement with the new/expanded Habitat Protection (dark blue) zones.

86% chose to answer the questions around Conservation Park (yellow) and Habitat Protection (dark blue) zones

AGREEMENT WITH THE PROPOSED NEW OR EXPANDED HABITAT PROTECTION (DARK BLUE) ZONES



Response by Primary Interest

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% agree	13%*	93%	17%	73%	80%	67%*
% disagree	75%*	5%	47%	15%	8%	13%*
	n=8*	n=199	n=30	n=705	n=60	n=15*

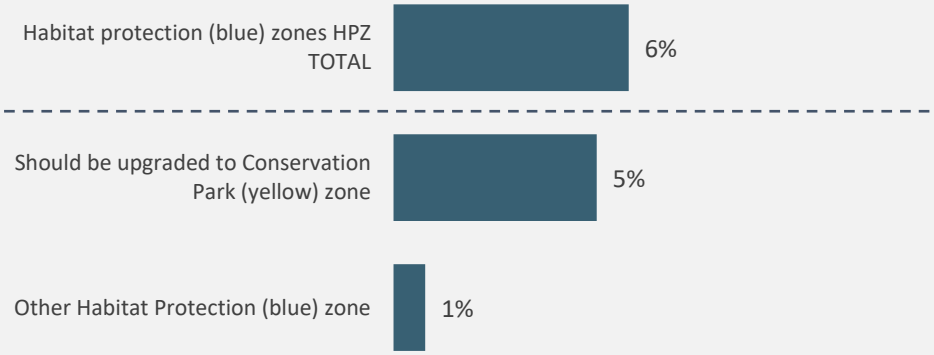
*Caution small sample size. Excluded from significance testing.

Base: All respondents (n=1245). Q. [Habitat protection – Yellow and dark blue zones] The draft zoning plan has an integrated system of different zone types to balance conservation and use throughout the marine park (RIS Appendix 4). Would you like to answer questions on this? Base: Those who chose to answer question (n=1053). Q. To what extent do you agree with the proposed new or expanded Habitat Protection (dark blue) zones?

SUPPORT FOR UPGRADING SOME HABITAT PROTECTION (DARK BLUE) ZONES

Out of the final comments made about zoning, there are suggestions to upgrade a number of specific Habitat Protection (dark blue) zones to Conservation Park (yellow) zones (5%) to limit some forms of commercial fishing.

29%
made final free-text comments about zoning



Please note that codes explaining reasons for support are identified above. The full codeframe is included further in the report on page 130.

Base: Those who chose to answer question (n=1053). Q. To what extent do you agree with the proposed new or expanded Habitat Protection (dark blue) zones?
Base: All respondents who made comments about zoning (n=184).
Q. What other comments would you like to make on the draft zoning plan?

75%
Agree with the proposed Habitat Protection (dark blue) zones

"The dark blue habitat protection zone on the eastern side of K'gari (Fraser Island) from north of MNP05 and encompassing Sandy Cape, Rooney's Point and much of the eastern side of K'gari to Moon Point should be replaced with a yellow conservation zone, protecting key parts of the shoreline that are of recreational angling significance from commercial harvesting".

"HPZ11 - Habitat Protection Zone in the Burrum River and Sherwell Rivers be changed to a Yellow Conservation Zone. Otherwise, it will allow commercial netting in that area! We believe it was changed to enable shoreline structures to be more easily approved, erected and maintained, like jetties etc".

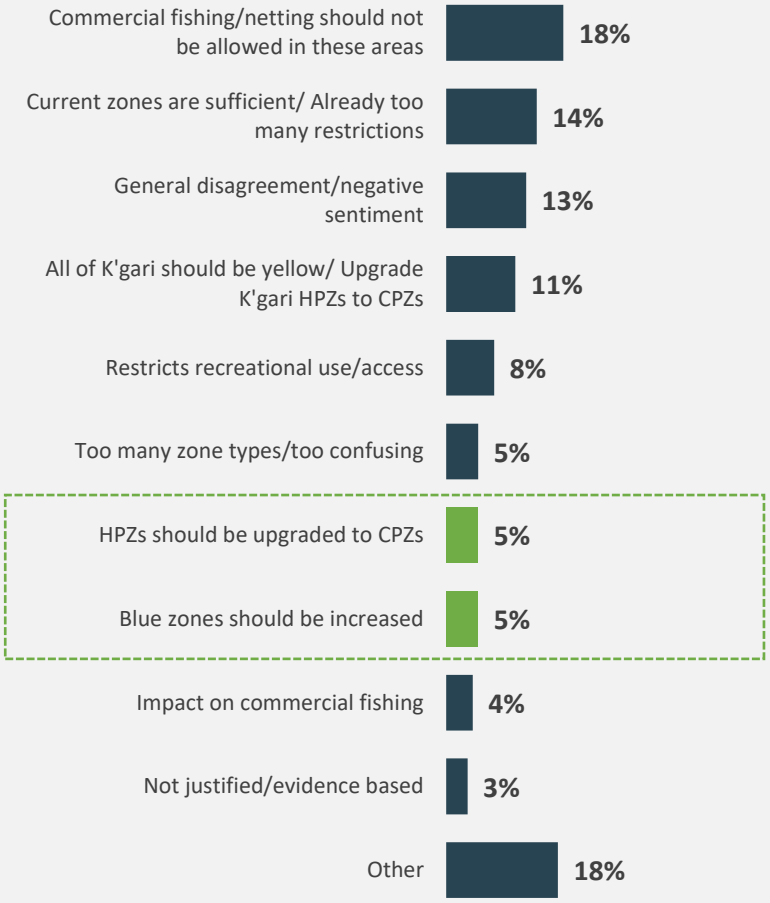
"The mouth of Moon Creek is not protected by a conservation zone. The creek mouth was on the southern side of Moon Point in 2006 when the Marine Park was formed. The creek mouth has moved to the northern side of Moon Point and is now in the proposed habitat protection zone where gill nets can be used. Please change the zoning on the northern side of Moon Point to a conservation zone. This will then be consistent with the yellow zones at the mouth of Coongu, Awinya, and Wathumba Creeks. There is also a small creek between Moon creek and Coongul Creek. Please change the zoning from Habitat protection to Conservation Zone between Moon Point and Coongul creek and 500 metres seaward".

"The blue zone that surrounds Fraser Island should be a yellow zone, consistent with the rest of the Island and even more so because it includes the unique turtle nesting area north of Ngkala Rocks and it also includes the unique marlin fishery inside bay."

The RIS states that commercial large mesh gill netting and ring netting will be prohibited in the proposed HP zone in the upper reaches of the Burrum River and Cherwell River via a specific provision.

DISAGREEMENT WITH NEW / EXPANDED HABITAT PROTECTION (BLUE) ZONES

KEY REASONS FOR DISAGREEMENT



Base: Those who chose to answer question (n=1053). Q. To what extent do you agree with the proposed new or expanded Habitat Protection (dark blue) zones? Base: Those who disagree with proposed dark blue zones (n=119). Q. Tell us why and please specify the Habitat Protection (dark blue) zone/s you disagree with.

14%
Disagree with the proposed Habitat Protection (dark blue) zones

Among the 86% who chose to answer this section of the survey, 14% disagree with the proposed new or expanded Habitat Protection (dark blue) zones.

Key reasons for this surround the belief commercial fishing/netting should be prohibited in these areas (18%), and perceptions there are ample restrictions and current zones are sufficient (14%).

It should also be noted that there is disagreement with proposed Habitat Protection (dark blue) zone changes with a view that all of the Habitat Protection (dark blue) zones surrounding K'gari (Fraser Island) should be upgraded to Conservation Park (yellow) zones (11%).

9% of those who disagree and made comments note specific zones, which primarily relate to:

- HPZ11 Cherwell and Burrum Rivers
- Mary River (generally)
- All HPZ zones
- HPZ10 Moon Point

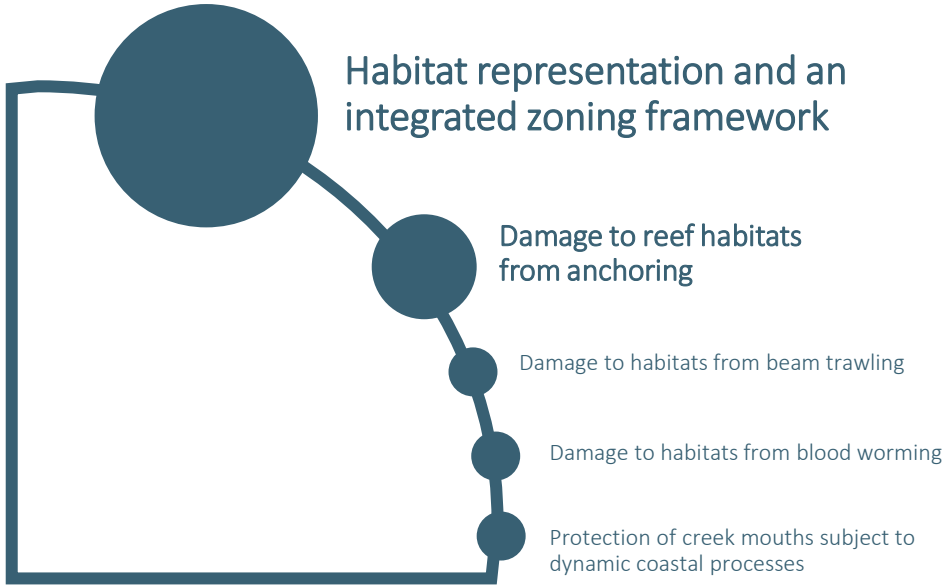
"Dark Blue zone says it allows commercial fishing. Description of commercial fishing says that tunnel and set pocket netting would continue. Tunnel and set pocket netting (no netting) should not be allowed in these areas!!!!!!!"

Habitat protection
- an overview of written submissions

Written Submissions

Sub topics mentioned

Habitat protection is one of the most discussed topics in the written submissions with approximately half of these submissions making comments in relation to this section of the RIS. The main theme focuses on habitat representation and an integrated zoning framework, particularly in relation to the proposed expansion of the Marine National Park (green) zone network, Conservation Park (yellow) zones and Habitat Protection (dark blue) zones.



Frequency of mentioning

A considerable number of written submissions received from a diverse range of stakeholders.

Habitat protection
- Habitat representation and an integrated zoning framework

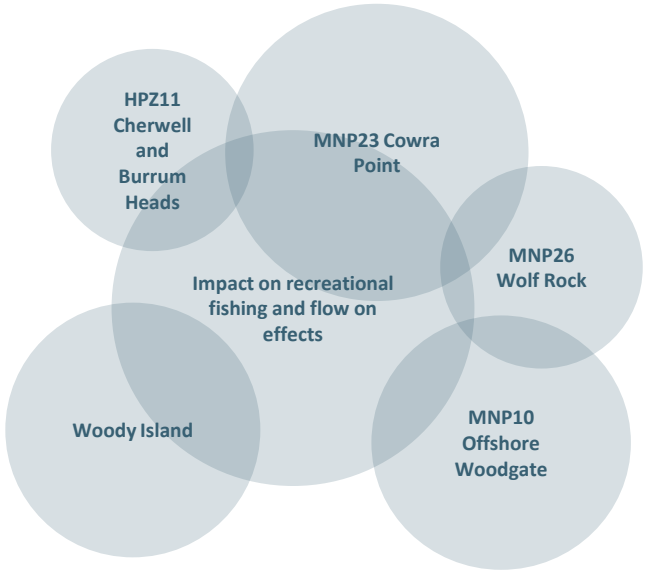
Written Submissions

This section of the RIS proposing changes to the representation of the range of marine park habitats and the delivery of an integrated zoning framework that balances conservation and use. It received a considerable amount of feedback in the written submissions. The major themes that emerged focused predominantly on potential impacts to recreational fishing and flow on effects, impact on commercial fishers, insufficient protection, and other location specific feedback. The locations mentioned most frequently are illustrated, and examples of locations receiving fewer comments are listed.

Sub topics mentioned

- Impact on recreational fishing and flow on effects
- Impact on commercial fishing and flow on effects
- Views on levels of protection
- Other specific feedback

Key locations mentioned



Examples of less mentioned areas:
Four Mile Reef
MNP11 Fork Bank
MNP25 Myers Creek
Teebar Ledge
The Pinnacles
Turkey Islands

Habitat protection
- Impact on recreational fishing and flow on effects (1)

Written Submissions

The impacts on recreational fishing should proposed changes be implemented, is a key theme amongst written submissions. Feedback often relates to proposed changes inhibiting recreational fishing activities and safe access to preferred recreational fishing locations. The potential flow on effects of proposed changes on communities such as Tinnanbar, are also raised.

IMPACT ON RECREATIONAL FISHING

Concern for the effects the proposed changes may have on recreational fishing is expressed in many written submissions - in relation to proposed new or expanded Marine National Park (green) zones prohibiting access to popular recreational fishing grounds, requiring increased travel to access fishing locations further afield.

A number of people from Tinnanbar raised major concerns for the proposed Cowra Point Marine National Park (green) zone (MNP23). Many community members suggested relocating the proposed zone to the southern side of Kauri Creek as a more acceptable solution. The basis for community concern includes the loss of access to a sheltered area for recreational fishing, boating safety issues associated with accessing alternative locations, and impacts on tourism, property values and lifestyle.

"The residents, visitors, holidaymakers, recreational fisherman and holiday rental owners will be extremely disadvantaged in a big way by being excluded from enjoying this safe family friendly area if the New Proposed Green Zone (MNP23) is placed in this nominated area."

"MNP28 & MNP29 I also disagree with the expanded Green Zones for similar reason to the above. These are key spots for locals to be able to catch a feed of bread & butter species such as bream, whiting & flathead also a popular please for people to go mud crabbing."

"I don't believe the proposed green zone around the 4 mile area south of Elliot heads achieves this. The site is just one of only a few that is readily accessible from Elliot Heads to people in small craft. The ecosystems and species found there are very similar to the extensive reefs along the rocky shoreline that are already well protected and further enhanced in your plan."

"I believe that for recreational fishers there should be no green zones or exclusions period."

Habitat protection
- Impact on recreational fishing and flow on effects (2)

Written Submissions

POTENTIAL FLOW ON EFFECTS
Recreational fishing is considered a drawcard for some coastal communities who rely on this activity to attract fishing-related tourism. Submissions that disagree with certain Marine National Park (green) zones cite potential flow on effects of prohibiting recreational fishing including loss of property value, tourism and lifestyle opportunities.

SPEARFISHING
Few submissions discuss this type of fishing. Of feedback received, views are polarised with some arguing that proposed changes, if implemented, would have negative impacts on easily accessible sites currently used for spearfishing training and competitions. The alternate view by some individuals is that this user group is not affected by proposed changes.

Other suggestions relating to spearfishing include applying further restrictions to limit catch or restricting spearfishing in certain areas/zones of the marine park.

OTHER POINTS RAISED
Despite participating in this public consultation process, some mention a perceived lack of consultation with a desire for further engagement.

"It is difficult to see how Government could compensate us for the removal of a substantial portion of our lifestyle."

"Visitors come to our little town because of the recreational fishing and crabbing opportunities. In turn this would have a detrimental effect on holiday letting income for many of our home owners."

"This proposal is extremely biased towards spearfishing as it will take away 95% of the shallow water reefs (under 20m) in the area. These are the only reefs that can be safely dived by Spearos."

Habitat protection
- Impact on commercial fishing and flow on effects

Written Submissions

Commercial fishers involved in a range of fisheries expressed their concern that, should proposed changes be implemented, there will be significant impacts on the commercial fishing industry, businesses and livelihoods. These fishers also noted there will also be flow on effects to associated businesses.

COMMERCIAL
Commercial fishers (involved in various types of fishing, including crabbing and aquarium fish collecting) voiced concern for proposed changes, with many noting a likely detrimental impact on their businesses should proposed new zones or changes be implemented.

FLOW ON EFFECTS
Fishers note that proposed zoning and other changes will effectively end the commercial fishing industry within the park, resulting in significant direct and indirect job losses, substantial regional economic impacts, reduction in the availability of fresh local seafood for purchase by the public, and fishing effort transfer issues within those areas that remain open to commercial fishing.

Fishers in the commercial crab fishery note that any loss of area available to this fishery would severely impact their livelihood, and some request a review of the impact of this fishing method on the environment, considering it to be minimal, and proposed changes to therefore be unnecessary. Conversely, concerns were raised that certain areas of the marine park that allow commercial fishing in Conservation Park (yellow) zones are insufficiently protected against impacts of these fishing activities.

"We run our crab pots now, nearly on the green zone line. To move the green zone out wider would impact us severely even if it was the slightest amount."

"The 2 proposed green Zones which are going to be an extension of the existing Green zones are of great concern and have detrimental affect on our livelihoods. The proposal to extend the 2 green zones in Hervey Bay will push crabbers into a smaller area which will have devastating affect on crab stocks for the future."

"It is written in your summary that the total amount of increased green zone is 12.8% of the marine park. However, this translates to 90% of the aquarium fish habitat and areas that are viable for the aquarium fish collection, due to depth and reef areas needed for aquarium fish."

"For me to remain in business now I can't afford to have any further restrictions, closing the river to netting and increasing the size of MNP10 & MNP11 will wipe me out."

Habitat protection
- Views on levels of habitat protection

Written Submissions

GENERAL SUPPORT
There is positive sentiment and broad support for increasing protection of habitats/areas within the marine park. However, there is a proportion of stakeholders that note the draft zoning plan does not adequately protect areas of the marine park. These stakeholders advocate for further increases in the Marine National Park (green) zone network, while noting the complexities of balancing conservation and use, and the need to secure public support (not opposition) for the zoning plan. Submissions suggest that the proportion of the marine park proposed to be included in Marine National Park (green) zones is lacking compared to other marine parks and international protected area targets.

MAINTAIN CURRENT PROTECTION
Some submissions voice negative sentiment towards the downgrading, delisting or downsizing of some of the current zones or parts thereof. The conservation sector in particular, raised 'in principle' objection to any locations where the current zoning is proposed to be downgraded, e.g. for coastal management purposes. There is also an argument to maintain current zones without amendment.

INCREASE PROTECTION
The conservation sector and general recreational users of the park are particularly supportive of the improved protection offered by the revised zoning network, although the conservation sector is advocating for a greater proportion of the park to be protected within Marine National Park (green) zones to align with contemporary international protected area targets.

Higher levels of protection of specific habitats are suggested to help meet international targets such as increasing protection of seagrass, along with ensuring that appropriate zoning is implemented to protect areas from the impacts of commercial and recreational fishing (overall but also specifically in the Mary and Susan Rivers). Ensuring sufficient protection of both natural and cultural heritage values is considered important and supported by many.

"While I would prefer to see a larger proportion of the Marine National Park green zone than the 12.8% of the total area of the marine park that is proposed, I accept that it may not be feasible to make a further increase at this time without creating excessive public opposition."

"Analysis shows a staggering 42 fully and partially protected zones are under threat of being downgraded, delisted or downsized, in the proposed plan."

"While placing 12.8% of the GSMP in MNP zones represents over 3x the level of current protection (3.9%), this still leaves the GSMP with the lowest level of marine park protection in Queensland."

"While the 12.8% proposed in the Draft is a considerable improvement, it is inadequate. It lags behind the Moreton Bay Marine Park (16%) and the Great Barrier Reef Marine Park (33%). It does not meet National or International standards."

"There needs to be more protection for seagrass, intertidal, shallow sub-tidal and deep sub-tidal seagrasses. Only 16% is to be protected which is under the recommended 30%. There is the opportunity of giving more protection to deep sub-tidal seagrasses by extending MNP07."

"While MNP06 extends to the highwater mark, MNP13 does not. We recommend that MNP13 be extended to the highwater mark to provide a reasonable quantum of this extremely important and most used habitat type of the GSMP."

Habitat protection
- Other specific feedback

Written Submissions

Beyond the key themes noted in this section, several submissions also focus on a range of minor topics or reference specific zones across the marine park.

FISHING EFFORT TRANSFER
Both recreational and commercial fishers express concern or question the justification for increasing the area/number of highly protected zones in the marine park, when the flow on effects of limiting fishing in these zones will include impacts from the transfer of fishing effort into areas open to fishing.

ZONE SPECIFIC NEGATIVE SENTIMENT
Submissions that voiced negative sentiment about specific zones often questioned if further protection is needed and raise concerns about the resultant loss of access to individually valued or accessible fishing locations. Whilst each section of the Consultation RIS explains each issue and justifies proposed changes, some submissions note a lack of understanding for these changes.

OTHER COMMENTS - SIGNAGE AND MARKERS FOR ZONES
There is general feedback on the need for clear signage and markers for various zones that are close to the coast and easily accessible. The use of landmarks or buoys are suggested, especially for transit lanes (in Go Slow Areas) or new zones / expansions.

"If these closure come into place a lot more area that we don't trawl will become trawl ground in the end causing more damage to areas that we didn't work before witch could mean a lot more effect to the environment.“

"When considered in the context of the Moreton Bay Marine Park this proposal for the Great Sandy Marine Park is gross overkill.“

“The proposed changes to the transit lane from the Poona boat ramp has the transit lane following the channel, as it should be. My concern is that there are no channel markers to mark the transit lane.”

"It would be crazy to expect me to have a GPS to check whether I was in a green zone. This zone would have to be signed and signs on the very dynamic beach zone would be very problematic.“

Habitat protection

- Damage to reef habitats from anchoring, beam trawling, blood worming and protection of creek mouths

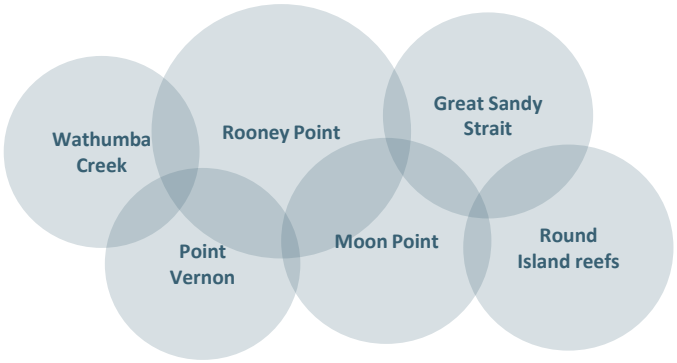
Written Submissions

Locations discussed

When interpreting feedback from written submissions relating to the remaining topics of the RIS within section 6.1 Habitat Protection, it should be cautioned that there is only a small amount. Of these, a range of locations are mentioned but no particular location received greater feedback than others.

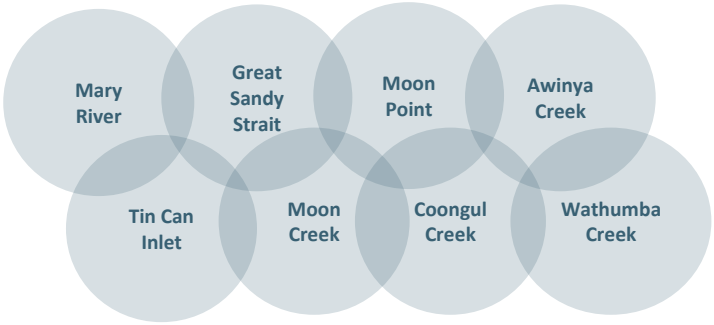
"For consistency give Moon Creek the same protection from netting as Coongul, Awinya and Wathumba creeks."

Damage to reef habitats from anchoring



**Small number of submissions referring to these areas, interpret with caution.*

Beam trawling, blood worming and creek mouths



**Small number of submissions referring to these areas, interpret with caution.*

Habitat protection
- Damage to reef habitat from anchoring, and less mentioned topics

Written Submissions

Damage to reef habitat from anchoring

There is general support for proposed changes to increase the protection of reef habitats by introducing designated No Anchoring Areas. There are requests that such zones be extended to include all of the Gatakers Bay reef to improve its protection.

OTHER COMMENTS
Spearfishing is perceived as an activity that the department should consider banning for the same reason as anchoring, to increase protection of coral reefs.

"Mainland coral communities are uncommon along Eastern Australia, and are particularly vulnerable to anchor damage, among other impacts from runoff and heatwaves… Hence, my recommendation is to include all coral communities in Marine National Park zones, with no anchoring or fishing. Notable examples include those mentioned above, Barolin Rocks (previously Green Zone), and The Gables to East Point Vernon (Inman Street).“

“NAA02 also excludes reef area to the west of your proposed boundary. NAA02 should be extended to include all of the Gatakers Bay reef.”

Other less mentioned topics

For other proposed changes outlined in the RIS, fewer comments were made so feedback/results should be interpreted with caution.

BEAM TRAWLING
There is support for increasing protection for habitats through restrictions on commercial beam trawling, and suggestions to prohibition of beam trawling in the Mary and Susan Rivers.

BLOOD WORMING
There are minor comments of support for the prohibition of blood worming in the Great Sandy Strait and Tin Can Inlet.

PROTECTION OF CREEK MOUTHS
General positive sentiment is shown towards increasing protection of three specific creek mouths that are subjected to dynamic coastal processes, and suggestions for further areas to consider enhancing protection that are located close to currently highly protected zones. There is some disagreement with upgrading levels of protection in these areas due to the proposed changes in zoning limiting some commercial fishing activities.

"...the creeks that run into the yellow zones need to be made yellow because that is where the fish are bred."

“Please change the boundary of the Conservation Zone in the draft plan to include Moon Creek in the yellow zone. Protection from netting is also required on the beach adjacent to the mouth of the creek.”

“Yellow zone extension in front of creek mouths - will affect commercial fishing.”

RIS 6.2 - CONFLICT IN WATERWAYS OF THE DESIGNATED GREAT SANDY AREAS

OVERALL ENGAGEMENT

Online Surveys 88-92% answered questions about this

About one third of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.2 CONFLICT IN THE WATERWAYS OF THE GREAT SANDY AREA (1)

Generally, the feedback is positive on the proposed changes to address conflict in the waterways of the designated Great Sandy Area (i.e., Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait, Tin Can Inlet). Survey results indicate strong support for both proposed removal of commercial large mesh gill nets and ring nets (91% agree) and for allowing fishers to use 2 rods / lines and 2 hooks (80% agree). However, only 1 in 5 respondents agree with the proposed retention of commercial tunnel netting (21%). Within the written submissions, two opposing views are evident with similar proportions in agreement with proposed changes as those that disagree.

ONLINE SURVEY RESULTS

At least 4 in 5 agree with the proposed removal of commercial large mesh gill and ring nets from the Conservation Park (yellow) zones and allowing fishers to use 2 rods / lines and 2 hooks in Conservation Park (yellow) zones. Only 1 in 5 agree with the proposed retention of commercial tunnel netting.

91% Agree

With proposed removal of commercial large mesh gill nets and ring nets from designated Great Sandy Area waterways.

21% Agree

With proposed retention of commercial tunnel netting.

80% Agree

With proposed change to allow fishers to use 2 rods / lines and 2 hooks in Conservation Park

REMOVAL OF COMMERCIAL LARGE MESH GILL AND RING NETS FROM THE DESIGNATED GREAT SANDY AREA AND WATERWAYS

KEY FINDINGS

- Overall broad support for removal of commercial large mesh gill nets and ring nets from designated Great Sandy Area waterways, with the conservation and recreational fishing sectors particularly supportive.
- Many who support the proposal believe that tunnel netting should also be removed from the Great Sandy Strait.
- The commercial fishing sector strongly opposes the proposal and rejects the suggestion that the gill nets that are predominantly used in these waterways pose a significant entanglement risk to threatened species. They identify that the proposed changes would have significant impacts on the commercial fishing industry within the marine park, forcing fishing businesses to leave the industry with associated flow on effects such as job losses, economic impact to support businesses and a reduction of the availability of fresh local seafood for public purchase.
- Commercial fishers identify their strong custodianship of the waterways across generations and their ongoing environmental advocacy. They argue that broader environmental management issues (e.g., construction of barrages, sewerage outflows, application of herbicides in the catchment) are a far greater threat to marine park values than their impact on the marine park.
- Significant concern was raised by seafood processors, retailers and consumers that proposed changes will result in a significant reduction in the availability of fresh local seafood.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- This is the most contentious and polarising proposal for the zoning plan review.
- The proposed impact mitigation package is viewed with scepticism by the commercial fishing sector due to the lack of detail provided and concern regarding its ability to effectively compensate fishers and manage effort transfer for those who remain.

Online Surveys 88-92% answered questions about this

About one third of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.2 CONFLICT IN THE WATERWAYS OF THE GREAT SANDY AREA (2)

ALLOW CONTINUATION OF COMMERCIAL TUNNEL NETTING IN THE GREAT SANDY STRAIT AND TIN CAN INLET AND SET POCKET NETTING IN THE MARY RIVER

KEY FINDINGS

- Overall, there is little support for the retention of tunnel netting and set pocket netting in these waterways, with tunnel netting being the particular focus of the concerns.
- The conservation and recreational fishing sectors view tunnel netting as a significant and destructive form of commercial net fishing and have strongly
- promoted its prohibition.
- The commercial fishing sector supports the continuation of tunnel netting. However, some fishers also suggest that the gill nets that are proposed to be prohibited from the Great Sandy Area waterways are more environmentally and economically sustainable than tunnel netting operations.
- In relation to the set pocket net fishery in the Mary River, the conservation sector suggests that 'sunsetting' of the existing licences should be considered, to remove this form of netting over time.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- This was the proposed zoning change that received the least public support.

USE OF 2 LINES/RODS AND 2 HOOKS IN ALL CONSERVATION PARK (YELLOW) ZONES

KEY FINDINGS

- Overall, there was strong support across the commercial and recreational fishing sectors and across most of the community for the proposal to allow fishers to use 2 rods / lines and a total of 2 hooks in all Conservation Park (yellow) zones.
- There was some opposition to the proposal from First Nations peoples' representative bodies and conservation organisations who would prefer that a 1 rod / line and 1 hook limit be applied. Some suggest aligning these restrictions with those in other marine parks.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- Objection to the proposal from First Nations peoples' representative bodies and conservation organisations.

Conflict in the waterways
- an overview of survey responses

Survey responses

The following pages include analysed results from the online survey. Three specific questions were asked of respondents to gauge their level of agreement with proposed changes. Where participants disagreed, a follow up question offered the opportunity to explain their disagreement for two of those questions. Feedback was also received through the final comments question at the end of the survey which has been coded and included within the relevant section.

SURVEY RESPONSES FROM SPECIFIC QUESTIONS

The following specific questions were asked in the survey:

- Q. To what extent do you agree with the proposal to remove commercial large mesh gill nets and ring nets from the Conservation Park (yellow) zone in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet?
- Q. To what extent do you agree with the proposed retention of commercial tunnel netting in the Great Sandy Strait and Tin Can Inlet, and commercial set pocket netting in the Mary River?
- Q. To what extent do you agree with the proposal to allow each commercial and recreational fisher to use a maximum of 2 hand-held rods/lines and 2 hooks in all Conservation Park (yellow) zones?

CODED RESPONSES FROM FINAL COMMENTS

At the end of the online survey, respondents were able to provide any final comments through an open ended question.

The feedback received through this question provides insights and information to support or refute proposed zoning plan changes or offers alternative perspectives and differing options for departmental consideration.

Conflict in the waterways
- overview of written submissions

Written Submissions

Conflict in the waterways and the proposed changes to address this issue is one of the most discussed topics in the written submissions, with approximately one third of respondents making comments on this section of the RIS.

Written submissions relating to this section of the RIS show clearly polarised opinions on the proposed changes to the designated Great Sandy Area and the removal of commercial large mesh gill nets and ring nets. There is strong support for removal of the designated Great Sandy Area and these types of commercial nets. A similar proportion of respondents are against any prohibition of commercial fishing with a minority 'on the fence' including comments from both views.

For prohibition of types of commercial netting and removal of the designated Great Sandy Area

Against any prohibitions of commercial fishing

Frequency of mentioning

A moderate number of written submissions received from different stakeholders.

REMOVAL OF COMMERCIAL LARGE MESH GILL NETS AND RING NETS FROM DESIGNATED GREAT SANDY AREA WATERWAYS

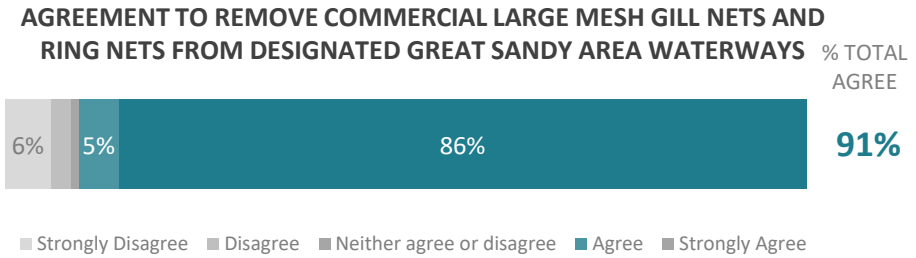
Over 9 in 10 (91%) chose to answer questions around the designated Great Sandy Area and commercial fishing.

Of those who chose to answer, almost all (91%) agree with the proposal to remove commercial large mesh gill nets and ring nets from designated Great Sandy Area waterways (Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet).

AGREEMENT
Those interested in marine conservation or who are recreational fishers or users of the marine park, are more likely to agree with the proposed changes than other primary interest groups.

DISAGREEMENT
Commercial fishers are most likely to disagree with this proposal.

91% chose to answer questions around the designated Great Sandy Area and commercial fishing



Response by Primary Interest

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	100%*	97%	11%	94%	90%	89%*
% Disagree	0%	2%	78%	6%	9%	11%
	n=8*	n=195	n=36	n=766	n=67	n=18*

*Caution small sample size. Excluded from significance testing.

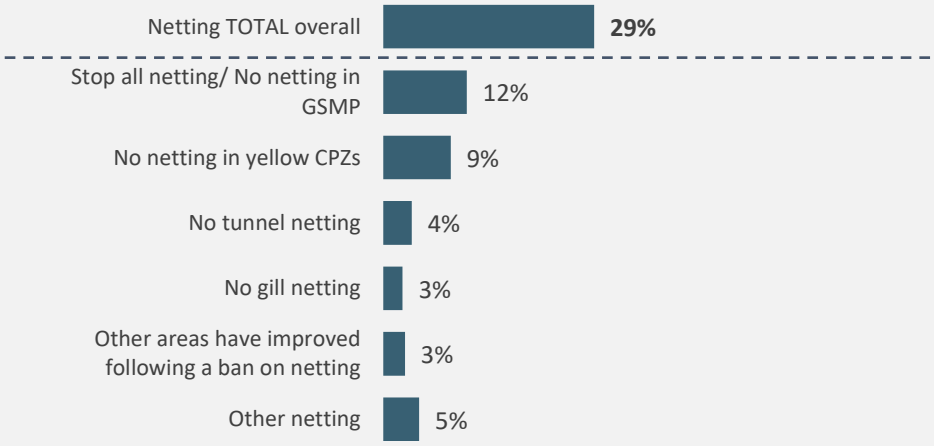
Base: All respondents (n=1245). Q. The existing designated Great Sandy Area primarily allows commercial net fishing to occur in the Conservation Park (yellow) zone in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet. Since the marine park was established in 2006, the competing uses of this designated area have undermined the ability to manage these waterways to effectively balance conservation and use. (RIS Sections 6.2. and 7). Would you like to answer questions on this? Base: Those who chose to answer question (n=1127). Q. To what extent do you agree with the proposal to remove commercial large mesh gill nets and ring nets from the Conservation Park (yellow) zone in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet?

SUPPORT FOR REMOVAL OF COMMERCIAL GILL NETS AND RING NETS

There is good support for the proposed removal of commercial large mesh gill nets and ring nets from the designated Great Sandy Area waterways. Among respondents who left a final free text comment, approximately one in two referred to commercial fishing (47%) and one in three commented on netting (29%).

9% of those comments suggest there should be no form of netting in Conservation Park (yellow) zones, and 3% mention there should be no gill netting.

47%
made final free-text comments about commercial fishing



Please note that codes explaining reasons for support are identified above. The full codeframe is included further in the report on page 129.

91%
Agree with the proposed removal of commercial large mesh gill nets and ring nets from designated Great Sandy Area waterways

"For the marine environment to flourish all Commercial Netting must be removed from all Yellow Conservation zones."

"All netting should be banned. I see many netter in Tin Can Bay area and they are always followed by birds and pelicans eating the undersized fish discarded by the netter. Also should be a complete ban on all netting within 1klm of Tin Can Bay Township."

"All netting in the Sandy Strait needs to stop. Netting in a marine park should have never been allowed in the first place! It is madness! These commercial fishers have no respect for the area and a lot have come here from other areas that have closed down commercial fishing. After closing the other areas down, like Gladstone and Mackay, the fish numbers have come back in amazing numbers. Having all the extra commercial fishing here is destroying the area. They already break the law and fish outside of the zones and times and will not stop breaking the law if they are allowed in the area."

"Remove commercial netting from the Great Sandy Straits, Mary River and Burrum River. This will not only drastically improve the longevity of our water ways but potentially provides the Fraser Coast with a fantastic tourism opportunity as a net free zone."

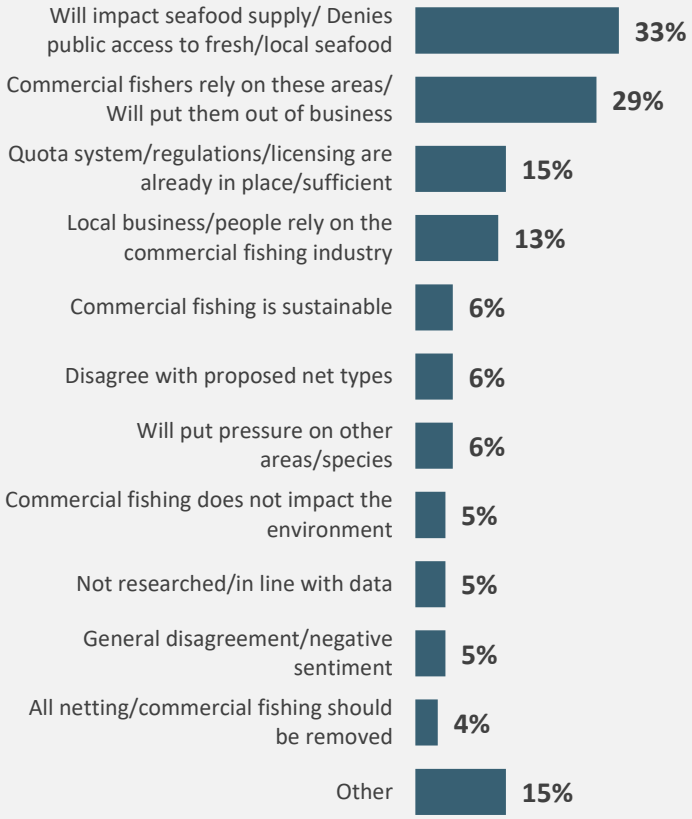
"We would like the gill netters in the sandy straits and Mary river to be stopped. We have seen this area destroyed as they catch turtles, stingrays, dugongs, sharks and breeding fish."

"Strongly agree with closure of the straits to netting for the protection of wildlife. Farmers nurture there land not rape. Once fish stock increase then controlled netting could be looked at."

Base: Those who chose to answer question (n=1127). Q. To what extent do you agree with the proposal to remove commercial large mesh gill nets and ring nets from the Conservation Park (yellow) zone in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet? Base: All respondents who made comments about commercial fishing (n=299). Q. What other comments would you like to make on the draft zoning plan?

DISAGREEMENT WITH REMOVAL OF COMMERCIAL GILL AND RING NETS

KEY REASONS FOR DISAGREEMENT



Base: Those who chose to answer question (n=1127). Q. To what extent do you agree with the proposal to remove commercial large mesh gill nets and ring nets from the Conservation Park (yellow) zone in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet? Base: Those who disagree with removal of commercial mesh gill and ring nets from yellow zone (n=82). Q. Tell us why?

8%
Disagree with the removal of commercial mesh gill nets and ring nets the Designated Great Sandy Area waterways

Of the 91% who chose to answer this section of the survey, 8% disagree with the proposed removal of commercial mesh gill nets and ring nets from designated Great Sandy Area waterways (Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet).

Key reasons for disagreement surround the perceived impact on seafood supply and public access to fresh/local seafood (33%), commercial fishers' reliance on these areas and potential business impacts (29%), and the perception that current systems and regulations are sufficient (15%).

"Commercial fisherman need area to make a living. It will end up we will be eating imported fish only."

"Netting provides seafood products to all forms of business. From the local restaurants to the dolphin feeding in Tin Can Bay"

"The fishers already are heavily regulated with their catches, These nets are integral to the catching of local fresh fish which our customers want as they are unable to recreational fish for themselves."

"Collapse of the commercial netting section of the sandy straights would lead to the collapse in my business which is therefore reliant on its survival."

"The commercial fishing sector is already under too much pressure. Local fresh sea food availability is limited and expensive. On the back of the changes to the mackerel fishery this is another example of the commercial sector getting squeezed out."

Conflict in the waterways

- Removal of the designated Great Sandy Area and prohibiting large mesh gill nets and ring nets (1)

Written Submissions

Overall, there was broad support for the removal of commercial large mesh gill and ring nets from designated Great Sandy Area waterways. The conservation and recreational fishing sectors are particularly supportive of the proposal to reduce conflict amongst fishing sectors and protect threatened species from entanglement. There is also recognition across a broad range of stakeholders of the importance of fairly and equitably compensating affected commercial fishers and associated businesses.

Many submissions articulate the need for the complete prohibition of all forms of commercial netting. Concerns with retaining any commercial netting in the marine park are centred around commercial fishers shifting their fishing effort to other locations. The commercial fishing sector strongly opposes these proposed changes and oppose the notion that fish stocks in these waterways are depleted or unsustainably fished by the commercial sector. The peak commercial fishing representative body questions the scientific evidence supporting the level of entanglement risk to protected species identified in the RIS. This body suggests there is no justification for removing net fishing without also removing recreational fishing/boating under the same pretext of applying the precautionary principle to avoid potential interactions with threatened species.

"If you had been working in an industry for as long as I have, and had as much passion and caring for the ocean as I have, you would understand how a person could get upset over the relentless action of the government to decimate your livelihood which only does one real thing. I feed a nation of people."

"I applaud your decision to revise this plan but think that you should remove commercial netting from this hatchery as well. This should also exclude all rivers flowing into the park."

"With the new proposed changes, I will be losing up to 80% of my annual income. As a 23 year old, I have invited (sic) my whole life into the fishing industry and had endeavoured to keep working as a commercial fisherman to provide fresh, local seafood to the region. If the proposed plan was to be put in place, there is a HIGH possibility that I won't be able to make enough money to cover the mortgage payment on my home or my car that I use for work. This draft proposal will not only set me back, but also my whole family."

"I challenge the department to find any entry in a SOCI (species of conservation interest logbook) showing ANY interactions or entanglements with megafauna from the N1 fishery."

Conflict in the waterways

- Removal of the designated Great Sandy Area and prohibiting large mesh gill nets and ring nets **(2)**

Written Submissions

Commercial fishers state that these proposed changes will drastically impact the commercial fishing industry within the marine park, forcing many fishing businesses to leave the industry and resulting in significant direct and indirect job losses, substantial regional economic impacts, and a reduction in the availability of fresh local seafood.

Commercial fishers also reject the analysis of the economic value of the commercial fisheries conducted within the marine park that is presented in the RIS. They suggest that the value of the commercial fisheries is significantly underestimated, and that the method used to value commercial fisheries (i.e. Gross Value of Production) cannot be directly compared to the value of recreational fishery (calculated via a different method based on expenditure by recreational fishers during their activity).

The proposed impact mitigation package for those affected by proposed changes to the zoning plan is viewed with scepticism by the commercial fishing sector, due to the lack of detail provided and concern regarding its ability to effectively compensate fishers and manage effort transfer for those who remain.

“Recreational fishers like me have wide ranging fishing opportunities. Please do not ruin profitable businesses for the sake of ephemeral rec fishing/tourism opportunities. Commercial fishers are managed in a Sustainable way by Fisheries Qld and have far more restrictions than rec fishers. Commercial fishers would much rather a job than a payout!”.

"Pros try as hard as we can and still get kicked out. It’s simply not fair. No-one is threatening the jobs of the sport fishers but they think nothing of putting us out of our jobs and the government goes along with it.”

"While that may be deemed adequate compensation to the Government, it does not address displacement, meaning buy out packages need to be better than what the fisher can get on the open market to avoid displacement.”

“Are you going to compensate commercial fisherman when you arbitrarily shrink the area we can trawl. We have enough green zones now. As well as the loss of all our scallop replenishment area that seem to never be given back. You're pushing us into smaller and smaller areas and wonder why the catch rates are dropping.”

"The commercial financial injection to the economy is based on “beach price”. There seems to be no analysis of… There is no assessment of the local economic multiplier of commercial fishing activity including fuel, purchase of supplies, engineering, refrigeration etc.”

Conflict in the waterways

- Removal of the designated Great Sandy Area and prohibiting large mesh gill nets and ring nets **(3)**

Written Submissions

Significant concern was raised by seafood processors, retailers and consumers regarding the reduced availability of fresh local seafood. Seafood businesses involved in the supply chain of commercially netted fish, and their consumers, are concerned for the long-term viability of their businesses. Many members of the public that do not recreationally fish noted their support for the continuation of the commercial net fishing industry to maintain their access to fresh, local seafood.

Commercial fishers identify their strong custodianship of the waterways across generations and their ongoing environmental advocacy. This includes commercial fishers mentioning involvement in programs assisting government bodies, with systems to care for turtles caught in the nets, and simply choosing a career as a fisher to better understand the ecosystems. They argue that broader environmental management issues (e.g construction of barrages, sewerage outflows, application of herbicides in the catchment) are a far greater threat to the marine park than their impact on the marine park.

"I DO NOT want to be buying inferior imported fish and do not want the Fraser Coast to become known as the 'imported seafood capitol of Queensland'."

"I am against the removal of the professional netting in the Sandy straights. As I don't fish as I am in a wheelchair and can't go fishing in a boat ,so I buy all my whiting and mullet from the fresh fish shops in Harvey Bay"

"I do not support the banning of the ring net fishing in the Great Sandy Marine Park. This proposed plan bans my right to the only access I have to the high quality local just caught inshore fish."

"So I ask you why a resource that is owned by the whole community be taken from that community and be given to a minority group?"

"I have fished in the Straights most of my life 3rd generation. Its a disgrace what this government has done how would they like 2/3rds of there income taken away I can't even fish anymore… why don't the government look after us like farmer's on the land."

"Our customer base in Hervey Bay is approx. 2000 locals and their strongest message is 'we want to eat what's caught here and support you'."

"For myself, commercial fishing was not all about money but understanding how these ecosystems work as an attachment of oneself."

"Local fishers pioneered the dugong protection programme, which later aided [name] in developing the DPA for the Great Barrier Reef Marine Park. No such system or stewardship exists from a recreational fisher perspective."

PROPOSED RETENTION OF COMMERCIAL TUNNEL NETTING AND SET POCKET NETTING

Over 9 in 10 (91%) respondents chose to answer questions around the designated Great Sandy Area and commercial fishing.

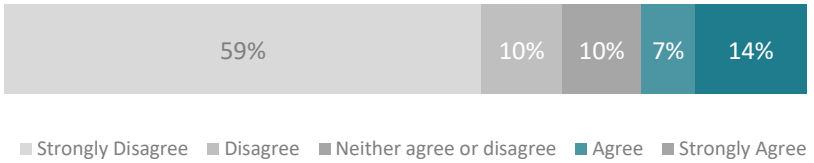
Of those who chose to answer, over 2 in 3 (70%) disagree with the retention of tunnel netting in the Great Sandy Strait and Tin Can Inlet and commercial set pocket netting in the Mary River. Only 1 in 5 (21%) agree with the proposed retention of these forms of fishing.

AGREEMENT
Commercial fishers are more likely to agree with this proposal, with half (50%) reporting they agree or strongly agree.

DISAGREEMENT
Those interested in marine conservation and those who are recreational fishers or users are more likely to disagree with the proposed retention of commercial tunnel netting.

91% chose to answer questions around the designated Great Sandy Area and commercial fishing

AGREEMENT WITH THE PROPOSED RETENTION OF COMMERCIAL TUNNEL NETTING AND SET POCKET NETTING



Response by Primary Interest

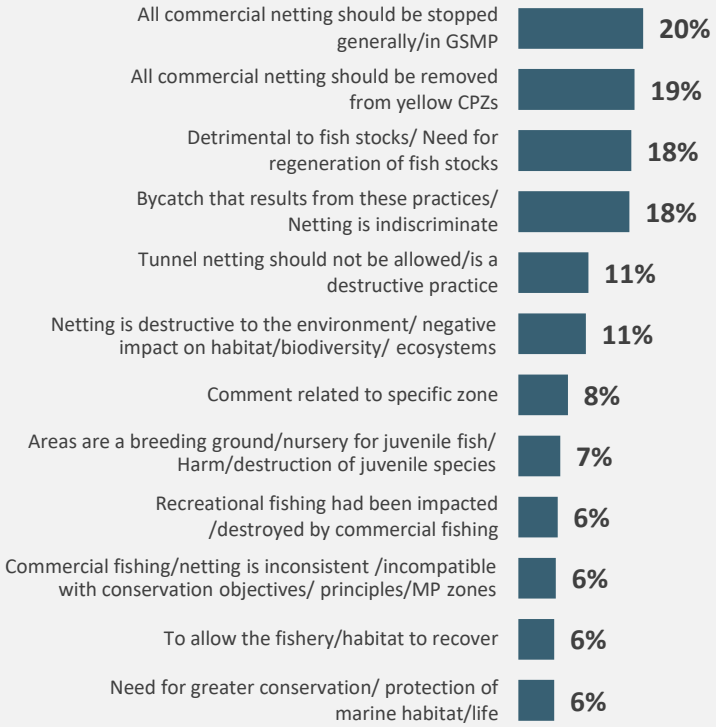
	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	38%*	22%	50%	18%	21%	29%*
% Disagree	63%	68%	33%	74%	59%	59%
	n=8*	n=197	n=36	n=765	n=66	n=17*

*Caution small sample size. Excluded from significance testing.

Base: All respondents (n=1245). Q. The existing designated Great Sandy Area primarily allows commercial net fishing to occur in the Conservation Park (yellow) zone in Baffle Creek, Elliott River, Burrum River system, Great Sandy Strait and Tin Can Inlet. Since the marine park was established in 2006, the competing uses of this designated area have undermined the ability to manage these waterways to effectively balance conservation and use. (RIS Sections 6.2. and 7). Q. Would you like to answer questions on this? Base: Those who chose to answer question (n=1126). Q. To what extent do you agree with the proposed retention of commercial tunnel netting in the Great Sandy Strait and Tin Can Inlet, and commercial set pocket netting in the Mary River?

DISAGREEMENT WITH PROPOSED RETENTION OF COMMERCIAL TUNNEL NETTING

KEY REASONS FOR DISAGREEMENT



Note: only codes >5% shown.
Base: Those who chose to answer question (n=1126). Q. To what extent do you agree with the proposed retention of commercial tunnel netting in the Great Sandy Strait and Tin Can Inlet, and commercial set pocket netting in the Mary River? Base: Those who disagree with the retention of commercial tunnel netting & commercial set pocket netting (n=718). Q. Tell us why?

70%
Disagree with the proposed retention of commercial tunnel netting and set pocket netting

Of the 91% survey respondents who chose to answer this section of the survey, 70% disagree with the proposed retention of commercial tunnel netting and set pocket netting.

Key reasons for disagreement are the belief all commercial netting should be stopped in the marine park (20%) or stopped specifically in Conservation Park (yellow) zones (19%), that it is detrimental to fish stocks (18%), and concerns relating to the bycatch that results from these practices (18%).

"Tunnel nets three hundred metres long seriously deplete entire mature fish populations in single areas and are highly destructive, for minimal economic benefit. Please remove this form of netting."

"The Commercial fishing sector has in large part decimated fish stocks in that area. The removal of gill netting is a very positive move, but by allowing tunnel netting, it allows these practices to continue. Its very likely given past behaviour by commercial fisherman in the GSMP that abuse of these privileges will be common practice, as these people have proven themselves as people who seemingly have little respect for the sustainability of highly desirable recreational species that people travel from all over the world to the GSMP to catch and release.

"Tunnel netting is a take-all, leave none netting style that does not discriminate on what fish it catches, raping an area of everything. Comparative to ring nets its a larger, far more harmful operation."

"No netting at all. Tunnel netting still catches fish and while fishermen say they will dispose of unwanted fish carefully, from previous experiences in the Woodgate area, we have seen that not all will survive when returned to the water."

"I disagree with this proposal as I believe commercial tunnel netting has had hugely negative effects on the fish stocks in the area. I have seen first hand how these nets can effect not only the fish they intent to catch but also many other undersized fish."

Conflict in the waterways

- Retention of commercial tunnel netting in the Great Sandy Strait and set pocket netting in the Mary River

Written Submissions

There is little support for the retention of tunnel netting and set pocket netting in these areas of the marine park, with tunnel netting being the particular focus of concerns. The conservation and recreational fishing sectors view tunnel netting as a significant and destructive form of commercial net fishing and have strongly promoted its prohibition from the Conservation Park (yellow) zones within the Great Sandy Strait and Tin Can Inlet.

The commercial fishing sector supports the continuation of tunnel netting.

In relation to the set pocket net fishery in the Mary River the conservation sector identifies that 'sunsetting' of the existing licences should be considered, to remove this form of netting over time.

"Congratulations on an excellent draft plan. It has been a long time coming and addresses all necessary issues. The only comment I would like to make is that tunnel and pocket nets should not be considered as they would just take the place of gill nets."

"I strongly disagree with retaining commercial tunnel netting in Yellow Conservation zones. All commercial netting should be removed from Yellow Conservation Zones. (In line with conservation zones in other Queensland Marine Parks)."

PROPOSED HAND-HELD ROD/LINES & HOOK ALLOWANCES IN CONSERVATION PARK (YELLOW) ZONES

Almost 9 in 10 (88%) chose to answer questions around line fishing in Conservation Park (yellow) zones.

Of those who chose to answer, 4 in 5 (80%) agree with the proposed change, allowing each fisher a maximum of two hand-held rods/lines and 2 hooks in all Conservation Park (yellow) zones.

AGREEMENT
Those interested in marine conservation or who are recreational fishers or users of the marine park are more likely to agree with the proposed change than other primary interest groups.

Those aged over 65 years are also more likely to agree with the proposed change than those aged 18-45 years.

DISAGREEMENT
Commercial fishers most likely to disagree with this proposal. Agreement is also low among those respondents who identify as Traditional Owners however the sample size is small, so these results are indicative only.

88% chose to answer the questions around line fishing in Conservation Park (yellow) zones

AGREEMENT WITH THE PROPOSAL TO ALLOW EACH FISHER TO USE A MAXIMUM OF 2 HAND-HELD RODS/LINES AND 2 HOOKS IN CONSERVATION PARK (YELLOW) ZONES

Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	13%*	82%	41%	83%	72%	88%*
% Disagree	75%*	10%	41%	12%	11%	13%*
	n=8*	n=188	n=29	n=757	n=64	n=16*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	75%	81%	87%
% Disagree	17%	13%	10%
	n=375	n=509	n=192

*Caution small sample size. Excluded from significance testing.
Base: All respondents (n=1245). Q. [Line fishing in yellow zones] The draft zoning plan proposes to apply consistent rules for the number of fishing lines and hooks a person can use in all Conservation Park (yellow) zones of the marine park (RIS Section 6.2). Would you like to answer a question on this? Base: Those who chose to answer question (n=1097). Q. To what extent do you agree with the proposal to allow each commercial and recreational fisher to use a maximum of 2 hand-held rods/lines and 2 hooks in all Conservation Park (yellow) zones?

Conflict in the waterways

- Other comments or suggestions (1)

Written Submissions

PROPOSED CHANGE TO NUMBERS OF RODS AND HOOKS IN CONSERVATION PARK ZONES

There is support across the commercial and recreational fishing sectors, and from many in the community, for the proposal to allow fishers to use 2 rods/lines and a total of 2 hooks in all Conservation Park (yellow) zones, instead of 1 line/1 hook as is currently allowed. However, there was opposition to this proposed change from several key stakeholders, First Nations peoples' representative bodies and conservation organisations, who would prefer the 1 rod/line and 1 hook limit be maintained.

OTHER POINTS RAISED

There is also differing feedback that suggests no changes to the zoning plan are necessary as fish are plentiful in the area, as well as submissions querying the sources of data and research that have informed these proposed changes.

There is concern for the welfare of commercial fishers, their families and associated businesses, and their access to just compensation. It is noted that some fishers may not have engaged in the consultation process due to their inability to access the online survey, and the short consultation period in which to provide a written submission.

There were also views that commercial fishing is a legacy, and that the government should be providing support to maintain the commercial fishing industry.

A small number of submissions raise using seasonal area closures to allow species to breed.

"There are bag limits that limit the catch & conserve stocks of fish. I don't believe that altering the number of lines/hooks will change the number of fish caught so why change the status quo? It will only lead to confusion."

"I feel the rezoning is completely unnecessary and will destroy way many more lives than it will benefit."

"The total removal of pro fisheries to let fish stocks to replenish the biomass There is more value for the community with a larger fish biomass In the past people traveled from around the world to fly fish the flats of the Bay Area So when people travel to area the community wins."

"I have thought about some issues about fish stocks for quite some time. I think the biggest problems come from netting and not letting the fish breed. If we had closed seasons for when each species breeds that would go a long way to rejuvenating fish."

Conflict in the waterways

- Other comments or suggestions (2)

Written Submissions

SHIFT OF FISHING EFFORT

Commercial crabbers in particular are concerned about the risk posed by any shift in fishing effort from commercial fishers affected by proposed changes in the draft zoning plan. Fishers indicate concerns that the impact mitigation package may not be sufficient for some commercial fishers to exit their specific fishery. It is also of concern that fishers would use other endorsements to commence commercial crabbing, in competition with those currently involved in this fishery. A suggested solution for consideration is to apply a restriction (for a stated period of time) to affected commercial fishers that receive compensation as part of the impact mitigation package, in relation to entering into any form of commercial fishing.

ASSIGNED VALUE OF PRODUCT

There is disagreement with the approach in calculating the value of commercial versus recreational fishing – annual GVP (the $ value for commercial product) of commercial fisheries, against the total recreational spend. Claims are made that the local economic multiplier effect of commercial fishing activity has been overlooked (e.g., investment in local infrastructure, purchase of supplies), as well as the shift in seafood trading for many small scale commercial fishers as a result of Covid-19, to a direct-to-consumer model.

"I have no personal or family connection to those historic pro fishermen but I believe them to have been credible and in my judgement always took a long term view on sustainability."

"We beg of you to take SHIFTING EFFORT seriously. Buy out the whole license, all symbols and quota. With also maybe a provision of not being able to re-enter the fishing industry for a period of 5 year in any capacity."

"The commercial financial injection to the economy is based on "beach price". There seems to be no analysis of… the local economic multiplier of commercial fishing activity including fuel, purchase of supplies, engineering, refrigeration etc."

Conflict in the waterways

- Other comments or suggestions (3)

Written Submissions

As previously stated, most submissions are either against any changes or for all commercial netting to be prohibited in the Great Sandy Area. A smaller number support allowing some commercial netting or discuss the current conflict in the designated Great Sandy Area.

ALLOW SOME COMMERCIAL NETTING

Views were expressed that supported phasing out commercial netting, with references made to the Great Sandy Area and Marine Park as a whole, rather than an immediate prohibition on this activity when the zoning plan is implemented. There were also suggestions to allow commercial netting but only for local consumption. Those that feel some netting should be allowed are generally supportive of the preferred option proposed.

MENTIONS OF CONFLICT

Some mention personal experiences with the conflict referred to in this section of the RIS, from both a commercial fisher and community member perspective. There is acknowledgement that there should be fair access to resources for all fishers.

SUGGESTED SOLUTIONS

- Pay out commercial fishers, incl. licence, their quota etc.
- Allow for continued commercial netting in specific zones.
- Form a group for the purpose of conflict resolution to cover the boundaries with local representation and an independent chair and a secretariat provided by DES or the Great Sandy Marine Park or Fisheries Queensland.

"Reports of tunnel netters unloading fish at the Tinnanbar boat ramp, into boxes marked for the Sydney markets is of a big concern for me. Perhaps if this type of netting is to continue it should be for local markets and resale only so it has a less effect on the environment."

"I have noticed a lot of assumptions and misconceptions in the information your office and department has released and is relying on to implement the proposed changes in the zoning for the GSMP"

"During the last 10 years working in the GSMP I have been personally attacked, abused and threatened by extremist recreational fishing advocates."

"Anyone raising the problem of over-fishing was subjected to threatening behaviour, so much so that persons who tried to sound alarm bells were frightened to the point of giving up and retreating in silence."

"In fact Tobin found that "ROFA's (Recreational-only fishing areas – the equivalent of kicking net fishers out of the designated area) are not likely to reduce conflict…. Increased education and communication is more likely to resolve conflict in this fishery, because the conflict is caused by misperceptions held by fishers…. rather than high levels of contact between fishing sectors."*

** Reference: Tobin, Renae C. (2006) "The effectiveness of recreational only fishing areas in North Queensland estuaries for reducing conflict and improving recreational catches JCU , 2006. p. 162*

Conflict in the waterways

- Other comments or suggestions (4)

Written Submissions

Although not directly applicable to proposed changes, additional comments were made by various groups, mainly around the need to share resources rather than restrict access.

SHARE RESOURCES

The need to share resources is highlighted in a number of submissions, noting that respecting others and their viewpoint aids conflict resolution. There is concern about an increase in future conflict amongst fishing sectors if proposed changes go ahead.

OTHER POINTS RAISED (DOLPHIN FEEDING)

A small number of submissions are concerned that proposed changes affecting the N1 commercial net fishery will impact on the provision of fish for the dolphin feeding program tourist attraction (which occurs outside of the marine park) at Tin Can Bay.

"In this plan it leans heavily on the removal of commercial GP mesh nets (N1) from the park, as you know this is where we obtain all of our sustainably caught local biddie etc. for the dolphin feeding program. As you are aware, the terms for the feeding require that we obtain this fish from the same ecosystem in which the dolphins reside. As result of removing this commercial fishing method, it would directly impact on our ability to do so."

"The aim of the Marine Park should be to support the sustainable take of resources for all future generations and not just benefit a select few operators or lobby groups as future beneficiaries."

"I do not want to witness violence and chaos on our shores but I fear that this course of destroying food production for the public while appeasing the selfish demands of a very small group to have exclusive access to our fishing grounds, might well bite us all."

"Conflict is not an environmental threat. It is really a matter of learning to respect others, to listen to others' points of view, to share and to use manners."

"What interactions has occurred is the trawling up of stoves, refrigerators, children's swings, outdoor settings and washing machines littered across the bay… particularly along the western side of Fraser Island – how does oil oozing white goods and gas filled refrigerators become a protected species for a trawl closure?"

"The RIS states that the loss of seagrass in the GSMP is the fault of the commercial fishery. This is absolutely unfounded and once again I ask, WHERE IS THE PEER REVIEWED SCIENTIFIC EVIDENCE?"

RIS 6.3 – PROTECTION OF THREATENED SPECIES

OVERALL ENGAGEMENT

Online Surveys *72-85% answered questions about this*

About a sixth of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.3 PROTECTION OF THREATENED SPECIES (1)

Generally, feedback from the online survey indicates a positive sentiment towards proposed changes to the zoning plan to increase protection of threatened species. Written submissions that discussed this topic mainly discuss marine turtles, dugongs and dolphins, followed by migratory shorebirds. Least discussed are grey nurse sharks and other proposed changes.

MIGRATORY SHOREBIRDS

ONLINE SURVEY RESULTS

~~A~~t least 3 in 4 respondents agree with the proposed changes in relation to protection of migratory shorebirds.

84% Agree

With proposed park-wide measures to protect shorebirds from intentional disturbance.

76% Agree

With proposed access closure periods at significant shorebird roost sites.

KEY FINDINGS

- Overall, strong support for the proposed changes to improve protection of migratory shorebirds through introducing park-wide measures to protect shorebirds from intentional disturbance and seasonal access closure periods at highly significant shorebird roost sites (Maaroom, Boonooroo, Moon Point, Cooloola-Tin Can Inlet).
- First Nations peoples' representative bodies support the proposal.
- The conservation sector, and scientific community are particularly supportive, although support from recreational users and fishers, and tourism operators is also relatively high.
- The scientific community suggests better protection of shorebird sites that extend outside the boundary of the marine park and raised concerns with disturbance of shorebirds from coastal development.
- Those who object to the proposed closure areas are mostly recreational fishers who consider access closures to be an unnecessary measure and would like to maintain unrestricted use of these areas, including at Moon Point and Boonooroo.
- There is a suggestion to modify the boundary at Boonooroo to minimise impacts on local residents.
- There are several suggestions for additional closure areas.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- Proposed changes will restrict use and access, in particular for residents whose boundaries are adjacent to the Boonooroo seasonal access closure area.
- Concerns that local council dog off leash areas allow disturbance of shorebirds.

OVERALL ENGAGEMENT

Online Surveys *72-85% answered questions about this*

About a sixth of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.3 PROTECTION OF THREATENED SPECIES (2)

GREY NURSE SHARKS

ONLINE SURVEY RESULTS

Over 3 in 5 agree with the proposed improved protection of grey nurse sharks.

70% Agree

With proposed improved protection of grey nurse sharks.

WRITTEN SUBMISSIONS

KEY FINDINGS

- Overall, there is good support for the proposed changes to expand the Wolf Rock Marine National Park zone and designated Grey Nurse Shark area to improve protection of critically endangered grey nurse sharks.
- The conservation sector and scientific community are particularly supportive of the proposal.
- Many recreational fishers agree with the proposal.
- Support from recreational users and tourism operators is also relatively high.
- Recreational fishers who disagree often note the inclusion of The Pinnacles as the reason, due to the popularity of this site which is within easy access of Rainbow Beach. Fishers suggest the use of a Buffer zone over The Pinnacles to allow trolling (with surface lures), believing that grey nurse sharks are not accidentally taken by fishers, and the existing zoning plan provisions are adequate.
- Commercial fishers predominantly disagree with the proposal.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- The Pinnacles was the site within the proposed expansion of the Marine National Park (green) zone that was most contentious – mainly for recreational fishers.
- While some submissions requested no change to the existing Marine National Park (green) zone, others suggested the area at The Pinnacles should be changed to a Buffer Zone to allow trolling (with surface lures).

REDUCE THE THREAT TO TURTLES, DUGONG AND DOLPHINS FROM VESSEL STRIKE

81% Agree

With proposed expansion of the network of designated go slow areas.

WRITTEN SUBMISSIONS

KEY FINDINGS

- Broad support for the proposed changes to designated Go Slow Areas. First Nations peoples' representative bodies, the conservation sector, recreational users, recreational fishers and tourism operators are most supportive of proposed changes.
- Some commercial fishers disagree with the designated Go Slow Area network, while others support the proposal.
- Various reasons are given by the few respondents who disagree with this proposal, e.g., boat strikes are minimal, current Go Slow Areas are sufficient, and threatened species are not present in proposed designated Go Slow Areas.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- Commercial fishers (in particular mud crabbers) generally object to having to comply with designated Go Slow Area speed restrictions as this increases the time taken to service their crab pots.

OVERALL ENGAGEMENT

Online Surveys *72-85% answered questions about this*

About a sixth of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.3 PROTECTION OF THREATENED SPECIES (3)

IMPROVE PROTECTION OF INTER-NESTING TURTLES

ONLINE SURVEY RESULTS

Almost 9 in 10 agree with the proposed increase of the Turtle Protection Area.

89% Agree

With proposed increase of the Turtle Protection Area.

WRITTEN SUBMISSIONS

KEY FINDINGS

- Very strong support for increasing the size of the designated Turtle Protection Area off Mon Repos. Support is highest amongst recreational users, the conservation sector, recreational fishers, and tourism operators.
- Those in the commercial fishing sector are less likely to agree, primarily as this proposal increases the area where commercial trawling is prohibited off Mon Repos for three months a year (1 November to 31 January) during turtle nesting season.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- None identified.

EXTEND TIMING OF DESIGNATED MON REPOS AREA TO PROTECT LATE SEASON TURTLE HATCHLINGS

ONLINE SURVEY RESULTS

Just under 9 in 10 agree with the proposed extended timing of the designated Mon Repos Area.

87% Agree

With proposed extended timing of the designated Mon Repos Area by one month (to 31 may) to protect late season turtle hatchlings from disturbance

WRITTEN SUBMISSIONS

KEY FINDINGS

- Very strong support for extending the designated Mon Repos Area rules by one month (to May 31) to protect turtle hatchlings emerging late in the nesting season from human disturbance. Stakeholders that support this proposal include the conservation sector, recreational users and recreational fishers.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- None identified.

Protection of threatened species
- an overview of survey responses

Survey responses

The following pages include analysed results from the online survey. Six specific questions were asked of respondents to gauge their level of agreement with proposed changes. Where participants disagreed, a follow up question offered the opportunity to explain their disagreement for some of those questions. Feedback was also received through the final comments question at the end of the survey which has been coded and included within the relevant section.

SURVEY RESPONSES FROM SPECIFIC QUESTIONS

The following specific questions were asked in the survey:

- Q. To what extent do you agree with the proposed park-wide measures to protect shorebirds from intentional disturbance?
- Q. To what extent do you agree with the proposed access closure periods at the significant shorebird roost sites of Maaroom, Boonooroo, Moon Point, and Cooloola-Tin Can Inlet?
- Q. To what extent do you agree with the proposals to improve protection of grey nurse sharks by expanding the Wolf Rock green zone and designated Grey Nurse Shark Area?
- Q. To what extent do you agree with the proposed expansion of the network of designated Go Slow Areas to reduce the threat to turtles, dugongs and dolphins from vessel strike?
- Q. To what extent do you support the increase in size of the designated Turtle Protection Area (which prohibits trawling between 1 November and 31 January) from 1.8km to 5km offshore from Mon Repos beach to improve protection of turtles preparing to come ashore to lay eggs?
- Q. To what extent do you agree with the proposal to extend the timing of the designated Mon Repos area by one month (to 31 May) to protect late season turtle hatchlings from disturbance?

CODED RESPONSES FROM FINAL COMMENTS

At the end of the online survey, respondents were able to provide any final comments through an open ended question.

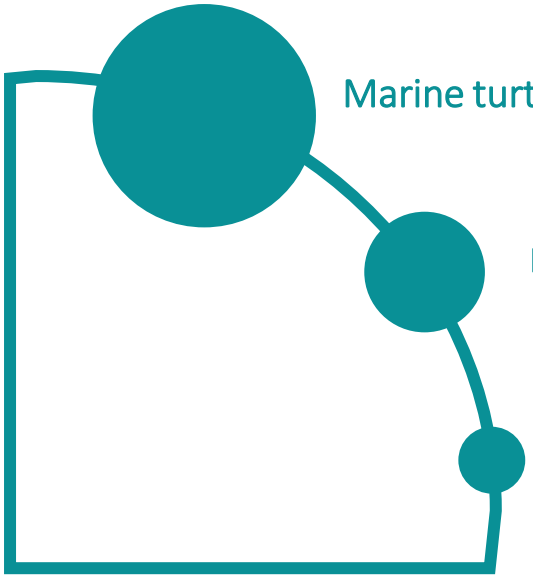
The feedback received through this question provides insights and information to support or refute proposed zoning plan changes or offers alternative perspectives and differing options for departmental consideration.

Protection of Threatened Species
- an overview of written submissions

Written Submissions

Sub topics mentioned

Protection of threatened species and the associated proposed changes were discussed in a relatively small number of written submissions and as such, results should be interpreted with caution. The majority of feedback relates to marine turtles, dugongs and dolphins, followed by migratory shorebirds. Least discussed are the proposed changes relating to grey nurse sharks.



Marine turtles, dugong and dolphins

Migratory shorebirds

Grey nurse sharks

Frequency of mentioning

A relatively small number of written submissions received from a range of stakeholders.

Protection of Threatened Species - an overview of written submissions

Written Submissions

Locations discussed

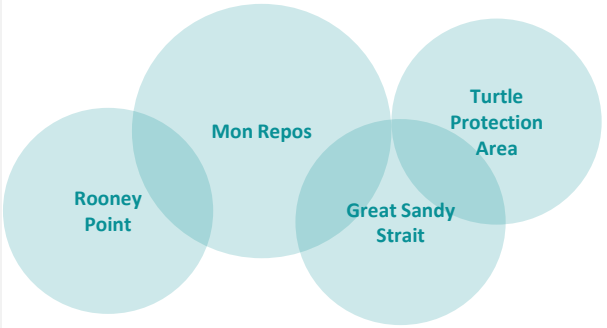
Written submissions mostly commented on protection of marine turtles, dugongs and dolphins followed by migratory shorebirds. The locations referred to are noted to the right.

A few commented on protection of grey nurse sharks, with most common areas mentioned including Marine National Park (green) 26 and Rocky bommie.

**Please note a small number of submissions referring to these areas, interpret with caution.*

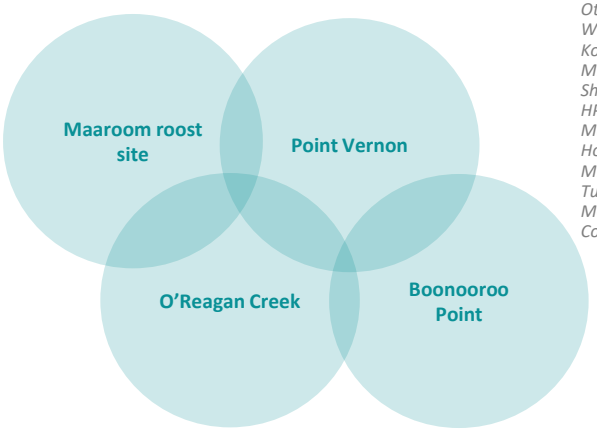
"We have fishing trawlers. Way too close to our beach. We see the by product from these trawlers washing up on the beach. Dead turtles, snakes and thousands of tiny baby fish. The wash up of the sea grass damaged by the trawlers. You are not protecting the marine life in this area. Why is this area not protected? The Northern Headland of Moore Park Beach is incredibly fragile for the migrating birds once again this river mouth headland has no protection. I disagree strongly with the zone given to Moore Park Beach."

Locations mentioned in relation to marine turtles, dugongs and dolphins



Other less mentioned areas:
Tin Can Inlet
Sandy Cape
Catalina Moorings
Wide Bay
Woongarra Coast
Kolan River
GSA08 Boonooroo to Kauri Creek
Double Island Point
Inskip Point
Eli Creek

Locations mentioned in relation to migratory shore birds



Other less mentioned areas:
Wathumba Creek
Kolan River
MNP 22 Bookar, Walsh and Turkey Islands
Shark Creek
HPZ17 Boonooroo
Mangrove South Claypan
Hook Point
MNP 20 Mangrove Point
Turtle Cover Clay
Moon Point
Cooloola

PROPOSED PARK-WIDE MEASURES TO PROTECT SHOREBIRDS

Over 3 in 4 (76%) respondents chose to answer questions around migratory shorebirds.

Of those who chose to answer, over 4 in 5 (84%) agree with the proposed park-wide measures to protect shorebirds from intentional disturbance.

AGREEMENT
Those conducting research or interested in marine conservation are more likely to agree with this proposal than other primary interest groups however there is still relatively high agreement among recreational users and fishers, and tourism operators.

Those aged over 65 years are most likely to agree with the proposed changes.

DISAGREEMENT
Those under the age of 45 are less likely to agree with the proposed change compared to older age groups.

76% chose to answer questions around migratory shorebirds

AGREEMENT WITH THE PROPOSED PARK-WIDE MEASURES TO PROTECT SHOREBIRDS FROM INTENTIONAL DISTURBANCE

Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	33%*	97%	30%*	82%	85%	77%*
% Disagree	50%*	1%	50%*	7%	7%	15%*
	n=6*	n=195	n=20*	n=613	n=61	n=13*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	80%	84%	91%
% Disagree	11%	6%	1%
	n=304	n=450	n=171

*Caution small sample size. Excluded from significance testing.
Base: All respondents (n=1245). Q. [Protecting threatened species – Migratory shorebirds] Changes are proposed to better protect shorebirds including at four sites in the marine park (Maaroom, Boonooroo, Moon Point, and Cooloola-Tin Can Inlet) that are especially significant for shorebirds as they recover from, and prepare for, migration (RIS Section 6.3.1 and Appendix 6). Would you like to answer questions on this?
Base: Those who chose to answer question (n=942). Q. To what extent do you agree with the proposed park-wide measures to protect shorebirds from intentional disturbance?

SUPPORT FOR PROPOSED PARK-WIDE MEASURES TO PROTECT SHOREBIRDS

There is good support for the proposed measures to protect shorebirds from intentional disturbance as indicated by the response to survey questions. Among respondents who left a final free text comment, 1 in 4 referred to conservation (25%) with few comments (2%) suggesting shorebird protection should be increased.

25% made final free-text comments about conservation

84% Agree with the proposed measures to protect shorebirds from intentional disturbance

"As someone who enjoys bird-watching I am also keen to see the improved protections for shorebirds implemented. These species are suffering habitat destruction and degradation across their migratory range. Ensuring they are well-protected from disturbances during stop-overs and more generally anytime they use the park is important for ensuring these birds will be there for myself and future generations to watch and enjoy."

"Migratory birds in the West side of Point Vernon Eli Creek area. Need to restrict access to dogs which are interfering with the birds."

"Shorebirds need protection as currently within the Elliott River estuary there are no controls being enforced, and roosting sites are being overrun by dogs and people with no care for the birds."

"The establishment of a seasonal Shorebird Closure area for four significant high tide roost sites is commendable but does not go far enough. There are other areas just as worthy of this protection. In particular, The mouth of O'Regans Creek, the area at Point Vernon to the east of the Gatakers boat ramp where Greater and Lesser Sand-plovers roost on the rock platform."

Please note that codes explaining reasons for support are identified above. The full codeframe is included further in the report on page 131.

Base: Those who chose to answer question (n=942). Q. To what extent do you agree with the proposed park-wide measures to protect shorebirds from intentional disturbance?
Base: All respondents who made comments about conservation (n=157). Q. What other comments would you like to make on the draft zoning plan

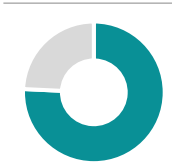
PROPOSED ACCESS CLOSURE PERIODS AT HIGHLY SIGNIFICANT SHOREBIRD ROOST SITES

Over 3 in 4 (76%) chose to answer questions around migratory shorebirds.

Of those who chose to answer, 3 in 4 (76%) agree with the proposed access closure periods at four highly significant shorebird roost sites (Maaroom, Boonooroo, Moon Point, and Cooloola-Tin Can Inlet).

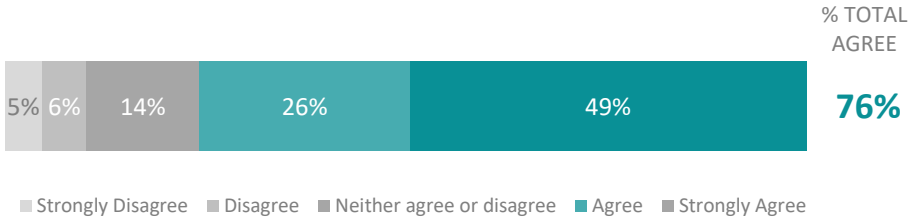
AGREEMENT
Those interested in marine conservation or conducting research are more likely to agree with this proposal, however, there is still relatively high agreement among recreational users and fishers, and tourism operators.

DISAGREEMENT
Recreational fishers and users are most likely to disagree with this proposal. Those aged under 45 years are also more likely to disagree compared to older age groups.



76% chose to answer questions around migratory shorebirds

AGREEMENT WITH THE PROPOSED ACCESS CLOSURE PERIODS AT HIGHLY SIGNIFICANT SHOREBIRD ROOST SITES



Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	0%*	94%	25%*	72%	78%	62%*
% Disagree	67%*	2%	40%*	11%	8%	15%*
	n=6*	n=194	n=20*	n=612	n=60	n=13*

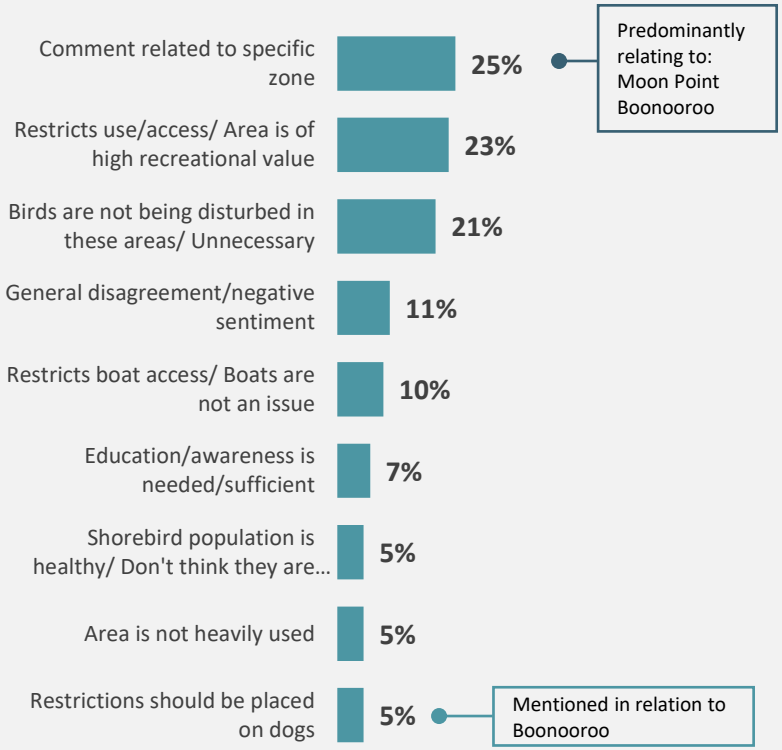
	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	68%	77%	86%
% Disagree	16%	8%	6%
	n=303	n=448	n=171

*Caution small sample size. Excluded from significance testing.
Base: All respondents (n=1245). Q. [Protecting threatened species – Migratory shorebirds] Changes are proposed to better protect shorebirds including at four sites in the marine park (Maaroom, Boonooroo, Moon Point, and Cooloola-Tin Can Inlet) that are especially significant for shorebirds as they recover from, and prepare for, migration (RIS Section 6.3.1 and Appendix 6). Would you like to answer questions on this?
Base: Those who chose to answer question (n=939). Q. To what extent do you agree with the proposed access closure periods at the significant shorebird roost sites of Maaroom, Boonooroo, Moon Point, and Cooloola-Tin Can Inlet?

DISAGREEMENT WITH PROPOSED ACCESS CLOSURE PERIODS AT ROOST SITES

10%
Disagree with the proposed access closure periods at significant roost sites

KEY REASONS FOR DISAGREEMENT



Note: only codes >4% shown.
Base: Those who chose to answer question (n=939). Q. To what extent do you agree with the proposed access closure periods at the significant shorebird roost sites of Maaroom, Boonooroo, Moon Point, and Cooloola-Tin Can Inlet? Base: Those who disagree with the proposed closure periods (n=73). Q. Tell us why and please specify which location/s you disagree with.

Of the 76% who chose to answer this section of the survey, 10% disagree with the proposed access closure periods at four highly significant shorebird roost sites.

Key reasons for disagreement include the area being of high recreational value (23%), and the perception that birds are not being disturbed in these areas (21%).

"Closure of the site at Boonooroo would prevent me from walking on to the foreshore at the end of my street and walking across the coastline at low tide. I do however agree that dogs should not access the location during any closure."

"Sensible use of areas for recreational use should be allowed."

"Moon Point has very few visitors, I do not agree with closing these areas as there is no need to with how little disturbance there is. Very few shore birds even visit the area so there is not need."

"Some of these sites are key recreational fishing areas and we should NOT loose access to these areas."

"I strongly disagree with the area designated at the end of Adair At Boonooroo, this is access for a number of residents to walk and swim. No one would ever interfere with wildlife on these flats. Just ban dogs during this time."

Protection of Threatened Species
- Migratory shorebirds

Written Submissions

Migratory shorebirds

A moderate number of submissions refer to protection of migratory shorebirds. There is support for the proposed introduction of park-wide provisions to protect shorebirds from disturbance throughout the park. The proposed establishment of a new designated area that seasonally closes access to highly significant roost sites, four of which are proposed in the RIS, also received good support in submissions. There were recommendations to seasonally close additional roost sites at Wathumba Creek, O'Reagan Creek, Point Vernon and Hook Point, to protect migratory shorebirds from disturbance when at their most vulnerable.

There are concerns raised that local council dog off leash areas allow disturbance of shorebirds, with suggestions made to review locations and better protect shorebirds that use these areas within the marine park.

Other points raised include other sites suggested for added protection (Kolan Creek for both protection of migratory birds and inter-nesting turtles and Shark Creek for protection of migratory birds), lack of mention in the RIS of beach-nesting, need for education programs to raise awareness of the impacts of disturbance on shorebirds and proposed seasonal closure areas limiting access to privately owned property.

"At present the area [mouth of Eli Creek] is a dog off leash area. The area is easily accessible and very popular. There are dogs constantly and the birds have little chance to feed uninterrupted."

"...notes that the plan could be further strengthened to better protect the significant environmental values of the Marine Park including migratory shorebirds and beach-nesting birds."

"Through this we have learned that there is quite limited knowledge amongst the general public about the migratory birds, their journey to the Great Sandy Strait and the subsequent importance of them being able to feed and refuel while here. We are therefore concerned that the potential benefit of the seasonal closures for migratory birds may be undermined by lack of public knowledge and support."

"However I am deeply concerned about the bird nesting area that may be created at Boonooroo Point right up to my front boundary."

PROPOSALS TO IMPROVE PROTECTION OF GREY NURSE SHARKS

Around 3 in 4 (72%) chose to answer questions around grey nurse sharks.

Of those who chose to answer, 7 in 10 (70%) agree with the proposals to expand the Wolf Rock Marine National Park (green) zone and designated Grey Nurse Shark Area.

AGREEMENT
Those interested in marine conservation and recreational users, as well as those aged over 45 are more likely to agree with this proposal.

DISAGREEMENT
Recreational fishers and those aged under 45 years are most likely to disagree with this proposal.

72% chose to answer the questions around grey nurse sharks

AGREEMENT WITH THE PROPOSALS TO IMPROVE PROTECTION OF GREY NURSE SHARKS BY EXPANDING THE WOLF ROCK MARINE NATIONAL PARK ZONE AND DESIGNATED AREA

Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	0%*	96%	30%*	64%	84%	57%*
% Disagree	86%*	3%	57%*	26%	13%	36%*
	n=7*	n=187	n=23*	n=588	n=56	n=14*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	63%	72%	78%
% Disagree	27%	20%	14%
	n=300	n=428	n=156

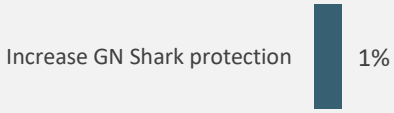
*Caution small sample size. Excluded from significance testing.

Base: All respondents (n=1245). Q. [Protecting threatened species – Grey nurse sharks] The existing Marine National Park (green) zone and designated Grey Nurse Shark Area at Wolf Rock regulates some activities to minimise distress and harm to grey nurse sharks and their habitat. Recent research shows that the key habitat used by critically endangered grey nurse sharks extends beyond Wolf Rock to The Pinnacles and Round Rock (RIS Section 6.3.2). Would you like to answer a question on this? Base: Those who chose to answer question (n=901). Q. To what extent do you agree with the proposals to improve protection of grey nurse sharks by expanding the Wolf Rock green zone and designated Grey Nurse Shark Area?

SUPPORT FOR IMPROVED PROTECTION OF GREY NURSE SHARKS

There is good support for the proposed changes to improve protection of grey nurse sharks as indicated by the response to the survey question. Among respondents who left a final free text comment 1 in 4 referred to conservation generally (25%) with 1% supporting increased protection of the grey nurse shark population.

25% made final free-text comments about conservation



70% Agree with the proposed changes to improved protection of grey nurse sharks

"The Great Sandy Marine Park is home to the most northerly location of four key aggregation sites for critically endangered grey nurse sharks in Queensland. Expanding the current sanctuary in the Great Sandy Marine Park around Wolf Rock to better protect the only known gestation site for pregnant female grey nurse sharks on the east coast of Australia is absolutely vital for their survival. The current protection around Wolf Rock is not sufficient to protect them from fishing-related injuries and death."

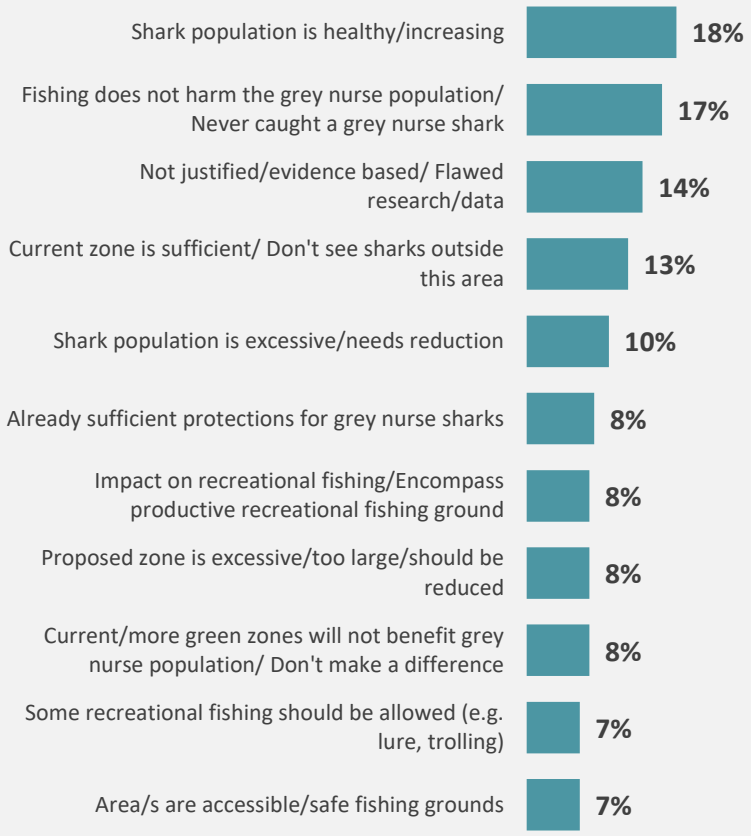
"The extension of protections around Wolf Rock is particularly important to the survival of the critically endangered grey nurse shark population. As someone who does diving and snorkelling, expanding protection, and therefore helping to ensure these species are better protected, is important to my continued enjoyment of these activities."

Please note that codes explaining reasons for support are identified above. The full codeframe is included further in the report on page 131.

Base: Those who chose to answer question (n=901). Q. To what extent do you agree with the proposals to improve protection of grey nurse sharks by expanding the Wolf Rock green zone and designated Grey Nurse Shark Area? Base: All respondents who made comments about conservation (n=157). Q. What other comments would you like to make on the draft zoning plan

DISAGREEMENT WITH PROPOSED EXPANSION OF WOLF ROCK MARINE NATIONAL PARK (GREEN) ZONE

KEY REASONS FOR DISAGREEMENT



Note: only codes >5% shown.
Base: Those who chose to answer question (n=901). Q. To what extent do you agree with the proposals to improve protection of grey nurse sharks by expanding the Wolf Rock green zone and designated Grey Nurse Shark Area? Base: Those who disagree with the proposed expansion of Wolf Rock (n=168). Q. Tell us why?

21%
Disagree with the proposed expansion of the Wolf Rock Marine National Park zone and designated area

Of the 72% who chose to answer this section of the survey, 21% disagree with the proposed expansion of the Wolf Rock Marine National Park (green) zone and designated Grey Nurse Shark Area.

Key reasons for disagreement include the perception the shark population is healthy/increasing (18%), or alternatively that the shark population is excessive/needs reduction (10%). The perception that fishing does not impact the grey nurse shark population (17%) is also a key reason for disagreement.

"This is a major recreational fishing area. The fishing in this area is limited and this further restricts it. Anyone who thinks grey nurse sharks are endangered needs to spend a bit more time on the water."

"The protections in place for grey nurse sharks are sufficient. Nobody targets them any more and their breeding grounds are well protected. This is just expanding into more local reefs to appear to be doing more."

"Where is the proof that recreational fishing is damaging the Grey nurse shark population? By closing this area you are creating a safety issue for smaller boats making them go further off shore."

"There is no shortage of Grey Nurse Sharks. They are thriving on the whole East Coast. Keep them as a no take species but don't take more productive fishing waters away from law abiding recreational anglers."

Protection of Threatened species
- Grey nurse sharks

Written Submissions

Grey nurse sharks

A small number of submissions mention grey nurse shark protection. Of these, the majority, including the conservation sector, strongly support the expansion of the Wolf Rock Marine National Park (green) zone and prohibition of all fishing in the expanded area, to protect this threatened species from fishing-related injuries/mortality.

The recreational fishing sector request that part of the proposed Marine National Park (green) zone be downgraded to a Buffer Zone, to allow trolling (with surface lures) over the popular recreational fishing site, The Pinnacles. Additional points raised include the removal of shark control programs, consideration of protecting Bommie Point, and a request for a Conservation Park (yellow) zone to replace the current Buffer zone.

"Expansion of MNP29 to create MNP26 that will better protect the critically endangered grey nurse shark (from fishing interactions) connecting Wolf Rock, Round Rock, the Pinnacles, and Double Island Point with an additional 13.5 km^2 of protection. Despite likely opposition from commercial and recreational fishers, this new MNP zone is vital to protect the only known gestation site for the species on the East Coast of Australia and must be maintained at a minimum at its proposed extent to reflect current scientific knowledge of the species movement, behaviours and risks from fishing."

"Bycatch in fisheries, particularly recreational fisheries, is one of the main threats to grey nurse shark (Robbins et al. 2013). This species aggregates at certain sites, including Wolf Rock and is sedentary for part of the year. Sharks with these movement patterns can be effectively protected by green zones (Dwyer et al. 2020). Therefore, I strongly support the proposal to expand the green zones around grey nurse shark areas."

"My submission relates to the extension of MNP26 to include the waters directly adjacent to Double Island Point below and to the north and NW of the light. I would like to object to this extension and instead propose that this be replaced with a 100m wide (or similar) corridor of CPZ around the entire headland. I have fished and dived this area my whole life and know it very well."

"Wolf Rock green zone be amended to allow recreational fishing access to the vitally important recreational fishing area at 'The Pinnacles'. This could be done with a Buffer Zone (BUZ)."

Robbins WD, Peddemors VM, Broadhurst MK, Gray CA. Hooked on fishing? Recreational angling interactions with the Critically Endangered grey nurse shark Carcharias taurus in eastern Australia. Endangered Species Research. 2013 Aug 13;21(2):161-70.
Dwyer RG, Krueck NC, Udyawer V, Heupel MR, Chapman D, Pratt Jr HL, Garla R, Simpfendorfer CA. Individual and population benefits of marine reserves for reef sharks. Current Biology. 2020 Feb 3;30(3):480-9.

PROPOSAL TO EXPAND DESIGNATED GO SLOW AREAS TO REDUCE VESSEL STRIKE OF THREATENED SPECIES

Over 4 in 5 (85%) chose to answer questions around the threats to turtles and dugongs.

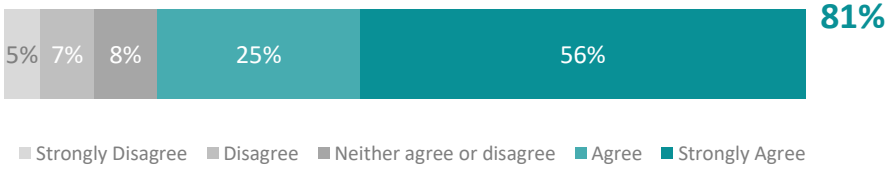
Of those who chose to answer, 4 in 5 (81%) agree with the proposal to expand the network of designated Go Slow Areas to reduce the threat to turtles, dugongs, and dolphins from vessel strike.

AGREEMENT
Those conducting research or interested in marine conservation and recreational users are more likely to agree with this proposal, as are those aged over 65 years.

DISAGREEMENT
Recreational fishers and those under 65 years old are most likely to disagree with this proposal.

85% chose to answer the questions around reducing threats marine turtles and dugongs

EXPANSION OF THE NETWORK OF DESIGNATED GO SLOW AREAS TO REDUCE THE THREAT TO TURTLES, DUGONGS AND DOLPHINS FROM VESSEL STRIKE



Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	0%*	98%	44%	77%	95%	67%*
% Disagree	88%*	1%	29%	13%	5%	22%*
	n=8*	n=205	n=34	n=691	n=62	n=18*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	76%	82%	89%
% Disagree	14%	11%	8%
	n=331	n=508	n=198

*Caution small sample size. Excluded from significance testing.

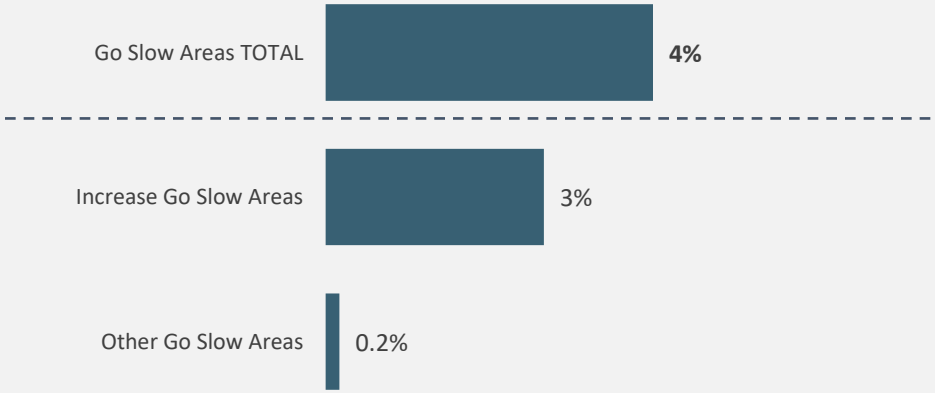
Base: All respondents (n=1245). Q. [Protecting threatened species – Marine turtles and dugongs] Multiple ongoing and emerging threats to populations of turtles and dugongs and their core habitats affect the long-term survival of turtles and dugongs (RIS Section 6.3.3). Would you like to answer questions on this? Base: Those who chose to answer question (n=1057). Q. To what extent do you agree with the proposed expansion of the network of designated Go Slow Areas to reduce the threat to turtles, dugongs and dolphins from vessel strike?

SUPPORT FOR EXPANDING THE NETWORK OF DESIGNATED GO SLOW AREAS

There is good support for the proposed expansion of the network of designated Go Slow Areas to reduce the threat to turtles, dugongs and dolphins from vessel strike as indicated by the response to the survey question.

Among respondents who left a final free text comment, 7% referred to designated areas, with 4% mentioning go slow areas with 3% wanting an increase of designated Go Slow Areas

7% made final free-text comments about designated areas



Please note that codes explaining reasons for support are identified above. The full codeframe is included further in the report on page 135.

81% Agree with the proposed expansion of the network of designated Go Slow Areas to reduce the threat to turtles, dugongs and dolphins from vessel strike

"I congratulate you to the planned changes but I don't think they go far enough to protect the marine environment, particularly go slow areas should be increased and netting and line fishing should be further reduced."

"It is vital we go ahead with the proposed changes. The green zones and go slow areas should be increased. We need to protect our marine creatures as much as possible for a healthy ocean and for future generations to see."

"'I propose that a seasonal go-slow zone is put in place in the habitat protection zone from Wardle creek to Wathumba Creek. During whale season, mothers and calves just float and travel north slowly in the shallow water 3 - 5 metres adjacent to the beach especially on afternoon high tides in the arch cliff region…The mothers and calves are at high risk of propeller strike as there is little option to escape."

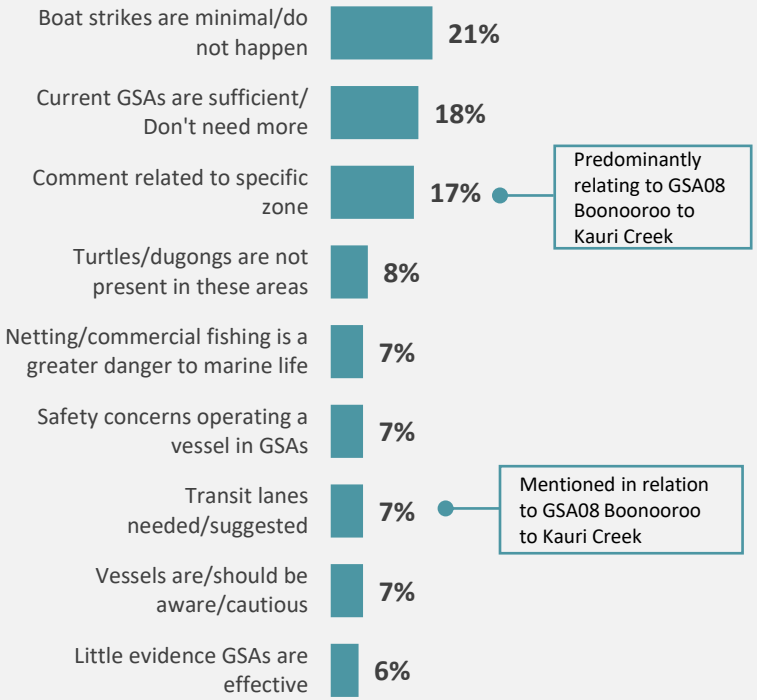
"'Dugong and turtle strike are my greatest concern. Poor behaviour of pwc operators is second. Reduced speed limits in more areas should reduce both these concerns."

Base: Those who chose to answer question (n=1057). Q. To what extent do you agree with the proposed expansion of the network of designated Go Slow Areas to reduce the threat to turtles, dugongs and dolphins from vessel strike? Base: All respondents who made comments about designated areas (n=43). Q. What other comments would you like to make on the draft zoning plan?

DISAGREEMENT WITH PROPOSED EXPANDED DESIGNATED GO SLOW AREAS

11%
Disagree with the proposed expansion of Designated Go Slow Areas

KEY REASONS FOR DISAGREEMENT



Note: only codes >4% shown.

Base: Those who chose to answer question (n=1057). Q. To what extent do you agree with the proposed expansion of the network of designated Go Slow Areas to reduce the threat to turtles, dugongs and dolphins from vessel strike? Base: Those who disagree with the proposed expansion of Go Slow Areas (n=103). Q. Tell us why and please specify the designated Go Slow Area/s you disagree with.

Of the 85% who chose to answer this section of the survey, 11% disagree with the proposed expansion of the network of designated Go Slow Areas to reduce the threat to turtles, dugongs and dolphins from vessel strike.

Key reasons for this is includes the perception that boat strikes are minimal/don't happen (21%), and the current Go Slow Areas are sufficient (18%).

Comments related to specific Go Slow Areas (17%) are mostly in relation to:

- GSA08 Boonooroo to Kauri Creek
- GSA01 Sandy Cape
- GSA04 Moon Point
- GSA06 Sheridan Flat
- GSA07 Reef Islands

"Again these numbers are on the increase due to the current protection. Dolphins are never going to be hit. And very few turtles will either. Banning netting will do far more to the turtle and dugon numbers then go slow zones."

"Due to the fact of NO localized boat strikes being recorded at Mon Repos . Therefore creating a solution to a problem that does not exist. Virtue signalling at its finest wasting tax payer dollars."

"More then enough go-slow zones. I fish a lot and turtle numbers are through the roof, the zones in place now have done a remarkable job."

Protection of Threatened species
- Mitigate risk of impact from commercial nets and vessel strikes

Written Submissions

Mitigate the risk of entanglement in commercial nets

There is good support for mitigating the risk posed to threatened species from commercial netting by discontinuing this form of fishing in the designated Great Sandy Area. Very few submissions directly support the continuation of this type of fishing. A small number of submissions discuss the changes proposed for specific areas.

"Commercial fishing is the main threat to this area, especially tunnel netting which is happening frequently. This is especially detrimental to the turtle and stingray populations that become part of the bycatch and do not survive."

Reduce the threat from vessel strikes

Submissions discussing vessel strike of threatened species state strong support for increasing the network of designated Go Slow Areas to reduce this threat. Benefits of the proposed designated Go Slow Areas beyond reducing vessel strike are noted, including the reduction of high noise volume that can impact threatened species' health. Concerns related to communication of designated Go Slow Area rules, and compliance and enforcement with these rules are expressed. One submission cautions against proposed changes impacting tourism.

"From our experience on the water the headland go slow zone is the most significant area that needs to continue to be protected as this is where we see most of the marine life in the bay."

PROPOSED EXPANSION OF THE EXISTING DESIGNATED TURTLE PROTECTION AREA OFF MON REPOS

Over 4 in 5 (85%) respondents chose to answer questions around increased protection of marine turtles and dugongs.

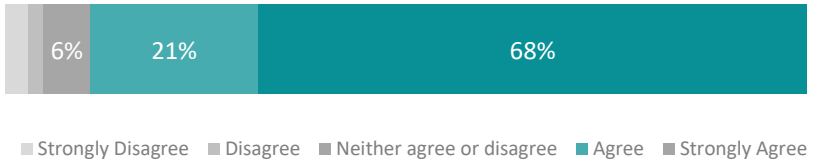
Of those who chose to answer, around 9 in 10 (89%) agree with the proposed expansion of the designated Turtle Protection Area off Mon Repos which prohibits commercial trawling for three moths during the turtle nesting season.

AGREEMENT
Those interested in marine conservation and those who are recreational fishers or users are more likely to agree with the proposed changes. Agreement is also strong among those over 65 years old.

DISAGREEMENT
Commercial fishers and those under 45 years old are less likely to agree with this proposal than other primary interest groups.

85% chose to answer the questions around marine turtles and dugongs

EXTEND THE OUTER BOUNDARY OF THE CURRENT DESIGNATED TURTLE PROTECTION AREA FROM 1.8KM TO 5KM OFFSHORE



% TOTAL AGREE **89%**

Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	50%*	96%	33%	91%	97%	72%*
% Disagree	38%*	1%	42%	4%	0%	6%*
	n=8*	n=205	n=33	n=687	n=62	n=18*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	86%	90%	94%
% Disagree	6%	5%	3%
	n=332	n=507	n=195

*Caution small sample size. Excluded from significance testing.
Base: All respondents (n=1245). Q. [Protecting threatened species – Marine turtles and dugongs] Multiple ongoing and emerging threats to populations of turtles and dugongs and their core habitats affect the long-term survival of turtles and dugongs (RIS Section 6.3.3). Would you like to answer questions on this? Base: Those who chose to answer question (n=1053). Q. To what extent do you support the increase in size of the designated Turtle Protection Area (which prohibits trawling between 1 November and 31 January) from 1.8km to 5km offshore from Mon Repos beach to improve protection of turtles preparing to come ashore to lay eggs?

PROPOSED EXTENSION OF THE TIMING OF THE DESIGNATED MON REPOS AREA

Over 4 in 5 (85%) respondents chose to answer questions around marine turtles and dugongs.

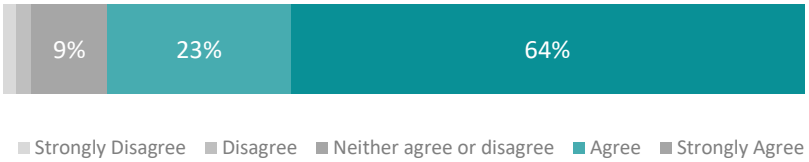
Of those who chose to answer, over 4 in 5 agree with the proposal to extend timing of the designated Mon Repos Area by an extra month (to 31 May) to protect late season turtle hatchlings from human disturbance.

AGREEMENT
Those interested in marine conservation and those who are recreational fishers or users are more likely to agree with this proposal. Respondents under 45 years are also more likely to agree with the proposed change compared to those aged over 65.

DISAGREEMENT
Commercial fishers are less likely to agree with this proposal. Agreement is also low among those respondents who identify as Traditional Owners however the sample size is small, so these results are indicative only.

85% chose to answer the questions around marine turtles and dugongs

EXTEND TIMING OF THE DESIGNATED MON REPOS AREA BY ONE MONTH (TO 31 MAY) TO PROTECT LATE SEASON TURTLE HATCHLINGS FROM DISTURBANCE



Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	25%*	97%	29%	88%	97%	78%*
% Disagree	25%*	1%	31%	3%	2%	0%*
	n=8*	n=205	n=35	n=689	n=62	n=18*

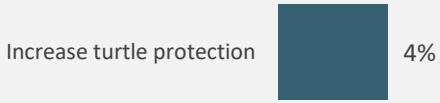
	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	82%	88%	93%
% Disagree	5%	4%	2%
	n=333	n=509	n=196

*Caution small sample size. Excluded from significance testing.
Base: All respondents (n=1245). Q. [Protecting threatened species – Marine turtles and dugongs] Multiple ongoing and emerging threats to populations of turtles and dugongs and their core habitats affect the long-term survival of turtles and dugongs (RIS Section 6.3.3). Would you like to answer questions on this? Base: Those who chose to answer question (n=1057). Q. To what extent do you agree with the proposal to extend the timing of the designated Mon Repos area by one month (to 31 May) to protect late season turtle hatchlings from disturbance?

SUPPORT FOR PROPOSED MEASURES TO PROTECT TURTLES

There is good support for the proposed measures to protect turtles as indicated by the response to survey questions. Among respondents who left a final free text comment 1 in 4 referred to conservation (25%) with 4% supporting an increase in protection of turtles. Moore Park Beach is raised as an important turtle nesting beach where zoning or management measures to improve protection of nesting turtles and hatchlings have not been proposed but are supported.

25% made final free-text comments about conservation



89% Agree with the proposed expansion of the designated Turtle Protection Area

87% Agree with the proposed extended timing of the designated Mon Repos Area

"In relation to the protections for turtles, consideration should be given to further extending the time period for non access to the breeding areas to prevent damage to these sites in the future. A mechanism to adjust the protected periods for turtle and shorebirds should be included in the plan, should climate change or dramatic weather / climate events change the bird migration and turtle breeding behaviour over time."

"Please include Moore Park Beach in the protection area. It is just as important for turtles and hatchlings as Mon Repos. We have very hard working volunteers here trying to help turtles. Trawlers hound this area and are very close to shoreline."

"Moore Park Beach is a turtle nesting beach and must be treated the same as Mon Repos."

"Moore Park Beach is part of the inter-nesting habitat for Mon Repos, many turtles come to lay their eggs on Moore Park Beach so why has it not been included as an exclusion zone. Many trawlers use this area and it is in complete conflict with a turtle conservation and breeding area."

Please note that codes explaining reasons for support are identified above. The full codeframe is included further in the report on page 131.

Base: Those who chose to answer question (n=1053). Q. To what extent do you support the increase in size of the designated Turtle Protection Area (which prohibits trawling between 1 November and 31 January) from 1.8km to 5km offshore from Mon Repos beach to improve protection of turtles preparing to come ashore to lay eggs? Base: Those who chose to answer question (n=1057). Q. To what extent do you agree with the proposal to extend the timing of the designated Mon Repos area by one month (to 31 May) to protect late season turtle hatchlings from disturbance? Base: All respondents who made comments about conservation (n=157). Q. What other comments would you like to make on the draft zoning plan

Protection of Threatened species
- Improve protection of turtle and dugong core habitat

Written Submissions

Generally, there is good support for proposed changes to improve protection of marine turtles including the expansion of the designated Turtle Protection Area off Mon Repos to improve protection of inter-nesting turtles. The proposal to extend the duration of the designated Mon Repos Area by one month (to 31 May) to protect late season hatchlings from human disturbance is also supported.

There are recommendations to extend rules relating to the designated Mon Repos Area to Moore Park Beach, to protect the large number of turtles that nest on this beach.

Most of the written submissions about this topic acknowledge the need for increased protection of turtle and dugong core habitat. However, there are polarised views on how best to proceed to achieve this. Some submissions recommend the strongest protection achievable through implementation of Marine National Park (green) zones to ensure commercial netting is no longer allowed. There is also discussion of the extent of impact on businesses such as tourism and commercial fishing if proposed changes are implemented. Some suggest buffer zones as a solution to minimise such impact, in contrast others would like further restrictions implemented as it is seen to better protect the wildlife.

Additionally, some voice the need to balance interests of the users of the affected locations in the marine park, thus suggesting the need for protection, but not necessarily to the extent of upgrading zoning to Marine National Park (green) zones. Considering the impact on commercial fishers suggestions are made for proceeding with an option achieving protection for threatened species with minimal impact.

“[organisation] strongly recommends the following elements are included in the final zoning plan: Increased protection for threatened turtle species by upgrading the level of protection to CP zoning at important nesting areas around Mon Repos; expanding the size of the seasonal Turtle Protection Area adjacent to Mon Repos; and extending the duration of the Mon Repos designated area for an additional month.”

"While there are a number of improvements that this re-zoning will bring there is a glaring deficiency; the current zoning plan fails to protect our threatened marine life in the Great Sandy MP."

"The practice of dragging nets on the sea floor ... has also resulted in the destruction of a dugong feeding ground in this area as the sea grass pasture has been completely destroyed.“

"Every person I talked to wants the total exclusion of commercial fishing in the Wide Bay Area. This is a very strong point amongst locals here and for good reason we have seen the dead dugong and turtles on our beach thanks to netting. Albeit hard to prove but just so happens after they netted the area.“

Other points raised include observing increasing numbers of dead dugong, turtles and other marine species stranding on marine park beaches.

RIS 6.4 – PROTECTION OF CULTURAL VALUES

OVERALL ENGAGEMENT

Online Surveys *69% answered questions about this*

A minority of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.4 PROTECTION OF CULTURAL VALUES

Generally, the feedback is positive on the proposed changes in relation to the section of the RIS discussing protection of cultural values. Survey results indicate support for both the proposed designated Go Slow Area in the extended Marine National Park (green) zone in Carland Creek (65% agree) and proposed No Motorised Vessel Areas in the extended Marine National Park (green) zones in Searys Creek and Cooloola Creek (55%). Concerns are raised in relation to the removal of the designated Fish Trap Area at Woody Island.

DESIGNATED GO SLOW AREA FOR NATURAL AND CULTURAL VALUES IN CARLAND CREEK.

ONLINE SURVEY RESULTS

2 in 3 agree with the proposed designated Go Slow Area in Carland Creek.

65% Agree

With proposed go slow area for natural and cultural values in the green zone in Carland Creek.

KEY FINDINGS

- Moderate support received with the conservation sector, the scientific community and recreational users particularly supportive.
- Minor mentions of this proposed change in the written submissions, with comments generally supportive of the proposed designated Go Slow Area.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- None identified.

PROPOSED NO MOTORISED VESSEL AREAS IN SEARYS CREEK AND COOLOOLA CREEK.

ONLINE SURVEY RESULTS

1 in 2 agree with the proposed designated No Motorised Vessel Areas in Searys and Coolooloa Creeks.

55% Agree

With proposed No Motorised Vessel Areas in Searys and Cooloola Creeks.

KEY FINDINGS

- Moderate support received, with the conservation sector, the scientific community and recreational users particularly supportive.
- Minor mention of this proposed change in the written submissions, with comments generally supportive of the proposed designated No Motorised Vessel Areas.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- None identified.

COMBINE THE FIVE SEPARATE DESIGNATED FISH TRAP AREAS AT BOORAL INTO A SINGLE SPATIALLY DEFINED AREA

KEY FINDINGS

- General sentiment to increase protection of fish trap areas.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- Removal of the designated Fish Trap Area at Woody Island.
- Resurvey the coordinates of the fish trap at Woody Island and correctly site the designated area.

Protection of cultural values
- an overview of survey responses

Online Surveys ***69% answered questions about this***

Survey responses

Survey responses

The following pages include analysed results from the online survey. Two specific questions were asked of respondents to gauge their level of agreement with proposed changes. Feedback was also received through the final comments question at the end of the survey which has been coded and included within the relevant section.

SURVEY RESPONSES FROM SPECIFIC QUESTIONS

The following specific questions were asked in the survey:

- Q. To what extent do you agree with the proposal to establish a designated Go Slow Area for natural and cultural values in the extended Marine National Park (green) zone in Carland Creek?
- Q. To what extent do you agree with the proposal to establish a designated No Motorised Vessel Area in the extended Marine National Park (green) zones in Searys Creek and Cooloola Creek?

CODED RESPONSES FROM FINAL COMMENTS

At the end of the online survey, respondents were able to provide any final comments through an open ended question.

The feedback received through this question provides insights and information to support or refute proposed zoning plan changes or offers alternative perspectives and differing options for departmental consideration.

PROPOSED GO SLOW AREA FOR CULTURAL VALUES

Over two-thirds (69%) chose to answer the questions around protecting cultural values.

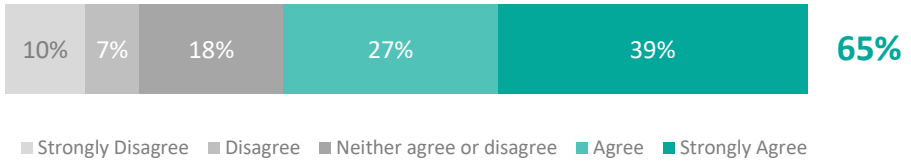
Of those who chose to answer, two-thirds (65%) agree with the proposed designated Go Slow Area for natural and cultural values in the Marine National Park (green) zone in Carland Creek.

AGREEMENT
Those who are conducting research, interested in marine conservation, or recreational users are more likely to agree with this proposal. Respondents aged 65 or over are also more likely to agree with the proposed changes.

DISAGREEMENT
Recreational fishers and those under 45 years old are most likely to disagree with the proposed changes.

69% chose to answer questions around protecting cultural values

AGREEMENT WITH THE PROPOSED DESIGNATED GO SLOW AREA FOR NATURAL AND CULTURAL VALUES IN THE MARINE PARK (GREEN) ZONE IN CARLAND CREEK



Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	13%*	93%	27%*	58%	78%	64%*
% Disagree	88%*	1%	35%*	20%	13%	88%*
	n=8*	n=183	n=26*	n=548	n=54	n=11*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	61%	65%	74%
% Disagree	19%	17%	9%
	n=283	n=402	n=159

*Caution small sample size. Excluded from significance testing.

Base: All respondents (n=1245). Q. [Protecting cultural values] First Nations peoples have strong connections with the land and sea Country of the marine park. Specific management arrangements are proposed to support First Nations peoples to connect to Country and undertake culturally important practices in a respectful environment, and to preserve cultural sites (RIS Section 6.4).Would you like to answer questions on this? Base: Those who chose to answer question (n=861). Q. To what extent do you agree with the proposal to establish a designated Go Slow Area for natural and cultural values in the extended Marine National Park (green) zone in Carland Creek?

PROPOSED DESIGNATED NO MOTORISED VESSEL AREA

Over two-thirds (69%) chose to answer the questions around protecting cultural values.

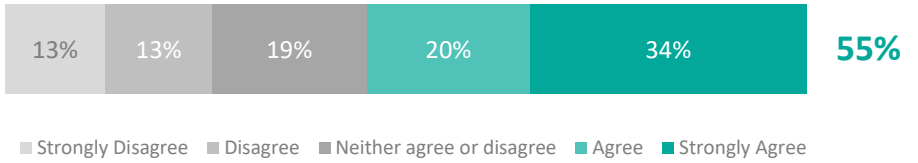
Of those who chose to answer, 1 in 2 (55%) agree with the proposed designated No Motorised Vessel Area in the Marine National Park (green) zones in Searys Creek and Cooloola Creek.

AGREEMENT
Those who are conducting research, interested in marine conservation, or recreational users are more likely to agree with this proposal, as are those aged over 45 years.

DISAGREEMENT
Recreational fishers and those under 45 years old are most likely to disagree with the proposed designated No Motorised Vessel Area.

69% chose to answer questions around protecting cultural values

AGREEMENT WITH THE PROPOSED DESIGNATED NO MOTORISED VESSEL AREA IN THE MARINE NATIONAL PARK (GREEN) ZONES IN SEARYS CREEK AND COOLOOLA CREEK



Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	13%*	89%	27%*	45%	67%	45%*
% Disagree	88%*	4%	50%*	31%	20%	45%*
	n=8*	n=184	n=26*	n=548	n=55	n=11*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	47%	57%	63%
% Disagree	33%	24%	18%
	n=284	n=402	n=159

*Caution small sample size. Excluded from significance testing.

Base: All respondents (n=1245). Q. [Protecting cultural values] First Nations peoples have strong connections with the land and sea Country of the marine park. Specific management arrangements are proposed to support First Nations peoples to connect to Country and undertake culturally important practices in a respectful environment, and to preserve cultural sites (RIS Section 6.4).Would you like to answer questions on this? Base: Those who chose to answer question (n=862). Q. To what extent do you agree with the proposal to establish a designated No Motorised Vessel Area in the extended Marine National Park (green) zones in Searys Creek and Cooloola Creek?

Protection of Cultural Values
- Feedback from written submissions

Written Submissions

Sub topics mentioned

Written submissions relating to the Protection of Cultural Values were received from both First Nations peoples' representative bodies and other stakeholders. It should be noted that engagement with First Nations peoples' representative bodies was undertaken during development of the draft zoning plan and is ongoing in relation to the protection of cultural values in the marine park. Written submissions relating to protection of cultural values covered a broad range of issues, topics and recommendations. These are summarised below:

- Better recognition of the effect of proposed changes on cultural values, cultural significance of iconic species and interconnectedness between cultural and natural heritage values
- Better recognition of the complex relationships between nature and Aboriginal culture
- More recognition and integration of cultural knowledge
- A need for education and awareness of the identity, and connection to culture and Country, of First Nations peoples
- Better recognition of the inherent and native title rights of First Nations peoples, consistent with the Gurra Gurra Framework
- Inclusion and active involvement of First Nations peoples in decision-making and ongoing management of the marine park
- Improved funding, resources and partnerships for effective management of cultural values and heritage
- Concern that protection of cultural heritage in the marine park is focused on site management/protection, where sites are superficially considered in isolation from each other.
- Impacts of climate change on natural and cultural resources, including the loss of cultural heritage assets such as middens and burial sites, some of which are already submerged due to sea level rise
- Call for a comprehensive study and survey of cultural values, in partnership with First Nations organisations, universities and the Australian Government, to inform their protection and management in the marine park
- Recognition, survey and assessment of underwater cultural heritage, with mapping to inform designated area protection within the zoning plan
- Site specific recommendations for Marine National Park zones and other measures for the protection of species and culturally significant sites
- Concern about the loss of environmental values in relation to proposed marine park zoning modifications and downgrades
- Adequate protection of fish trap areas, including at Point Vernon and Woody Island, informed by accurate mapping
- Consistency in penalties and fines between marine park legislation and the Aboriginal Cultural Heritage Act 2003, e.g. with regard to fish trap area related offences
- Concern about fishing impacts, with support for sustainable take and maintaining resources for the future

RIS 6.5 – MANAGEMENT OF PLATYPUS BAY TO COMPLEMENT K'GARI MANAGEMENT

OVERALL ENGAGEMENT

Online Surveys *76% answered questions about this*

About one in ten of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.5 MANAGEMENT OF PLATYPUS BAY TO COMPLEMENT K'GARI MANAGEMENT

Generally, the feedback is positive on the proposed changes in relation to the section of the RIS discussing management of Platypus Bay to complement K'gari (Fraser Island) management. Survey results indicate support for the proposed establishment of a new designated area in north-east Platypus Bay. The designated Platypus Bay Area will protect the natural integrity and amenity values of this relatively undisturbed and remote area by prohibiting motorised watersports, and the takeoff and landing of helicopters and fixed wing aircraft. There are some concerns about current noise levels in the Platypus Bay area and the impact this has on whales, noting the high level of use of this area by migrating humpback whales.

ONLINE SURVEY RESULTS

Over 3 in 4 agree with the proposed establishment of a new designated area in Platypus Bay.

78% Agree

With proposed establishment of a designated area that prohibits motorised water sports to protect amenity values in north-east Platypus Bay.

KEY FINDINGS

- There is strong support for the proposed designated Platypus Bay Area to prohibit motorised water sports and aircraft in the north-east of Platypus Bay to protect the amenity values of the area.
- A small number of submissions recommended that the proposal should go further and prohibit all motorised vessels from the designated area.
- Several submissions from the conservation sector and scientific community also highlight the importance of Platypus Bay to migrating humpback whales, recommending that additional provisions should be introduced to protect mother and calf pairs resting in Platypus Bay on their southern migration, e.g. via the use of a designated Go Slow Area.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- If a complete no motorised vessel option (as opposed to only motorised water sports) is progressed there is concern for access to safe anchoring and general boating in the area.
- There are suggestions to ban loud engines to minimise noise disturbance of migrating humpback whales.

Management of Platypus Bay to complement K'gari management
- an overview of survey responses

Online Surveys *76% answered questions about this*

Survey responses

Survey responses

The following pages include analysed results from the online survey. One specific question was asked of respondents to gauge their level of agreement with the proposed change. Feedback was also received through the final comments question at the end of the survey which has been coded and included within the relevant section.

SURVEY RESPONSE FROM SPECIFIC QUESTIONS

The following specific question was asked in the survey:

- Q. To what extent do you support establishing a designated area that would prohibit motorised watersports, e.g. tubing, erratic and unpredictable vessel operation, and the take-off and landing of aircraft, to protect amenity values in north-east Platypus Bay?

CODED RESPONSES FROM FINAL COMMENTS

At the end of the online survey, respondents were able to provide any final comments through an open ended question.

The feedback received through this question provides insights and information to support or refute proposed zoning plan changes or offers alternative perspectives and differing options for departmental consideration.

PROTECTING AMENITY VALUES IN NORTH-EAST PLATYPUS BAY

3 in 4 (76%) chose to answer the question around Platypus Bay amenity values.

Of those who chose to answer, almost 4 in 5 (78%) agree with establishing a designated area that would prohibit motorised watersports to protect the natural integrity and amenity values in the relatively undisturbed and remote area in north-east Platypus Bay.

AGREEMENT

Those interested in marine conservation, or who recreational fishers or users of the marine park, are more likely to agree with the proposed changes than other primary interest groups. Those aged over 45 are also more likely to agree with the proposed change.

DISAGREEMENT

Commercial fishers and those under 45 years are most likely to disagree with the proposed change.

76% chose to answer the question around Platypus Bay amenity values

AGREEMENT WITH ESTABLISHING A DESIGNATED AREA THAT WOULD PROHIBIT MOTORISED WATERSPORTS AND AIRCRAFT PROTECT AMENITY VALUES IN NORTH-EAST PLATYPUS BAY

Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	14%*	96%	38%	75%	84%	63%*
% Disagree	86%*	2%	45%	17%	13%	25%*
	n=7*	n=196	n=29	n=601	n=61	n=16*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	71%	80%	87%
% Disagree	22%	14%	7%
	n=306	n=449	n=167

*Caution small sample size. Excluded from significance testing.

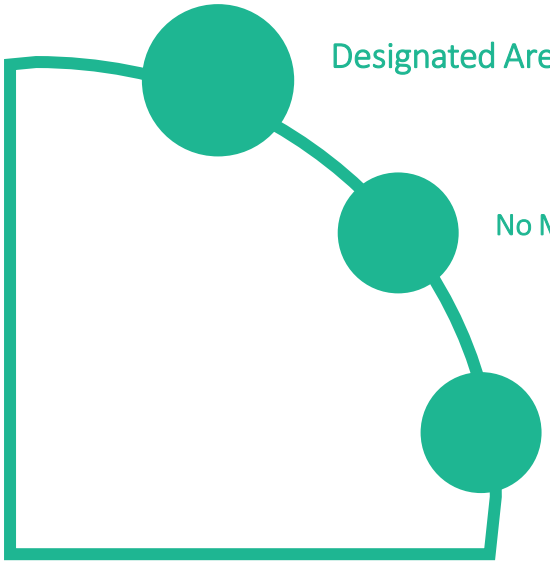
Base: All respondents (n=1245). Q. [Protecting amenity values – Platypus Bay] The remote northern part of Platypus Bay is a relatively undisturbed area of the marine park. It is important to maintain the integrity and amenity values of this area (RIS Section 6.5).Would you like to answer a question on this? Base: Those who chose to answer question (n=941). Q. To what extent do you support establishing a designated area that would prohibit motorised watersports, e.g. tubing, erratic and unpredictable vessel operation, and the take-off and landing of aircraft, to protect amenity values in north-east Platypus Bay?

Management of Platypus Bay to complement K'Gari management - overview of written submissions

Written Submissions

Sub topics mentioned

When interpreting the feedback from written submissions relating to the management of Platypus Bay to complement K'gari management, it should be cautioned that there is only a small amount. The main theme of the written submissions is the proposed designated area. Other points raised are in relation to protection of migrating humpback whales, and the impact on other vessel types if an alternate preferred option was considered for this area.

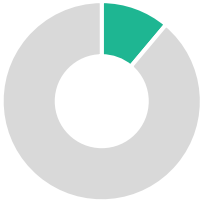


Designated Area

No Motorised Vessel Area

Other mentions

Frequency of mentioning



Only a small number of written submissions discussed this section, from a range of stakeholders.

Management of Platypus Bay to complement K'gari management - Establish a designated area in north-east Platypus Bay Area

Written Submissions

SUPPORT FOR THE PROPOSED DESIGNATED AREA TO PROHIBIT MOTORISED WATERSPORTS AND AIRCRAFT

There is general support for the establishment of a designated area in north-east Platypus Bay to prohibit motorised watersport and the take off and landing of aircraft and helicopters. Submissions note the designated area would reduce the risk of vessel strike to resting migrating humpback whales (particularly mothers and calves) and turtles.

Interpretation Note: There appears to be confusion between this proposal in north-east Platypus Bay and the proposed 0.8km^2 designated No Anchoring Area in Platypus Bay (off Wathumba Creek), with some submissions believing anchoring would be prohibited from the larger (30km^2) designated Platypus Bay Area where motorised watersports would be prohibited.

"We are encouraged by several components of the revision that will benefit all marine life. Specifically, these components include: increased area of highly protected zones, prohibition of commercial netting with large mesh gill and ring nets, the expansion of Go Slow Areas and No Motorised Vessel Areas, ***and the establishment of an area prohibit motorised water sports and the taking off and landing of fixed wing aircraft and helicopters in north-eastern Platypus Bay.“***

"With the new changes that are proposed PLEASE take into consideration that travelling yachts that mostly use sail will need safe anchorages in the sandy Straits in prevailing winds , as it is anchorages are limited in certain winds. So please consider that yachts can still use engines to safely anchor in these areas.“

"I acknowledge the issue with high speed and erratic motorised vessels. Whale watching charter boats and others move at high speed, 20 knots plus, near the whales, jet skis zooming along at over 30 knots, This behaviour is the issue - not cruising yachts. I suggest a 10 knot maximum in this area."

Management of Platypus Bay to complement K'gari management - Other comments

Written Submissions

Discussion of an alternate option for the designated area in Platypus Bay

There were a small number of submissions supporting an alternate option presented in the RIS - establish a designated No Motorised Vessel Area in north-east Platypus Bay. Reasons for supporting this option include providing a sanctuary for whales, and protection of an ecological and culturally significant area.

"The area between Rooney Point and Wathumba Creek is a critical safe anchorage for winds from north (Rooney Point) through to east (Wathumba Creek). Option 2 which would establish a No Motorised Vessel Area is problematic. The statement that use in an emergency would be a reasonable excuse for contravention misses the point. This blocks it off for cruising convenience".

"I support the full implementation of 6.5.3 Option 2, with the possible amendment of allowing diesel motor boats, e.g. yachts , catamarans, into the region."

"I feel future commercial use risk, e.g. whale watching, could happen if the whales decide Hervey Bay has become too noisy and reckless and that impacts their birth rate or location where they choose to rest, communicate and feed."

Other points raised

UPGRADE PROTECTION TO CONSERVATION PARK (YELLOW) ZONE

The majority of comments on Platypus Bay request that the proposed zoning be upgraded from a Habitat Protection (dark blue) zone to Conservation Park (yellow) zone. Supporting reasons for the upgrade include bringing the protection of the area in line with the management objectives of the adjacent K'gari World Heritage Area and the Great Sandy National Park.

OTHER COMMENTS

- One submission voices concern for the Ciguatera disease present in these waters and recommends allowing for the removal of bulk Cladophora.
- Questioning the impact these changes would have on the marlin fishery in the area.

Management of Platypus Bay to complement K'gari management - Other comments

Written Submissions

There are concerns that migrating whales resting in Platypus Bay are at risk of vessel strike, with suggestions to establish further designated Go Slow Areas in the area to better protect whales resting at the surface, and minimise this risk.

" A "go slow" zone in the identified whale resting areas would minimise disturbance to whales by allowing extra time for boaters to spot and navigate around these whales."

Another submission highlights the importance of reinstating the whale management and monitoring zone that was previously in place in this area.

Further suggestions include:

- Boost funding for community education on the importance of Hervey Bay for the eastern Australian Humpback whales.
- Boost funding for community education on the use of recreational vessels in the vicinity of humpback whale pods within Hervey Bay.
- Annual monitoring and evaluation of the health of ecosystems, particularly of eutrophic conditions within humpback whale aggregation areas.

RIS 6.6 – COASTAL MANAGEMENT AND ALIGNMENT WITH DECLARED FISH HABITAT AREAS

OVERALL ENGAGEMENT

Online Surveys *72-75% answered questions about this*

a minority of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.6 COASTAL MANAGEMENT AND ALIGNMENT WITH DECLARED FISH HABITAT AREAS

Generally, the feedback is positive on the proposed changes in relation to the section of the RIS discussing coastal management and alignment with declared Fish Habitat Areas. Survey results indicate support for proposed zone changes to facilitate works for coastal management, as well as changes proposed to align declared Fish Habitat Area and marine park boundaries to improve management consistency. There are requests to maintain the current zoning, as downgrading from Conservation Park (yellow) zone to Habitat Protection/General Use zone would allow commercial fishing activities in areas where it is currently prohibited/limited.

ONLINE SURVEY RESULTS

At least 2 in 3 agree with the proposed changes in relation to coastal management and alignment with declared fish habitat areas.

67% Agree

With proposed zone changes to facilitate works for coastal management.

72% Agree

With proposed changes to align declared Fish Habitat Area boundaries to improve management consistency.

KEY FINDINGS

- General positive sentiment towards proposed changes with 2 in 3 in agreement among survey respondents. Local governments are particularly supportive of proposed zone changes as they will facilitate the assessment of their applications to undertake works that are deemed necessary to protect foreshore areas.
- A small number of submitters request that the current zoning be retained to maintain the level of protection and simplify the zoning plan, or suggest that coastal management interventions are not needed.
- The recreational fishing sector note that proposed zone downgrades will allow other forms of commercial fishing to occur in locations of the marine park where it is currently prohibited/limited by the existing zoning, with examples given including Dayman Spit and the Burrum River.
- The conservation sector opposes any zone downgrades.
- Respondents who disagree with the proposed changes often cite irrelevant or unrelated reasons.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- There are specific concerns in relation to the proposal to downgrade the zoning at Wanggoolba Creek.
- Interpretation note: The proposal seeks to better align zoning with channel maintenance dredging that is currently conducted and expected to increase.

Coastal management and alignment with declared Fish Habitat Areas
- an overview of survey responses

Online Surveys ***72-75% answered questions about this***

Survey responses

Survey responses

The following pages include analysed results from the online survey. Two specific questions were asked of respondents to gauge their level of agreement with proposed changes. Where participants disagreed, a follow up question offered the opportunity to explain their disagreement for one of the questions. Feedback was also received through the final comments question at the end of the survey which has been coded and included within the relevant section.

SURVEY RESPONSES FROM SPECIFIC QUESTIONS

The following specific questions were asked in the survey:

- Q. To what extent do you agree with the proposed zone changes to facilitate works for coastal management?
- Q. To what extent do you agree with the range of proposed changes to align declared Fish Habitat Area boundaries or management and marine park zone boundaries to improve management consistency?

CODED RESPONSES FROM FINAL COMMENTS

At the end of the online survey, respondents were able to provide any final comments through an open ended question.

The feedback received through this question provides insights and information to support or refute proposed zoning plan changes or offers alternative perspectives and differing options for departmental consideration.

PROPOSED ZONE CHANGES TO FACILITATE COASTAL MANAGEMENT WORKS

Over 7 in 10 (72%) chose to answer the question around coastal management.

Of those who chose to answer, 2 in 3 (67%) agree with the proposed zone changes to facilitate works for coastal management.

AGREEMENT

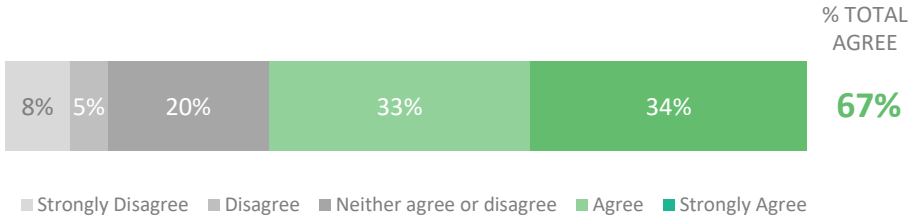
Those who are conducting research, interested in marine conservation, or recreational fishers are more likely to agree with this proposal. Tourism operators are also in relatively high agreement however due to small sample size is indicative only.

DISAGREEMENT

Recreational users of the marine park and those aged under 45 years are most likely to disagree with the proposed changes.

72% chose to answer the questions on coastal management

AGREEMENT WITH THE PROPOSED ZONE CHANGES TO FACILITATE WORKS FOR COASTAL MANAGEMENT



Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	14%*	75%	20%*	69%	52%	62%*
% Disagree	57%*	12%	45%*	10%	29%	8%*
	n=7*	n=190	n=20*	n=572	n=56	n=13*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	61%	68%	74%
% Disagree	14%	12%	11%
	n=277	n=430	n=168

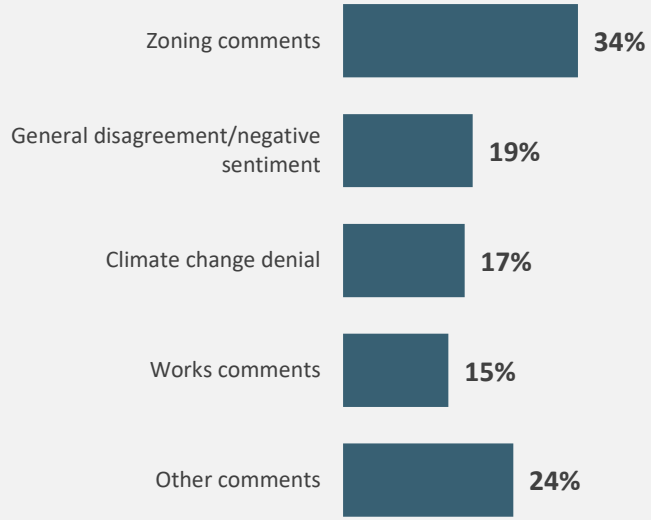
*Caution small sample size. Excluded from significance testing.

Base: All respondents (n=1245). Q. [Coastal management] The current zoning adjacent to some urban areas hinders the ability to undertake coastal management activities to address climate change impacts and protect public infrastructure (RIS Section 6.6 and Appendix 11). Would you like to answer a question on this? Base: Those who chose to answer question (n=891). Q. To what extent do you agree with the proposed zone changes to facilitate works for coastal management?

DISAGREEMENT WITH PROPOSED ZONE CHANGES

13%
Disagree with the proposed zone change to facilitate coastal management works

KEY REASONS FOR DISAGREEMENT



Base: Those who chose to answer question (n=891). Q. To what extent do you agree with the proposed zone changes to facilitate works for coastal management? Base: Those who disagree with the proposed zone changes (n=86). Q. Tell us why and please specify the proposed zone change you disagree with.

Of the 72% who chose to answer this section of the survey, 13% disagree with the proposed zone changes to facilitate works for coastal management.

Key reasons for disagreement includes general zoning comments (34%), general disagreement/negative sentiment (19%), and climate change denial (17%).

"These zone changes (to enable shoreline management works) are not necessary. My experience with local statutory bodies is they do more harm than good in their ill-conceived actions in these cases."

"Climate change is a myth started by fringe extreme minority and brainwashing our young generation."

"By downgrading previously partially and fully protected areas existing flora and fauna is at risk of destruction."

"Because climate change is not having any effect on the region."

PROPOSED ZONE CHANGES TO ALIGN DECLARED FISH HABITAT AREA AND MARINE PARK BOUNDARIES

3 in 4 (75%) chose to answer the question around declared Fish Habitat Area boundaries.

Of those who chose to answer, almost 3 in 4 (72%) agree with the proposed changes to align declared Fish Habitat Area boundaries or management and marine park zone boundaries to improve management consistency.

AGREEMENT

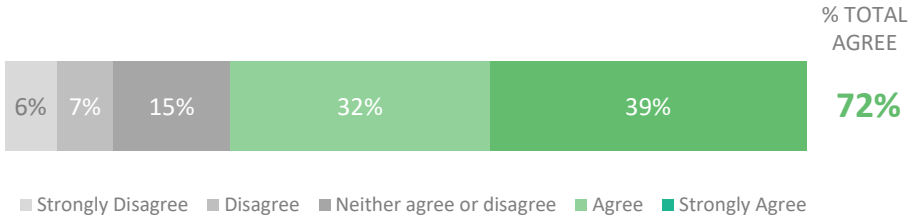
Those conducting research or interested in marine conservation are more likely to agree with this proposal. There is still relatively strong agreement among recreational fishers and users, and tourism operators.

DISAGREEMENT

Recreational fishers and those under 45 years old are most likely to disagree with the proposed changes.

75% chose to answer the question around declared fish habitat areas

AGREEMENT WITH PROPOSED CHANGES TO ALIGN DECLARED FISH HABITAT AREA AND MARINE PARK BOUNDARIES TO IMPROVE MANAGEMENT CONSISTENCY



Response by Primary Interest and age

	PRIMARY INTEREST IN MARINE PARK					
	Traditional Owners	Conservation / research	Commercial Fisher	Recreational Fisher	Recreational User	Tourism Operator
% Agree	13%*	87%	7%*	71%	76%	67%*
% Disagree	63%*	6%	74%*	13%	9%	17%*
	n=8*	n=180	n=27*	n=618	n=55	n=12*

	AGE		
	18 to 45 years	46 to 65 years	Over 65 years
% Agree	67%	72%	80%
% Disagree	16%	14%	8%
	n=309	n=434	n=169

*Caution small sample size. Excluded from significance testing.

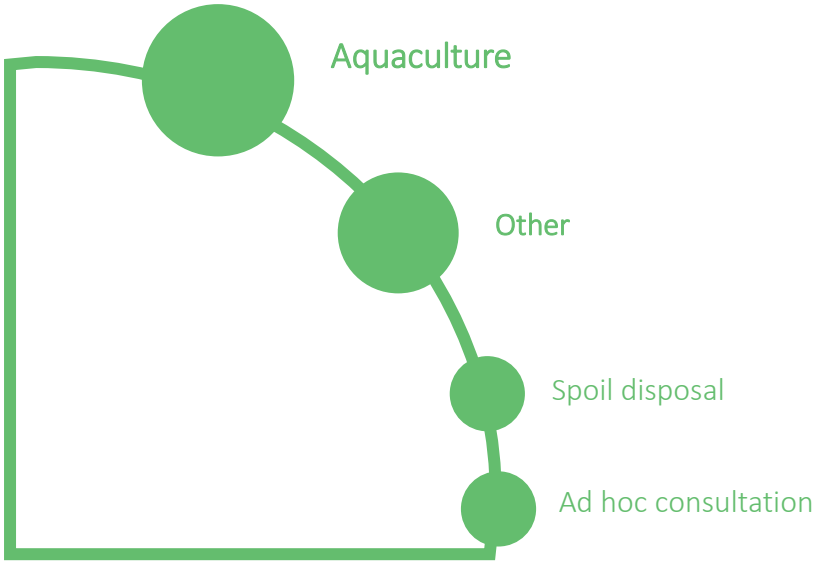
Base: All respondents (n=1245). Q. [Coastal management - Declared Fish Habitat Areas] In some locations, marine park zoning conflicts with existing declared Fish Habitat Area management which affects the consistency of management arrangements between the two protected area types (RIS Section 6.6 and Appendix 11). Would you like to answer a question on this? Base: Those who chose to answer question (n=932). Q. To what extent do you agree with the range of proposed changes to align declared Fish Habitat Area boundaries or management and marine park zone boundaries to improve management consistency?

Coastal management and alignment with declared Fish Habitat Areas - overview of written submissions

Written Submissions

Sub topics mentioned

When interpreting feedback from written submissions relating to coastal management and alignment with declared Fish Habitat Areas, it should be cautioned that there is only a small amount. The main themes of the feedback focus on aquaculture, soil disposal and ad hoc consultation.



Frequency of mentioning

Only a small number of written submissions discussed this section, from a range of stakeholders.

Coastal management and alignment with declared Fish Habitat Areas - Aquaculture

Written Submissions

Any future feed-based marine aquaculture in the Great Sandy Marine Park is generally seen as negative.

Most submissions note the likely cumulative impacts associated with this activity including nitrification and disease. Any feed-based aquaculture is perceived as concerning due to the potential for it to impact an already stressed marine environment, including seagrass which is vitally important for dugong and turtle populations.

"If feed-based marine aquaculture ventures were introduced within the Great Sandy Marine Park, this could lead to potential cumulative impacts associated with nitrification and disease on an already stressed marine environment."

"Further, we do not support any future feed-based marine aquaculture ventures within the Great Sandy Marine Park because of the potential for cumulative impacts associated with nitrification and disease on an already stressed marine environment where poor water quality issues have seen the loss of vast areas of seagrass meadows critical to support the local dugong and marine turtle populations."

Coastal management and alignment with declared Fish Habitat Areas - Written submissions

Written Submissions

Ad hoc consultation

Discussed to a lesser extent is the request for ongoing consultation to occur with conservation, community and scientific experts on how to best proceed with any climate change or coastal work when no alternative can be found.

Spoil disposal

Also discussed to a lesser extent is the removal of spoil disposal as a non-conforming use. Some request conditions to be applied for these types of works, and others voice concern that dredged sediment needs to be of appropriate quality for beach nourishment.

Other

Examples of less mentioned feedback:

- Clear guidance on what activities are allowed
- Dredging specific comments
- Investigate alternatives to beach nourishment projects for long term solutions

RIS 6.7 – MAXIMUM PENALTIES FOR OFFENCES

OVERALL ENGAGEMENT

There were no survey questions for this section

a minority of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.7 MAXIMUM PENALTIES FOR OFFENCES

No specific survey question was asked regarding the proposed changes within this section of the RIS, however, when given the opportunity to leave a final comment, 5% who chose to do so made a comment about compliance. Topics of discussion include the need for improved compliance, education and enforcement of designated Go Slow Areas, and similar to those in the written submissions, a demand for further education and enforcement of rules and regulations.

ONLINE SURVEY RESULTS

No direct questions were asked regarding the proposed changes in this section of the RIS.

However, of those choosing to leave a comment at the end of the survey, 5% made comments about compliance.

Most commonly those were regarding more compliance, education or enforcement of designated Go Slow Areas.

5% made final free-text comments about compliance

KEY FINDINGS

- In some cases, the introduction of education initiatives is preferable to imposing higher financial penalties.
- There is a demand for education of new zoning plan rules and regulations, specifically those that will apply to the use of vessels.
- Successful implementation of the zoning plan will require enhanced enforcement of the proposed rules and regulations.
- Further funding should be provided to effectively enforce the zoning plan.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- Too many rules could potentially deter tourists.
- Navigating new zones and understanding rules without the use of technology. Requests for physical markers on land and water.
- Inconsistencies with maximum penalty points and fines and suggested consistency with the Aboriginal Cultural Heritage Act 2003.

Maximum penalties for offenders
- an overview of survey responses

5% made final free-text comments about compliance

Survey responses

Survey responses

The following pages include analysed results from the online survey. No specific survey questions was asked for this section, however feedback was received through the final comments question at the end of the survey which has been coded and included.

SURVEY RESPONSES FROM SPECIFIC QUESTIONS

The following specific questions were asked in the survey:

- *No specific survey questions asked.*

CODED RESPONSES FROM FINAL COMMENTS

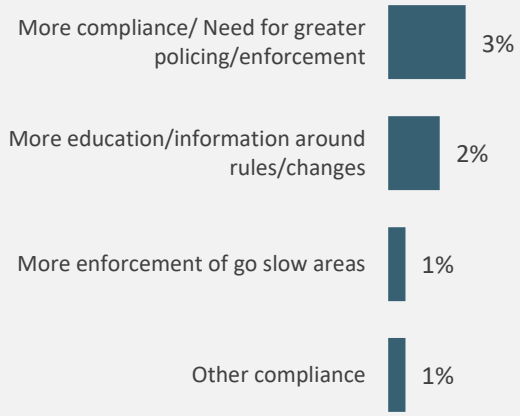
At the end of the online survey, respondents were able to provide any final comments through an open ended question.

The feedback received through this question provides insights and information to support or refute proposed zoning plan changes or offers alternative perspectives and differing options for departmental consideration.

SUPPORT FOR GREATER COMPLIANCE

Among respondents who left a final free text comment, 1 in 20 left a comment about compliance with, or enforcement of the zoning plan (5%). Comments include topics such as increasing compliance and enforcement (3%), education or information on the new zoning plan (2%), and improving enforcement of designated Go Slow Areas (1%).

5% made final free-text comments about compliance



Base: All respondents who made comments about compliance (n=32).
Q. What other comments would you like to make on the draft zoning plan?

"'This is a good move by the government to not only benefit the marine park but also local business in recreational fishing. The new changes MUST be policed heavily when in place."

"All these changes will not improve anything if the Fisheries, National Parks enforcement officers are not employed in suitable numbers which is the current situation."

"I would like to encourage you to ensure proper enforcement of all measures. This is not even done with the pitiful protection measures we have now."

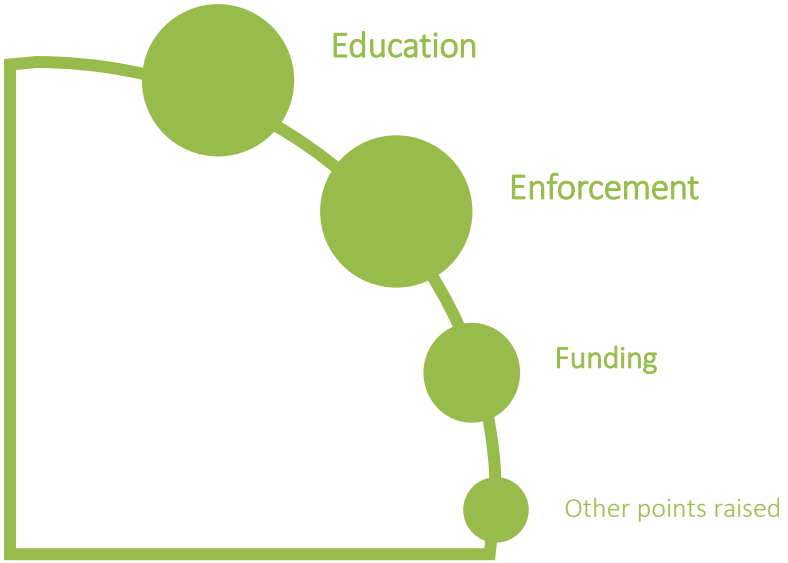
"If these extensions are put in place, there should be a corresponding increase in the policing of the rules… What's the point in having the rules there if they are not enforced?"

Maximum penalties for offences - overview of written submissions

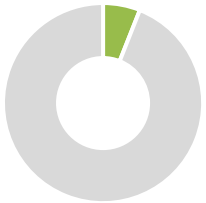
Written Submissions

Sub topics mentioned

When interpreting feedback from written submissions relating to maximum penalties for offences, it should be cautioned that there is only a small amount. The main themes relate to the need for education of rules, enforcement and funding to facilitate these two elements.



Frequency of mentioning



Only a small number of written submissions discussed this section, mainly from individuals, organisations or clubs.

Maximum penalties for offences - Written submissions

Written Submissions

EDUCATION
Some submissions favour education over enforcement. There are suggestions that jet ski operators and other recreational vessel owners receive education on the zoning plan and other rules and regulations applying to their watercraft. There is also a suggestion that there should be community education on the values of the marine park.

ENFORCEMENT
Ensuring sufficient enforcement of the proposed zoning plan and associated rules and regulations was noted in a number of submissions.

CONSISTENCY OF PENALTY ENFORCEMENT
Ensuring consistent maximum penalty fines and points was noted to some extent, with suggestion to align penalties with the *Aboriginal Cultural Heritage Act 2003,* which is maximum 1,000 penalty points ($143,750).

FUNDING
There are calls for an increase in funding to effectively implement and enforce the zoning plan to ensure that marine biodiversity is adequately protected.

"My concern relates to education/enforcement particularly in relation to Jet Skis - speed coupled with inexperience and awareness creates a serious problem."

"To ensure the approved zoning plan can be effective, adequate funds must be made available to educate the community about the plan and in particular, changes that have occurred. In addition, ensure adequate funding is in place for compliance and enforcement programs so that the zoning plan has every opportunity to be effective."

"Too often we see reasonable plans completely undermined by failure to implement, and with people unaware of how or unable to report breaches."

"The [organisation] recommends that conflicts in penalties between legislation should be resolved to the higher penalty amount (1000 penalty units), recognising the seriousness of the offence."

"I might just add, how about start policing the park. Been doing your job, picking up illegal nets."

"Boosting funding for enforcement, compliance, and community education on the value of MPAs, as well as increasing monitoring and evaluation of the health of park ecosystems."

"...if people are deterred because of far too many constraints (green zones/go slows/fines etc) visitation will fall and tourism will suffer and so too those small businesses."

RIS 6.8 – OTHER ZONING PLAN AMENDMENTS

There were no survey questions for this section

a minority of the written submissions discuss this topic.

DETAILED OVERVIEW

SECTION 6.8 OTHER ZONING PLAN AMENDMENTS

There were no survey questions asked in relation to the proposed changes in this section of the RIS and only a minority of the written submissions discussed this topic. Of these comments, many perceive non-conforming uses in highly protected zones such as Marine National Park (green) zones as inappropriate. Other points raised were in relation to restrictions imposed on the marine aquarium fish fishery.

ONLINE SURVEY RESULTS

No direct questions were asked regarding the proposed changes in this section.

KEY FINDINGS

- Written submissions include opposing views on the conduct of the marine aquarium fish fishery in the Little Woody Island Marine National Park zone (existing MNP15) .
- Licensed commercial fishers are requesting the continuation of the fishery as a non-conforming use in this zone, however, there are some submissions that are against non-conforming uses being allowed to occur in highly protected zones of the marine park.

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

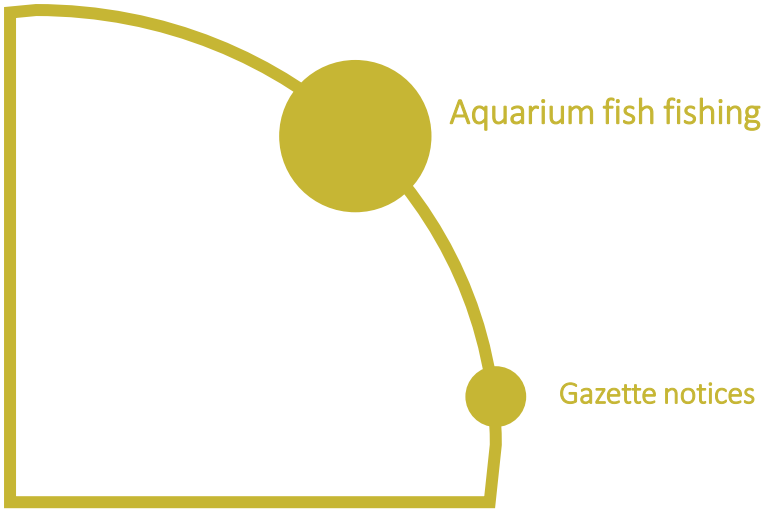
- Non-conforming uses in highly protected areas of the marine park should either be prohibited immediately or phased out by a specific date and/or management arrangement.

Other zoning plan amendments - Written submissions

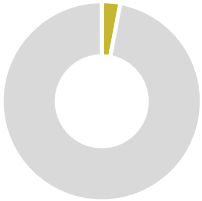
Written Submissions

Sub topics mentioned

When interpreting feedback from written submissions relating to other zoning plan amendments, it should be cautioned that there is only a small amount. The main theme of feedback is related to the marine aquarium fish fishery.



Frequency of mentioning



Only a small number of written submissions discussed this section, from a range of stakeholders.

Other zoning plan amendments - Written submissions

Written Submissions

BUSINESS IMPACT
Concerns are noted for impacts on coral and aquarium fish collecting businesses should they not be allowed to continue conducting their activities within Marine National Park (green) zones. There is a perceived lack of consultation with the industry, and a request for compensation should their access to areas of the marine park be restricted.

NO EXCEPTION
There are a small number of comments that non-conforming uses should not be allowed to occur in highly protected zones.

GAZETTE NOTICES
In relation to proposed changes to how notices are communicated to the public, **one submission,** notes opposition to the removal of notices published in the Gazette – a publication of the Queensland Government.

OTHER POINTS RAISED
There is a sentiment that the option for captive breeding should be investigated to establish whether collecting of aquarium fish is warranted.

"Should the changes to the existing marine park be approved, we would have to look at a new collection site and depending on where, it could result in changes to our existing means (e.g. boat, dive gear etc.).“

"The entire industry [organisations] is still grappling with drastic reductions in quota to the coral fishery which has had a crippling effect on most businesses. Now to be hit with these changes will have a devastating impact.“

"The proposed green zone changes have failed to take into consideration the direct impacts on the aquarium collecting industry. That include reduced viability of my fishing licence, limited access to areas, the ability to fish and collect and the subsequent loss of income.“

"Non-complying provisions severely compromise Marine National Parks and should be avoided. Aquarium collecting should be no exception."

"As for aquarium stock, that industry has been operating for such a long time that a review of the associated captive breeding component of that industry should be undertaken to see if the issuance of permits for such activity is still warranted.“

"I object to the proposed zoning plan change that would remove the requirement for notifications to be published in the Gazette…I do however also support additional options including publication of notices on the DES website and I would also strongly suggest that the Department also creates an RSS feed on the DES Park alerts page specifically for State Marine Parks including the Great Sandy Marine Park to which people can subscribe.”

RIS 6.9 – MARINE PARK OUTER BOUNDARY

There were no survey questions for this section

No written submissions discuss this section specifically.

DETAILED OVERVIEW

SECTION 6.9 MARINE PARK OUTER BOUNDARY

There were no survey questions asked in relation to the proposed changes in this section and no written submissions directly discuss the proposed changes within this section. Related comments about the removal of the designated Fish Trap Area at Woody Island and the Marine National Park (green) zones has already been covered in other sections.

ONLINE SURVEY RESULTS

No direct questions were asked regarding the proposed changes in this section of the RIS.

However, of those choosing to leave a comment at the end of the survey, 0.3% made comments about the Marine Park outer boundary.

Those comments mentioned either positive sentiment towards well balanced needs or that the park boundary should have further inclusions, such as Susan River.

0.3% made final free-text comments about the outer boundary

KEY FINDINGS

- *No submissions received discuss the marine park outer boundary specifically.*

KEY CONTENTIOUS ISSUES / OTHER COMMENTS

- *No submissions received discuss the marine park outer boundary specifically.*

Overview of Final free-text survey comments

Final free-text survey comments

Online Surveys
51% chose to leave a final comment

Survey responses

At the end of the online survey, respondents were able to provide any final comments through an open ended question. Feedback received through this question has been coded accordingly and where suitable it has been integrated with the main sections of the report. This section includes the full coding of the responses of this question.

SURVEY RESPONSES FROM SPECIFIC QUESTION

The following specific questions were asked in the survey:

- Q. What other comments would you like to make on the draft zoning plan?

FREE-TEXT SURVEY COMMENTS - OVERARCHING CATEGORIES

Overall, around half (51%) of survey respondents made final free-text comments in the online survey.

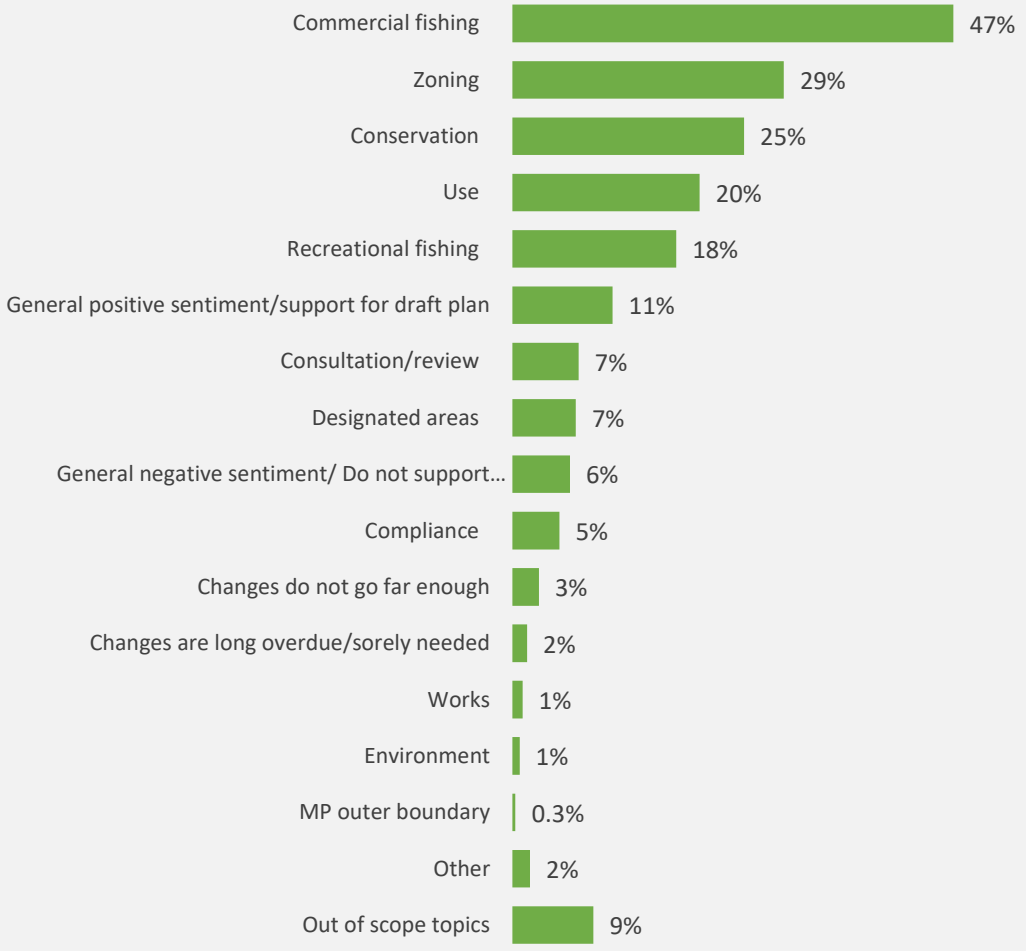
Feedback was primarily in relation to five main areas:

1. Commercial fishing (47%)
2. Zoning (29%)
3. Conservation (25%)
4. Use (20%)
5. Recreational fishing (18%).

The different areas are expanded further on the following pages.

Additionally, just over one in ten comments indicate broad support for the draft zoning plan (11%).

51% made final free-text comments in the survey



Base: All respondents who provided final comments (n=630). Q. What other comments would you like to make on the draft zoning plan?

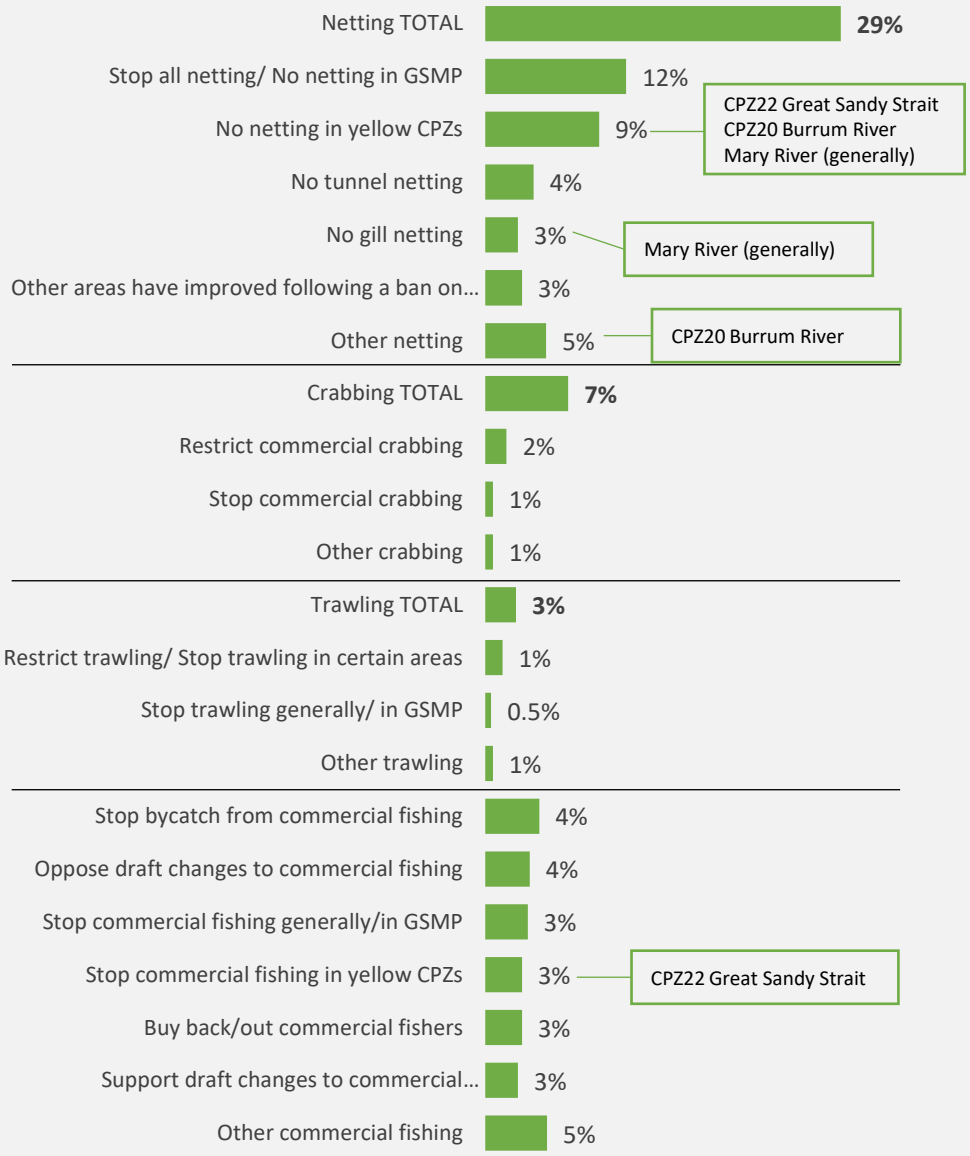
FREE-TEXT SURVEY COMMENTS - COMMERCIAL FISHING

47%
made final free-text comments about commercial fishing

Just under half (47%) of final free-text comments in the online survey relate to commercial fishing.

The feedback primarily discusses commercial netting, suggesting it should be prohibited in the marine park, or specifically within Conservation Park (yellow) zones.

Only 10% of comments on commercial fishing mention a specific zone or area, mostly relating to the Conservation Protection (yellow) zones in the Great Sandy Strait and Conservation Protection (yellow) and Burrum River.



Base: All respondents who made comments about commercial fishing (n=299).
Q. What other comments would you like to make on the draft zoning plan?

FREE-TEXT SURVEY COMMENTS - ZONING

29%
made final free-text comments about zoning

The majority of these comments are in relation to Marine National Park (green) zones. One-fifth (20%) of comments about zoning mentioned a specific zone or area.

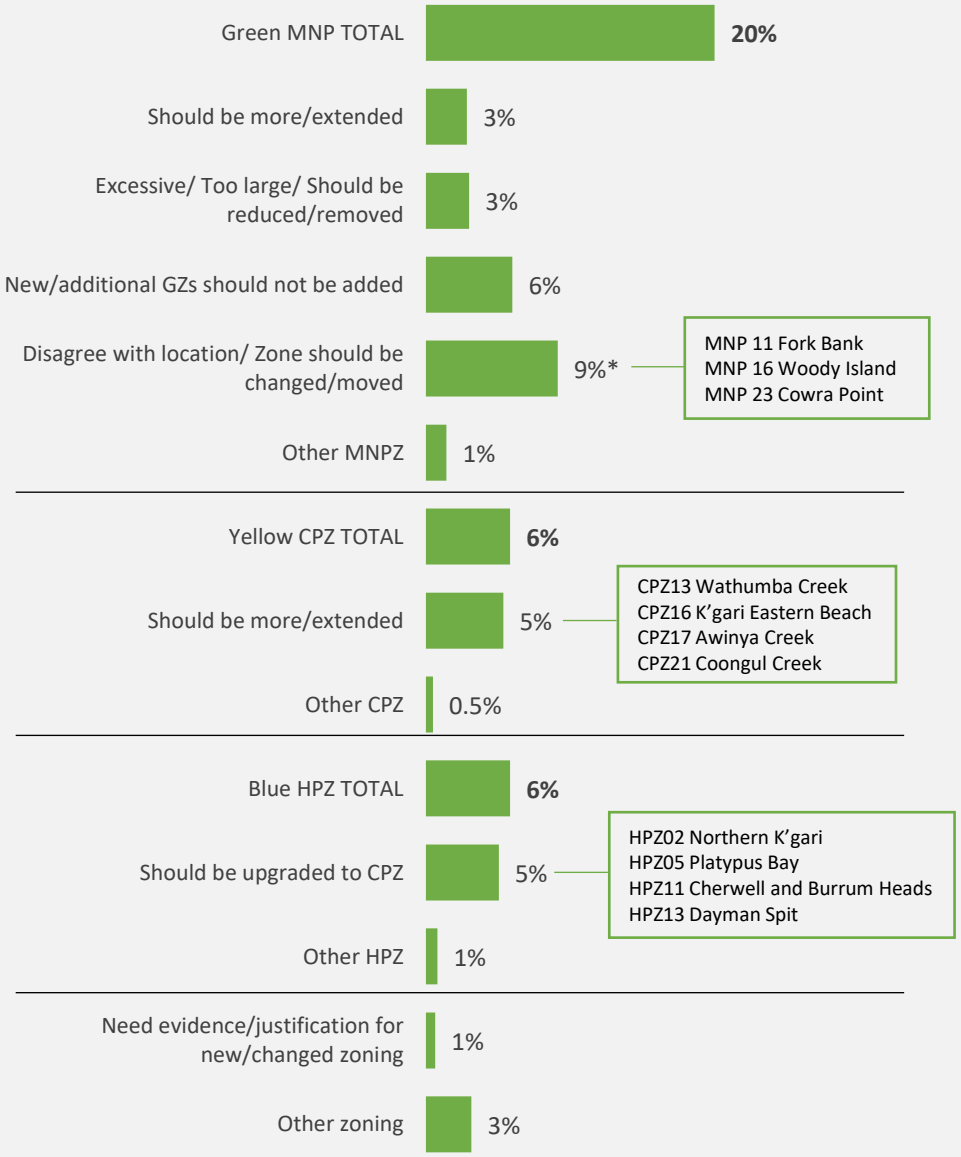
*** It should be noted that high mentions of Marine National Park (green) zone 11 and Marine National Park (green) zone 16 in relation to the zoning largely comes from a template response used by numerous recreational fishers who completed the survey. This response is shown below.**

"MNP11 - goes out further now and takes in some key recreational fishing areas, suggest the current MNP10 is left at its current northern limit and widened to the west to maintain proposed green protection % or look at another area where deep seagrass could be protected.

MNP16 - could be reduced to allow fishing on the top eastern and western sides of Big Woody (out from the shoreline) as it is a key recreational fishing area and is essentially all hard rock, propose a 300m Yellow conservation Zone be applied from the shoreline around the top of Big Woody.

HPZ09 - shoreline sections of HPZ05 & HPZ02, Habitat Protection Zones - propose that the habitat protection zones that are being shown along the shoreline of K'gari from North Kgkala Rocks to Moon Point be changed to Yellow Zones in line with the CPZ13, 17 & 21 - essentially continuing the Yellow Zone CPZ16 ALL the way around K'gari to Moon Point.

HPZ11 - Habitat Protection Zones in the Burrum & Sherwell Rivers be changed to a Yellow Zone otherwise appears would allow commercial netting in the area. Must exclude commercial fishing from these areas plus around the iconic Urangan Pier as well".



Base: All respondents who made comments about zoning (n=184).
Q. What other comments would you like to make on the draft zoning plan?

FREE-TEXT SURVEY COMMENTS - CONSERVATION

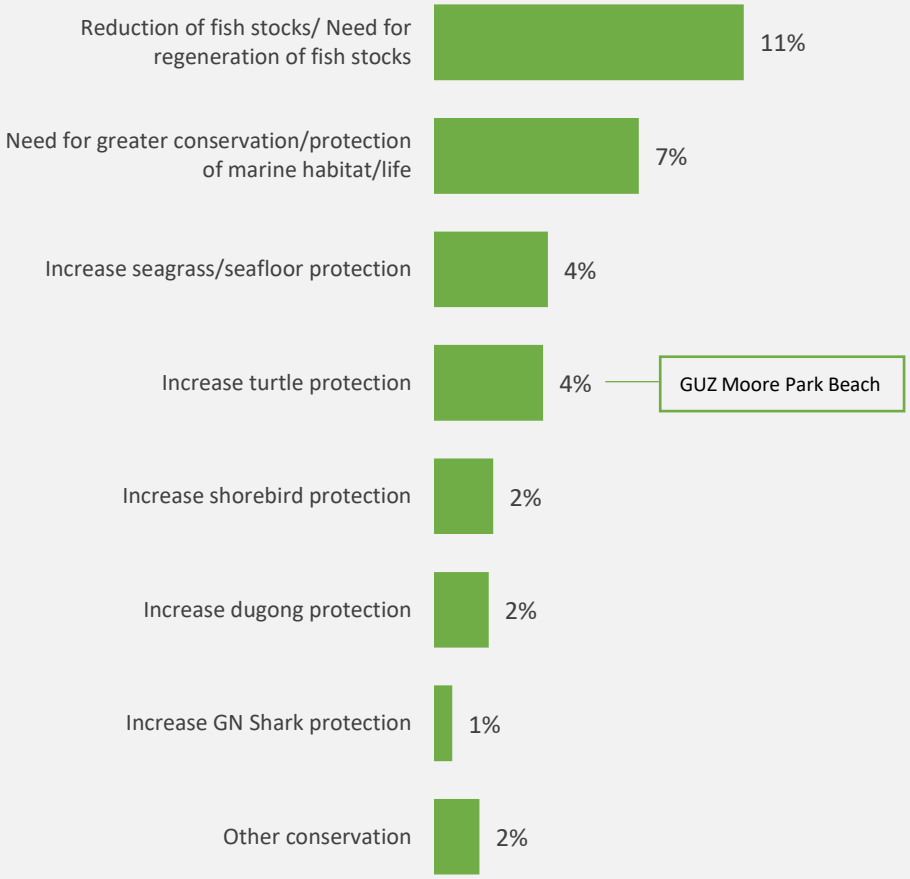
25% made final free-text comments about conservation

Overall, one quarter (25%) of survey respondents made final free-text comments about conservation.

Concerns that there has been a reduction in fish stocks (11%) and the need for greater conservation efforts (7%) are two main themes identified.

Increasing seagrass and improving turtle protection are also mentioned to a lesser extent (4% each).

Only 2% of comments discussing conservation mention a specific zone or area. The absence of any proposed zoning plan changes to increase turtle protection along Moore Park Beach is the predominant issue raised.



Base: All respondents who made comments about conservation (n=157).
Q. What other comments would you like to make on the draft zoning plan?

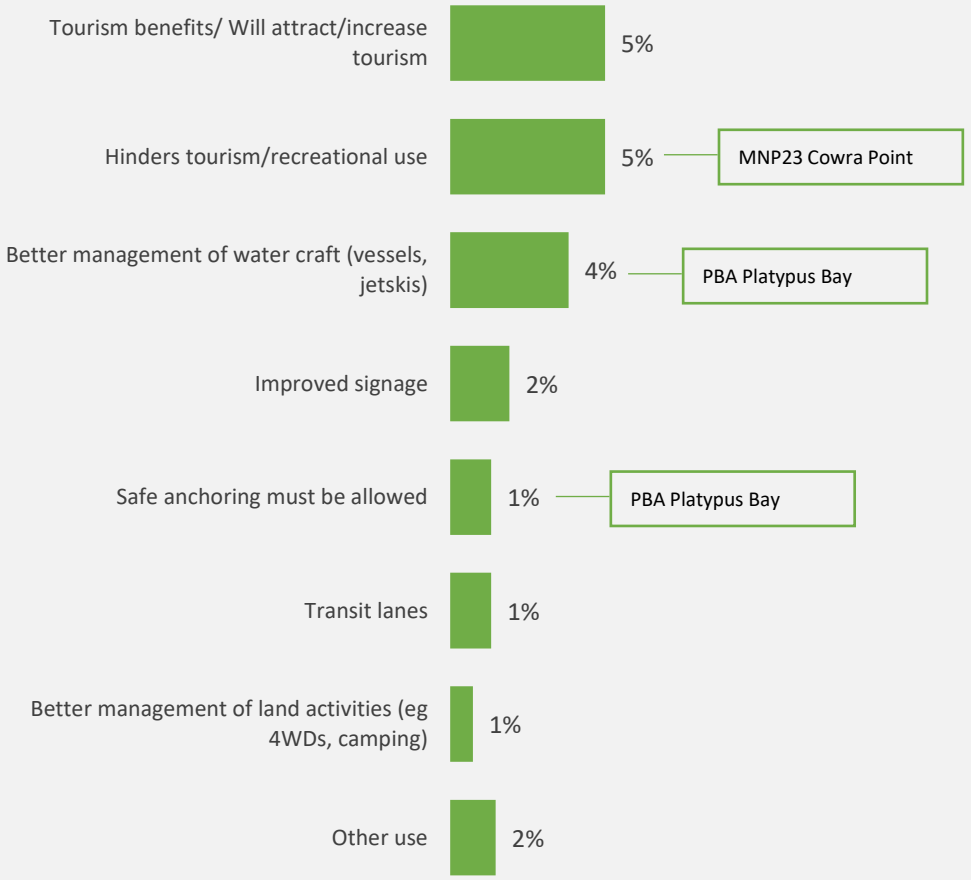
FREE-TEXT SURVEY COMMENTS - USE

20%
made final free-text comments about use

Overall, one fifth (20%) of survey respondents made final free-text comments about use in the marine park.

Opposing views about whether proposed changes to the zoning plan would benefit tourism (5%) or hinder tourism (5%) are noted. The need for better management of watercraft is mentioned (4%), particularly in relation to Platypus Bay.

Only 5% of comments about use mention a specific zone or area.



Base: All respondents who made comments about use (n=127).
Q. What other comments would you like to make on the draft zoning plan?

EXAMPLE FREE-TEXT COMMENTS - USE OF THE MARINE PARK

TOURISM BENEFITS

"Implementation of these new zones will open up the entire area to increased tourism and it will be a world class fishery with people coming from all over the world. This is a win for everyone but mostly the sandy straights".

"These proposals have been super slow coming to this point. I urge you to implement the changes promptly because continued gill netting will further degrade depleted fish stocks. The community benefits to a sustainable recreation fishing zone will vastly improve tourism and also provide jobs in the boating and fishing service industries".

"We need to get rid of commercial netting in this vulnerable area, the place has suffered way too much. The tourism dollar in getting recreational fishers to a thriving fishery is worth far more than few commercial netters pillaging the stock".

"Tourism and recreational benefits far out weigh the commercial fishing … protecting this area from commercial netting will see incremental benefits for the future… if you also manage bag limits for recreational fishing this will also ensure the future prosperity of this region".

HINDERS USE / TOURISM

"The draft zoning plan (Option 3) will have considerable impact on the residents of Tinnanbar. It will virtually wipe out the reasons that Tinnanbar exists which are recreational fishing and crabbing in relative safety. Other options that are available are to move the proposed green zone south between Kauri and Teebah Creeks. There are still many mangroves and banks to encourage gastropods in this area. If users are forced to travel further by small boat to pursue their recreational enjoyment in this open stretch of water then safety becomes paramount. Placing the green zone in the vicinity of Tinnanbar will undoubtably cause boating mishaps possibly resulting in loss of life".

"The proposal to have a Marine National Park or no fishing zone in the area of Dundubara and possibly Cathedral Beach is straight out ridiculous. It is where most people go. I would favour better education and harsher penalties for transgressions."

Base: All respondents who made comments about use (n=127).
Q. What other comments would you like to make on the draft zoning plan?

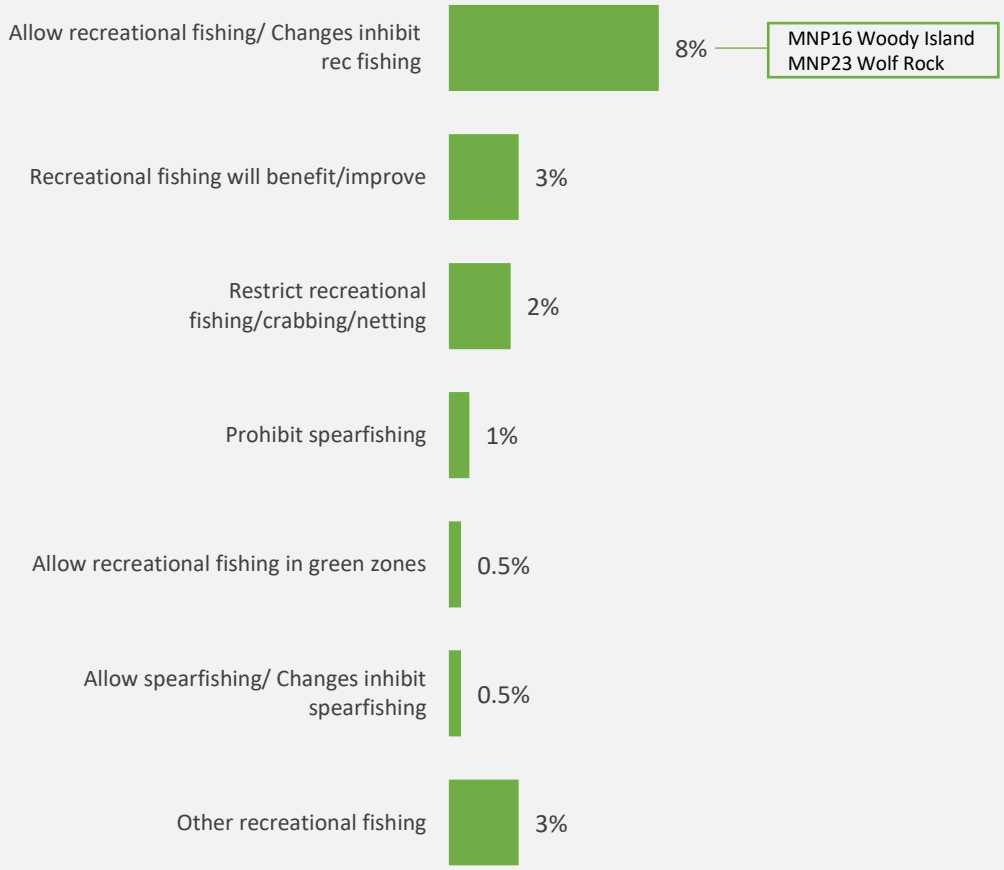
FREE-TEXT SURVEY COMMENTS - RECREATIONAL FISHING

18%
made final free-text comments about recreational fishing

Overall, just under one fifth (18%) of survey respondents made final free-text comments about recreational fishing.

These comments primarily focus on the proposed changes inhibiting recreational fishing, particularly in relation to Woody Island and The Pinnacles near Wolf Rock.

Only 6% of comments about recreational fishing mention a specific zone or area, which was predominantly MNP16 Woody Island.



Base: All respondents who made comments about recreational fishing (n=111).
Q. What other comments would you like to make on the draft zoning plan?

FREE-TEXT SURVEY COMMENTS - DESIGNATED AREAS

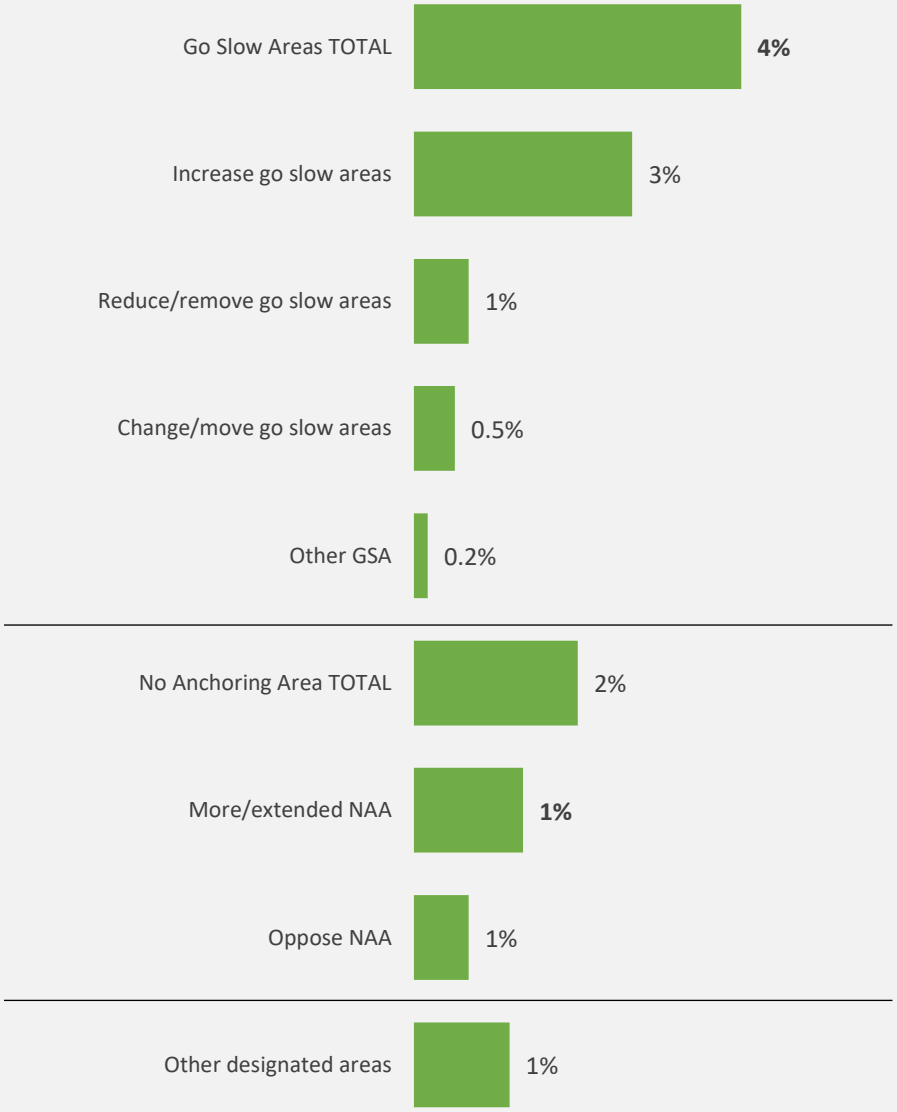
7%
made final free-text comments about designated areas

Only 7% of survey respondents made comments around designated areas, which was primarily in relation to designated Go Slow Areas.

Only 4% of comments about designated areas mention a specific area.

"It is vital we go ahead with the proposed changes. The green zones and go slow areas should be increased. We need to protect our marine creatures as much as possible for a healthy ocean and for future generations to see".

"Increase go slow area for Dugong / Turtle in/around Woodgate, not just mouth of Burrum River. Particularly turtles in breeding season".

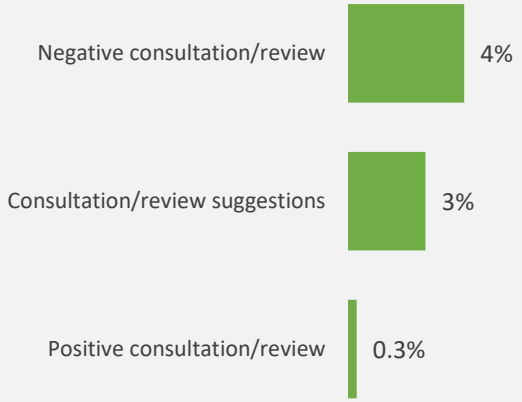


Base: All respondents who made comments about designated areas (n=43).
Q. What other comments would you like to make on the draft zoning plan?

FREE-TEXT SURVEY COMMENTS - CONSULTATION / REVIEW

7%
made final free-text comments about the consultation and review process

Overall, 7% of survey respondents made comments about the consultation process, which are primarily negative or suggesting changes to the way the consultation process is undertaken.



Negative comments

"I do not agree with this plan, can you please tell me who you have consulted with as I live in this area and have not heard a word about this proposal till now at the 11th, this is so unfair as it seems only a handful of residents have been consulted, thought this was a democratic country".

"What consultation was taken to involve locals and frequent users of the areas? "

Consultation suggestions

"Further study and communication with recreational fishermen needs to be considered before implementation of any bans".

"These decisions should not be made lightly, I don't believe the people of the area have been thoroughly considered and feel that these changes are extreme for the locations proposed. I urge you to consult with local fisherman, businesses and residents further to establish a healthy middle ground that can protect our natural resources while also allowing residents and tourists to still enjoy the area to the fullest. I'll be blunt and say outright, some of these changes are ridiculous and clearly concocted by people unfamiliar with the area, its needs and its uses".

"You have not provided the science or research to support your proposed changes. Please provide this information so we can make informed decisions".

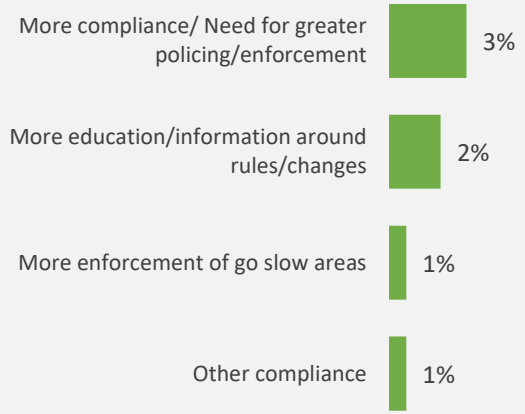
Base: All respondents who made comments about the consultation / review process (n=45).
Q. What other comments would you like to make on the draft zoning plan?

FREE-TEXT SURVEY COMMENTS - COMPLIANCE

5%
made final free-text comments about compliance

Only 5% of survey respondents made final comments relating to compliance, including the need for improvements in compliance and enforcement, and education and information on the new zoning plan once it is implemented.

"If these extensions are put in place, there should be a corresponding increase in the policing of the rules. It seems that it is almost impossible to get any action taken when it is obvious that take and size limits are not being observed. This is from my own experience and related by others to me. My personal experience when I attempted to report the keeping of undersize fish off the Torquay Jetty was that I could not even get through to speak to someone. This was simply hopeless. What's the point in having the rules there if they are not enforced?"



"The new zoning plan must be complemented by an extensive information and educational program. This program must include an increase (and/or upgrade) of signage and markers (both terrestrial and marine) throughout and adjacent to the marine park. The number of Authorised Officers must be increased as well as the equipment required to both educate and enforce provisions of the zoning plan and accompanying instruments."

Base: All respondents who made comments about compliance (n=32).
Q. What other comments would you like to make on the draft zoning plan?

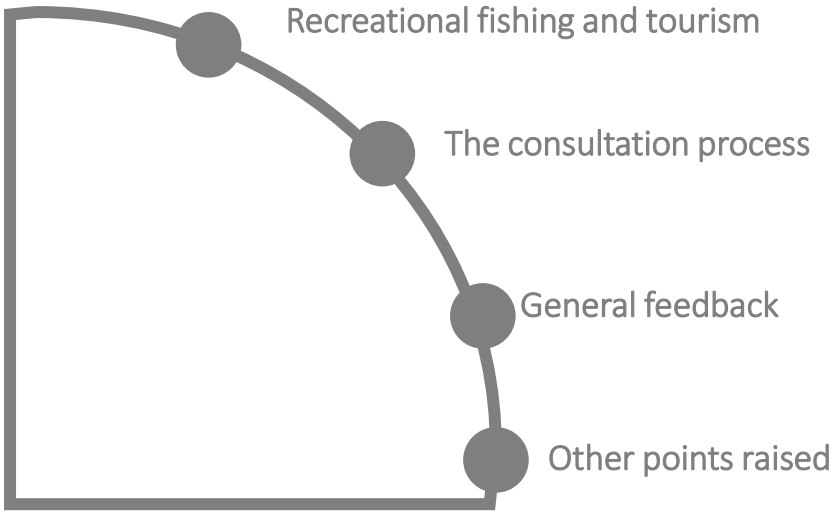
Overview of additional written submission insights

Additional Insights
- overview of written submissions

Written Submissions

Sub topics mentioned

Some content of the written submissions did not directly apply to any of the sections of the RIS. Those findings have been summarised to the following pages providing some additional insights. Those findings are mostly in relation to recreational fishing and tourism, the consultation and general feedback.



Recreational fishing and tourism

Written Submissions

RECREATIONAL FISHING

Recreational fishing bag and size limits are not regulated by the zoning plan, however, stakeholders expressed concerns that any increase in recreational fishing efforts without further regulations or controls on these activities, could adversely affect target fish stocks.

TOURISM

Lesser mentioned, but where discussed there are concerns for inconsistent allowances of the tourism operators in the park. This is having an impact on both tourists and the tourism operators.

"Amateurs on the other hand do as they like. Sure they have bag and size limits, but how many of them take any notice? And because they are not monitored like commercial fishers, they go out fishing as many times a day as they please and get their bag limit again and again. And brag about it!"

"[organisation] always take the opportunity to support actions that grow potential for recreational fishing and whilst the Green Zones in The Great Sandy Marine Park have increased from 3.9% to 12.8 % it remains as one of the lowest green zone percentages among other marine parks in the country and affords reasonable opportunity for recreational fishers."

"[organisation] has received feedback from the coastal communities, expressing concern about the potential commercial fishing and tourism impacts with the changes to fishing practices and exclusion areas"

"When the Moreton Bay Zoning Plan was implemented, one of the major recommendations of the Plan was to increase opportunities for recreational fishing at the expense of commercial fishing. Research has recently been completed in Moreton Bay that demonstrates that, in the absence of regulation of recreational fishers' activities, there have been a number of adverse impacts on fish stocks in Moreton Bay."

"This GSMP plan incites increased recreational effort without even controlling the recreational effort it now allows in."

"The current level of access to the parks is not consistent across all operators which is often leaving guests in an awkward position to either make multiple visits to the park to meet their expectations, or to use the single incumbent operator that has access to all features of the parks. This is neither sustainable or fair."

Consultation

Written Submissions

A moderate number of submissions express concern or sentiment that consultation on the draft zoning plan has been inadequate. Two main points are noted - the consultation period was too short, and key stakeholders have not been adequately consulted.

Many stakeholders suggest a longer consultation period was needed to understand the proposed changes, especially considering the breadth of changes to the zoning plan.

A range of stakeholders, including the commercial fishing sector and local communities, remark on their lack of engagement with the department, and the absence of available information about the draft zoning plan prior to its release

"Given the large amount of detail outlined in the document a number of stakeholders have contacted me with concerns over the time allocated to provide their feedback. The plan has been very open in the fact that it is proposing major changes to some tourism, charter, recreational and commercial operations as well as Traditional Owners. The above operators and I feel that four weeks is not a long enough time period to allow for fair and comprehensive consultation."

"It would appear that the Department of Environment and Science has excluded the aquarium industry once again from consultation in its second stage of the designing plan."

"Not only has request by [organisation] to meet at a unbiased venue to discuss this draft and the concerns with the approach towards this draft and the expressing of the devastation this draft would effectively cause, was on numerous times refused until threats to go public with those refusals were mentioned, and only then was there any submitting to the need to meet with the requesting party."

"Obviously, there are diverse views but what is of overall concern to the community is the complexity and breadth of documents associated with the Review. In general, people are overwhelmed and cannot fathom it all, certainly within the stipulated timeframe."

"To my knowledge, apart from information released in 2017 and 2019 there has been no face to face community consultation in Tinnanbar on the subject, despite a media release to the contrary by the Minister when visiting Hervey Bay recently."

"Another point for consideration; why only 1 month for the review time after the process is 6 years late. The review of the Marine Park was meant to happen at the 10 year mark, 2016. So why is there only 1 month for submissions when the process is already 6 years late?"

"There has been a complete failure to have any real consultation, scientific data, economic impact study, financial impact study, or health and mental impact study done to warrant such a significant resource reallocation. The DRAFT plan MUST be reworked in its entirety."

General feedback

Written Submissions

Some submissions are sparsely worded general feedback or include only a general positive submission.

Examples comments are provided here with many praising the draft zoning plan, the work that has been done so far, and expressing the need to ensure future protection of the area and its marine biodiversity.

Among these general comments, only a few voice concerns or suggest retaining the current zoning plan.

"As a local of the region, I would like to express my appreciation and 100% support for what is being proposed. I believe the draft proposal achieves a perfect compromise between the conflicting uses whilst protecting the environment, recognising Indigenous relationships to the area, and enhancing the region as a holiday and tourist destination. I look forward to seeing the area bounce back from the commercial gill netting in conservation zones which I witness every day".

"Good job"

"Please protect these amazing animals."

"We need to ensure the future marine protection of the Great Sandy."

"I wish to congratulate you and your Dept. on the preparation of the RIS and it balanced content. A well researched document and plan and if approved by the Government will set the standard for many similar future documents. This time the RIS is based on science and other relevant facts. You will endure some unbridled criticism but I am yet to see factual contributions to the debate. based on opposing views. Stick to your guns and give us the GSMP we should have had 16+ years ago."

"...I just wanted to thank you for your support and contribution to the saving of the Great Sandy Marine Park (GSMP) through the Zoning Plan Review. The GSMP has and will continue to be put under pressure. It is such a significant and absolutely beautiful part of Queensland, Australia and the world so understandably it is popular. However, the wildlife, including fish stocks, have noticeably decreased in a relatively short period of time (just years, not decades). Urgent and ambitious action needs to be taken now to protect the GSMP from further damage and hopefully the damage already done can be reversed so that the GSMP may be sustainably enjoyed and utilised now and for generations to come."

"Thanks very much for the hard work you're doing for the Hervey Bay region."

Other points raised

Written Submissions

While in the minority, there are submissions that express concern regarding the land use and development occurring both in and outside of the marine park, that can impact on marine park values. Comments relate to the New Colton Mine, pine plantation and cane fields, with some argument that these land uses may be related to a reduction in seagrass.

An example of another point raised is the impact of hovercraft activity on crucial habitats and the ecosystems.

"My own concerns can be summed up in a single word, development'. One of your aims, "To provide certainty of outcome for development applications", is totally ambivalent."

"We respectfully suggest The New Colton Mine has no social licence to operate in the hinterland of the magnificent Great Sandy Strait. We ask that DES revokes the ML as a further important measure to protect the wellbeing of the Great Sandy Straits."

"These papers demonstrates that seagrass growing in relatively clear water can become stressed with even small amounts of herbicide or herbicides/pesticide mixers, starting the failure of photosynthesis stressing the seagrass to the point that Labyrinthula which has been proven to exist within HB and GSS."

"A recent piece of research [organisation] helped fund showed that pollutants from the Mary River could remain within the Great Sandy Strait for over a month, meaning that low concentrations and/or bioaccumulation of toxic chemicals could do significant damage. The southern part of the Great Sandy Strait and intertidal regions in the range of the mean high spring tide were noted as areas where pollutant load accumulation could become particularly problematic."*

"For a long time I have felt a lot of the damage to the reef has been caused by silt, ash and other sediment being washed out from the cane fields. Any ocean areas adjacent to cane fields are muddied. I know is starting to be addressed but feel more should be done to reduce these out flows."

"We are already losing crucial habitats at an alarming rate and allowing this type of hovercraft activity for a few [who would appear to not care] will be devastating and destructive to the fragile ecosystem."

*Johnstone, R and D. Harris .2021. Hydrodynamics & Materials. Transport in the Mary River Estuary: An Initial Assessment.. University of Queensland.

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