Summary and Analysis of Public Submissions to the Indicative Joint Management Plan for the proposed Yawuru Nagulagun / Roebuck Bay Marine Park



Bilari (pelican) near Bush Point. Photo by Parks and Wildlife

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Prepared by
Planning Branch
Department of Parks and Wildlife

1. Introduction

On 19 June 2015, the *Proposed Yawuru Nagulagun / Roebuck Bay Marine Park Indicative Joint Management Plan 2015* (IJMP) was released by the Minister for Environment and Yawuru traditional owners for a three-month statutory public submission period, which closed on 25 September 2015. A total of 15,304 submissions were received during this time.

This document summarises the key issues raised in the public submissions and aided the Conservation and Parks Commission in preparing advice to the Minister for Environment under section 14 (6)(a) of the Conservation and Land Management Act 1984 (CALM Act).

A similar report has been developed for the *Yawuru Birragun Conservation Park Draft Joint Management Plan 2015*. This plan was released concurrently with the IJMP and a large portion of the conservation park abuts the proposed marine park.

2. Plan distribution

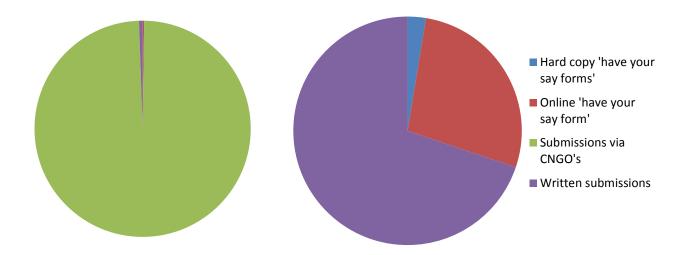
Coinciding with the release of the IJMP, a public notice about the proposal was published in the Government Gazette and The West Australian and Broome Advertiser newspapers, as required under section 14 (2) of the CALM Act. The plan was distributed to Ministers, State Government departments and Local Government as per section 14 (3A) and sections 59 (5) and (8) of the CALM Act. Notifications of the release and/or IJMPs were also distributed to tertiary institutions, libraries, peak bodies, stakeholder groups and numerous individuals who expressed an interest during the planning process. 'Have Your Say' brochures and submission forms were made available along with the IJMP at the Broome and Kensington offices of the Department of Parks and Wildlife, as well as the Yawuru Nyamba Buru and Department of Fisheries offices and various other locations in Broome. Social media was used by Parks and Wildlife and Yawuru Nyamba Buru to further notify the public about the proposal and submission period. Digital copies of the IJMP and 'Have Your Say' brochure were made available on the Parks and Wildlife website, where interested parties were encouraged to lodge submissions online.

3. Submission processing and analysis methods

A total of 15,304 submissions were received comprising: three hard-copy 'have your say' forms; 32 Parks and Wildlife online submission forms; 81 written submissions via email or post; and 15,188 (99.3 %) submitted through conservation non-government organisations (CNGOs) (Figure 1). Several CNGOs ran campaigns that resulted in a large number of submissions. Most of the submissions received through CNGOs included suggested text provided by the CNGOs, though many also included additional individual comment.

Every submission was considered in the analysis against the criteria stated on page two of the indicative joint management plan. Information was recorded relating to the submitter's contact details and location, submitter type/ interests (recreational fishing, tourism industry, Kimberley local etc.) and key issues raised. Once the data entry was complete for all submissions, duplicate submissions were removed to generate statistics on submitter demographics and key issues raised.

This report includes an overview of submitter demographics, an explanation of the key issues raised in submissions, a summary of key issues by sector (e.g. conservation, recreational and commercial fishing, tourism etc.) and a summary of responses to key issues and modifications made to the final plan.



- a.) Relative proportions of submission type for all submissions received (total of 15,304).
- Relative proportions of submission type excluding CNGO submissions (total of 116 or 0.76 %).

Figure 1: Relative proportions of submission types.

4. Who provided feedback?

Forty-three submissions were received from organisations or peak bodies representing conservation, commercial fishing, recreational fishing, tourism, industry and government sectors (see Appendix 1 for the list of individual organisations).

Submissions were received via CNGOs through the platform "The Kimberley: Like nowhere else on Earth. Help protect it." which was supported by Environs Kimberley, Conservation Council WA, Sea Shepherd Conservation Society, The Wilderness Society, WWF Australia, Pew Charitable Trusts, Australian Marine Conservation Society, and Whale and Dolphin Conservation. Other CNGOs that facilitated online proforma submissions were Save Our Marine Life, WWF and Australian Marine Conservation Society.

Submissions were received from 66 different nations; with all overseas submissions received via CNGO platforms (see Appendix 2). There were 4,162 submissions received from international postcodes, 8,954 submissions received from Australian states or territories other than Western Australia (WA) and 1,883 received from WA. Of the 1,883 WA submissions, 113 were from Broome. There were 305 submissions that did not specify a location. Figure 2 shows the number and origins of the submissions.

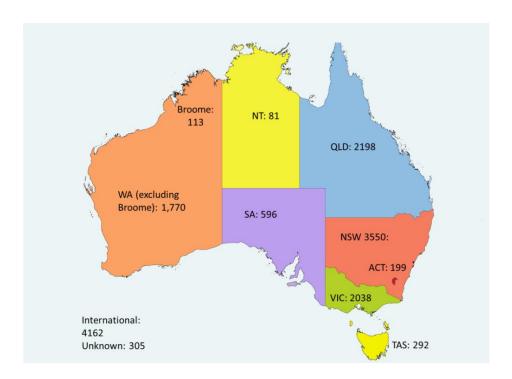


Figure 2: Numbers and origin of submissions (map source: Wikipedia).

5. Key issues

5.1 Establishment of the proposed marine park

Nearly all of the submissions supported the establishment of a marine park in Roebuck Bay. Three submissions — all Broome-based — opposed the proposal. One submission stated that the establishment of the marine park should be delayed until further knowledge of the area was gathered. Two submissions expressed concern that the establishment of the marine park could limit potential sustainable growth in the future.

5.1 Reserve boundary¹

The majority of submissions made no comment on the reserve boundary. Six submissions expressed support for the proposed boundary and made no further comment. Ten submissions provided further comments; the following comments were made.

- Five submissions suggested extending the marine park to include a portion of the Roebuck Deeps on the basis that this deeper habitat is vastly different from that within the current proposed area and is a critical habitat for target species.
- Two submissions objected to the inclusion of port waters in the marine park, stating that it could have significant impacts on the operations and future expansion of Broome town site, in particular the operations and development of Chinatown.
- One submission supported the proposal to include Dampier Creek and the northern intertidal
 area in the marine park on the basis that this area experiences the highest level of human
 pressure in the Bay.
- One submission suggested extending the marine park up to and including Barred Creek (through Willie Creek northern intertidal areas to the other side of the rocks at Barred Creek).

¹ The online submission form and 'Have your say' brochure specifically asked for comment on this issue.

- One submission suggested extending the marine park along the length of Hamersley Drive.
- One submission stated that the north eastern boundary may impact on potential irrigation development sites.

5.2 Zoning scheme

A total of 14,857 submissions made comments on the zoning scheme.

Sanctuary zone

The IJMP did not include a sanctuary zone in the proposed zoning scheme. A large number of submissions (14,843 or 96.99%) called for the inclusion of one or more sanctuary zones in the marine park, and these generally reflected the submissions made via conservation NGOs. Six submissions supported the proposed zoning scheme, eight stated they would object to a sanctuary zone if it were proposed and 447 people made no comment on the zoning scheme. Of the 447 submissions that did not comment on zoning, 251 expressed general support for the proposal and marine conservation in Roebuck Bay generally.

There were 113 submissions from Broome-based individuals or organisations, of which 78 were submitted via CNGOs. Of the total submissions from Broome, 79 submissions requested that the proposed zoning scheme should include a sanctuary zone (67 of these were submitted via CNGO's); five stated they would object to the inclusion of a sanctuary zone (this included three submissions from individuals and a recreational fishing interest); three supported the proposed zoning scheme; and 26 made no comment on the proposed zoning scheme (Figure 3).

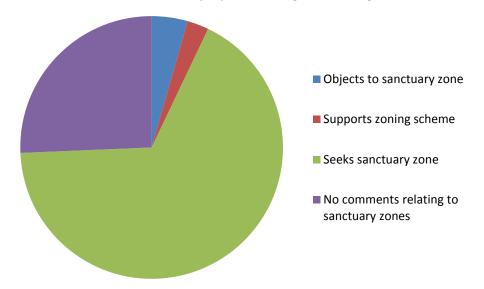


Figure 3: Percentage of Broome-based submissions that commented on the exclusion/inclusion of a sanctuary zone in Roebuck Bay.

Some submissions suggested the location of a sanctuary zone. One-hundred and fifty-two submissions that proposed a sanctuary zone suggested it should be located in the 'Fingers' area of Roebuck Bay, with some specifying that a sanctuary zone should be included in the southern part of the 'Fingers' area (Figure 4). Three submissions requested a sanctuary zone in 'The Deeps' in addition to one over the 'Fingers' area, whilst another submission suggested including Crab Creek in a sanctuary zone.

The main reasons submissions requested a sanctuary zone included to:

- protect the snubfin dolphin and other wildlife including dugongs, turtles, fish (e.g. threadfin salmon), shellfish (e.g. mud crabs) and migratory shorebirds;
- help ensure that future generations have the same opportunities and experiences in Roebuck Bay as the population increases;
- reflect 'best practice' for marine parks;
- provide reference sites to aid assessment of management effectiveness;
- increase resilience of ecosystems and populations; and
- protect critical areas (e.g. breeding) for targeted fish and crabs to increase numbers and enhance recreational fishing in the Bay.

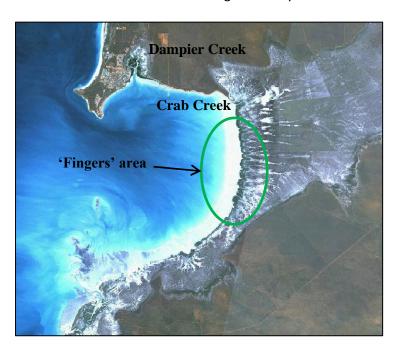


Figure 4: Location of the 'Fingers' area in Roebuck Bay.

Special purpose zones

One submission representing commercial fishing interests expressed concern that the proposed zoning scheme did not include any general use zones, but instead had large special purpose zones, and stated that this may set a precedent for future marine parks.

Special purpose zones (cultural heritage)²

Thirty submissions commented on the Kunin Special Purpose Zone (cultural heritage). Fifteen of these supported the zone, eight indicated they would support the zone if changes were made and seven did not support the zone.

Of the 30 submissions that commented on the Jangu Special Purpose Zone (cultural heritage), 14 supported the zone, eight stated they would support the zone if changes were made and eight did not support the zone.

The following comments were made on the SPZ (cultural heritage):

• Five submissions expressed concern that the zone may impact on recreational fishing and cause a division within the community.

² The online submission form and 'Have your say' brochure specifically asked for comment on this issue.

- Two submissions with recreational fishing interests stated there should be better clarification of how the privacy clause would apply.
- One submission representing recreational fishing interests stated that it would be useful to
 include information on the type of cultural activity that is to be expected in the cultural zones
 and information on the preferred respectful behaviour to which other marine park users should
 adhere.
- One submission expressed concern that any Aboriginal person or group may be able to use the area if they have been given consent to do so from traditional owners.
- Two submissions suggested methods should be developed to identify those entitled to practice customary fishing in the proposed marine park.

Special purpose zones (recreation and conservation)³

Twenty submissions supported the Dampier Creek Special Purpose Zone (recreation and conservation), six indicated they would support the zone if changes were made and eight did not support the zone. Of the eight submissions that did not support the zone, two did not support the incorporation of the port waters into the marine park. One submission requested a ban on the use of live bait in Dampier Creek.

Eighteen submissions supported the Roebuck Bay Special Purpose Zone (recreation and conservation), eight indicated they would support the zone if changes were made and five did not support the zone.

The following comments were made on the Special Purpose Zone (recreation and conservation):

- Two submissions representing commercial fishing and pearling interests expressed concern that
 the current pearling leases were located within the proposed special purpose zone (recreation
 and conservation), on the basis that pearling may not be compatible with the purpose of the
 zone given it is a commercial activity.
- Two submissions suggested encompassing the existing pearling leases and buffer zones in Roebuck Bay into a special purpose zone (pearling), to be consistent with other parks such as Lalang-garram / Camden Sound Marine Park.
- One submission representing commercial fishing interests expressed concern that the Marine Aquarium Fishery activities fall within the two special purpose zones (recreation and conservation and cultural heritage) and not within a general use zone.
- One submission stated that fishing rules needed to be stricter in the marine park to encourage rehabilitation of fish stocks in the Bay.

5.3 Customary fishing

Fourteen submissions commented on customary fishing in Roebuck Bay. Eight submissions wanted to see management frameworks applied to customary fishing so that bag and size limits applied to all marine park users. Three submissions stated that traditional hunting should be carried out using traditional tools and methods and the use of gill nets, set nets and drag nets should be banned for all fishing including customary fishing. Four submissions, including from scientific/research interests, expressed concern that there was no management or monitoring in place regarding the customary take of marine mammals, particularly dugongs, in Roebuck Bay. One submission supported the management strategies proposed.

5.4 Dredging

Eleven submissions, mostly with conservation and/or scientific/research interests, expressed concern that the IJMP could potentially permit dredging activities within special purpose zones

³ The online submission form and 'Have your say' brochure specifically asked for comment on this issue.

(recreation and conservation). While it was acknowledged that there would be a need for small-scale dredging or maintenance works, concern was expressed that large-scale dredging such as for the building of a marina would have detrimental effects on the marine life of the Bay, particularly the seagrass beds, and should be prohibited.

5.5 Non-ground disturbing mineral and petroleum exploration

Eight submissions, mostly with conservation and/or scientific/research interests expressed concern that non-ground-disturbing mineral and petroleum exploration and development could potentially be permitted within the marine park. This concern was mostly based on the potential impact of seismic testing on dolphins and whales within the Bay.

5.6 Temporal closures⁴

Waterbirds including migratory gamirda-gamirda

Seven submissions, mostly with conservation and/or scientific/research interests, supported the use of temporal closures to manage disturbance to water birds. Seven submissions, mostly with recreational fishing and tourism interests, stated that the use of temporal closures for this purpose was not necessary. Two submissions noted that there may be a need to address issues relating to shore birds and stated that further consultation and community engagement would be expected/appreciated. Two submissions stated that if a temporal closure was to be applied, it should be implemented in the dry season when the Roebuck Bay northern shore beaches were regularly used by people.

Marine mammals

Three submissions with conservation and/or scientific/research interests supported the use of temporal closures to manage disturbance to marine mammals. Four did not support the use of temporal closures, including submissions representing recreational fishing and tourism interests. One submission stated that if a temporal closure was to be put in place it would need to be scientifically proven that it would significantly benefit marine mammals.

Two-hundred and seven submissions which were mainly submitted through CNGOs called for the protection of species of special conservation interest such as the Australian snubfin dolphin (Orcella heinsohni) but did not address management arrangements.

Two submissions suggested that marine mammals should be listed as a key performance indicator in the management plan due to their recognised importance in Roebuck Bay, their ecological role and their high public profile.

Finfish

Three submissions supported the use of temporal closures to manage finfish and six submissions did not support the use of temporal closures for this purpose. Submitters who did not support temporal closures generally represented recreational fishing interests. One submission stated it would need to be scientifically proven that a temporal closure would significantly benefit fish in Roebuck Bay.

5.7 Speed restrictions⁵

Eight submissions with conservation, scientific/ research and recreational fishing interests supported the use of speed restrictions in the Bay and five submissions with tourism and recreational fishing interests stated that the use of speed restrictions for this purpose was not necessary. The majority of

⁴ The online submission form and 'Have your say' brochure specifically asked for comment on this issue.

⁵ The online submission form and 'Have your say' brochure specifically asked for comment on this issue.

submitters who did not feel speed restrictions were necessary did not think there was a problem with vessel strike in the Bay.

5.9 Commercial fishing and aquaculture

Five submissions reflecting conservation interests requested that commercial fishing in Roebuck Bay be prohibited completely, and three of these submissions also stated that large-scale aquaculture should not be permitted. One submission with an interest in commercial fishing stated that the plan should note that the two Kimberley Gillnet and Barramundi Fishery licences, which were bought by the government, were available for sale and that the government took the opportunity to buy them for resource allocation reasons and not due to sustainability concerns.

5.10 Balance between conservation and use and access⁶

Twelve submissions stated that more emphasis was required on use and access; nine stated that more emphasis on conservation was required. Eleven submissions stated the IJMP had achieved a good balance between conservation and use and access.

5.11 Water and sediment quality⁷

Five submissions commented on the water quality of Roebuck Bay being reduced by catchment runoff and groundwater contamination and stated that relevant authorities needed to urgently address this issue, especially the occurrence of *Lyngbya* blooms in the Bay. Fourteen submissions representing a broad spectrum of interests supported collaborative work with neighboring land and water managers to identify and where feasible, address human activities occurring outside the marine park that may impact on the values of the park. Three submissions stated they did not support collaborative work but did not state why.

5.12 Waterbirds including migratory gamirda-gamirda

The IJMP stated that waterbirds in the proposed marine park are highly diverse and include a number of nationally and internationally important populations of migratory species. Two submissions expressed concern that recreational and tourism activities such as the use of jet-skis and hovercrafts cause disturbance to waterbirds and are permitted near roosting sites. One submission stated that caution should be taken when considering creating new access areas to the beaches that are currently not frequented by people as these are the few relatively undisturbed roosting sites that birds can use.

Two submissions stated that the number of mangroves between One Tree and the Broome Bird Observatory had visibly increased since 2010 and that this should be recorded as a threat to waterbirds. They further stated that the plan should include a management strategy to monitor mangrove encroachment and its effect on waterbird roosting behaviour and fishing opportunities. One submission stated that the management plan should allow for small-scale (<2hectares per year) mangrove clearing for shorebird management.

Two submissions commented that the management objective for waterbirds would not be able to be met if the Fall Point medium day use area proposed in the Yawuru Birragun Conservation Park draft management plan 2015 was implemented.

⁶ The online submission form and 'Have your say' brochure specifically asked for comment on this issue.

⁷ The online submission form and 'Have your say' brochure specifically asked for comment on this issue.

5.13 Management programs⁸

Management frameworks

Eighteen submissions supported the management strategies proposed and seven submissions did not support the strategies however no reasoning was given.

Education and Interpretation

Twenty-six submissions supported the education and interpretation strategies proposed and three submissions did not support the strategies proposed. One submission stated that interpretation information should include results of monitoring of major threats to the system and what mitigation actions are being implemented and why. One submission advised that more emphasis was required on evaluating the success of programs already in place in the Bay.

Public Participation

Twenty-eight submissions supported the public participation strategies proposed and two submissions did not agree with the strategies proposed, however no reasons were given. One submission advised that the establishment of a Community Advisory Committee should be considered.

Patrol and enforcement

Twenty-two submissions supported the patrol and enforcement strategies proposed and four submissions did not support the management strategies proposed. One submission with a recreational fishing interest stated that a registration and monitoring process should be implemented for customary fishing. Another submission supported traditional owners to have training and funds put in place for the ranger program.

Visitor risk, access and infrastructure

The management intervention and visitor infrastructure strategies proposed in the IJMP were supported by 25 submissions. One submission that supported the strategies stated that the plan should include details on the use of boat ramp access to reduce the impact on coastal areas. Two submissions did not support the management strategies proposed, however no reasons were given. One submission stated that the plan needed more detail on how off-road vehicle use will be discouraged.

Research

Twenty-eight submissions supported the research strategies proposed. One submission did not support the strategies proposed but did not provide any reasoning for this. One submission expressed concern that some of the research strategies proposed aim to get a baseline for key values; however the current condition of values may not reflect their natural condition.

Monitoring

Twenty-seven submissions supported the monitoring strategies proposed. One submission stated that monitoring should be carried out on all days of the week, not just during standard work hours and one submission emphasised the need for regular, annual monitoring and adaptive management. One submission did not support the strategies proposed but did not provide any reasoning for this. One submission stated that the plan's approach to monitoring and evaluation should be strengthened, they suggested marine parks should be audit annually and results should be made publicly available every year.

⁸ The online submission form and 'Have your say' brochure specifically asked for comment on this issue.

5.14 Joint management

The majority of the submissions from a variety of different interest groups including the tourism industry, commercial fishing and the science community showed support for joint management of the park between the Yawuru people and Department of Parks and Wildlife.

5.15 Summary of issues raised by industry and community organisations

The following summary outlines issues raised by industry and community organisations across different sectors. It does not include submissions from individuals.

Commercial fishing and pearling interests

- General support for the park and the plan and recognition that commercial fishing and pearling are compatible with the park.
- Requested amendments of zoning to accommodate pearling under a special purpose zone (Pearling) and sought explicit recognition of commercial fishing uses in special purpose zones (Recreation and Conservation).
- Would prefer Marine Aquarium Fisheries (MAF) activities to be accommodated in a general use zone.
- Sought more information on how recreational and cultural fishing will be monitored.
- Sought engagement in the management of the park.
- Sought rationale for why commercial gillnetting is prohibited while Indigenous gillnetting is permitted.

Recreational fishing

- General support for the park and the plan.
- Support for strategies to manage marine mammals and commented that sanctuary zones would not increase protection for these animals.
- Commented that the prohibition/ removal of threatening activities such as commercial gillnetting and ground-disturbing resource development would provide enhanced protection for marine mammals and turtles.
- Commented that sanctuary zones would incite division in the community.
- Comments in relation to customary take included a request for information on appropriate behaviour in the special purpose zones (Cultural Heritage), a call for stronger management of this activity and a comment that proof would be required to ensure customary users are eligible.
- Comment that temporal and/ or spatial closures to protect marine mammals may impact anglers and that a scientific basis would be required before implementing them.
- One submission indicated support for existing regulation of recreational fishing and commented that there is no need for additional protection.

Tourism operators

- General support for the park and plan.
- One submission supported the allowance of recreational fishing throughout the park and a lack of sanctuary zones. It also suggested that sanctuary zones may put pressure on other areas of the park.
- One submission supported a sanctuary zone in The Fingers area to preserve biodiversity and for snubfin dolphin feeding.
- One submission sought management for customary take of marine mammals and a prohibition on customary use of gillnets. It also proposed the enforcement of sustainable fishing bag limits and size limits for all users including Aboriginal people.
- One submitter did not support temporal closures or speed restrictions.
- Support for the management of fish stocks through bag and size limits.

• One submitter stated its expectation that traditional owner permissions for the business to operate would continue, and stated that it was pleased to allow access to Yawuru people through the property.

Conservation non-government organisations

- General support for the park.
- Support for the ban on commercial gillnet fishing.
- Support for sanctuary zone(s) in the park, with many specifying that a sanctuary zone should be located in The Fingers part of Roebuck Bay and some seeking a sanctuary zone in 'The Deeps'.
- General opposition to large-scale dredging and non-ground disturbing mineral and petroleum exploration including seismic testing.
- General support for joint management.
- Some sought prohibition on future commercial mudcrab and fish trapping.
- Some sought prohibition on large-scale aquaculture and commercial fishing.
- One submission stated there should be an allowance for small-scale mangrove management for shorebird management.
- Some requested strategies for the management of *Lyngbya* blooms.

Scientific/research

- General support for the park and plan.
- Comments that further information is required to define customary hunting of dugong.
- Requested management strategies for seaplane wrecks.
- Support for sanctuary zones including a request for a minimum of 30 per cent in sanctuary zones.
- Support for the exclusion of gillnetting and ground-disturbing resource exploration and development.
- One submission stated that dredging, dredge-spoil dumping and seismic surveys should be prohibited.

Government organisations

- General support for the park and plan.
- Key issue raised in relation to the boundary with the Port of Broome.
- One submission noted that the north-eastern boundary of the park may intrude on potential irrigation development sites.
- One submission raised concerns about proposed access restrictions for the general public along foreshore of sections of Roebuck Bay and in the special purpose zone (Cultural Heritage).
- One submission raised concerns about the potential impacts of the park on the operation of the port.
- One submission raised concerns about the impacts of the park on development proposals in the town site and coastal protection works required to protect the town.
- One submission sought involvement of relevant authorities in the development of management strategies.
- One submission stated that baseline data should account for existing usage and impacts.
- One submission sought a commitment to consultation on for planning an Indigenous Protected Area (IPA).
- One submission sought amendments and clarifications to text in the plan.
- One submission recommended removal of Dampier Creek from the park.

- One submission acknowledged mangrove clearing may occur for coastal infrastructure, subject to approvals.
- One submission sought the removal of special purpose zones (Cultural Heritage) and recommended the areas be incorporated into special purpose zone (Recreation and Conservation).

Others

- One submission provided comments on temporal closures, mangroves, waterbirds, day-use areas, migratory shorebirds, public participation and management.
- The inclusion of Dampier Creek in the park was not supported by one submission.
- The inclusion of port waters in the park was not supported by two submissions.
- Two submissions raised concerns about the implications of the park for the development of Broome
- Concerns were also raised about restrictions on public access around Roebuck Bay foreshore.

5.16 Summary of key issues raised by proforma submissions made via CNGOs

The following key messages were promoted through the CNGO campaigns.

- Support for the marine park.
- Sought the creation of sanctuary zone/s:
 - to increase the abundance of marine life, provide a safe haven for breeding fish and healthy feeding grounds for animals like snubfin dolphins, turtles and dugongs;
 - to support huge numbers of migratory birds that are Ramsar-listed;
 - because the Bay is of great cultural significance to the Yawuru people;
 - to secure the future for snubfin dolphins and other unique marine life and protect big breeding fish such as threadfin salmon and ensure a healthy supply of baitfish.

6. Summary of responses to key issues and modifications to the joint management plan

All issues raised during the public submission period were considered. Additional contextual information has been included in a number of areas of the plan in response to questions and new information contained in a range of submissions.

Responses to the key issues raised, and any resulting modification to the joint management plan, are summarised below.

Zoning scheme

The zoning scheme for the marine park remains unchanged because it is considered that at this point in time, the objectives of the marine park can be best achieved using a combination of special purpose zones and complementary management strategies. A remotely placed sanctuary zone was considered before and after the public submission process but it was concluded that with the information currently available, the management strategies and zoning scheme proposed are appropriate at this time.

The development of the zoning scheme was based on providing a high level of protection for all areas of the marine park and an integrated 'whole of country' approach to planning and management for the Yawuru conservation estate (which includes adjacent land areas). The zoning scheme reflects the values and objectives of the marine park and the existing and potential pressures on the values.

In considering the appropriateness of a sanctuary zone, it was noted that a key threat – commercial gillnet fishing (which yielded 60-100 tonnes per year) – had been removed with the State's decision

to buy out the licence holders. The plan includes management strategies to assess the nature and level of impact of human activities on finfish and critical habitat. In addition, given the unique nature of the Roebuck Bay system, including the extreme tidal regime, distinctive geomorphology and prevailing winds, areas of the marine park are difficult to access for much of the year, therefore limiting human pressures at these times. In terms of the conservation of priority species such as the snubfin dolphin, the plan outlines a range of management strategies including temporal closures, vessel speed restrictions, altered recreational and customary fishing regulations and research and monitoring, which complement the zoning scheme. Furthermore, it was noted that the bay's close proximity to Broome and its social and cultural importance make it an important recreation and tourism destination for the local community and visitors, particularly for recreational fishing.

Research and monitoring programs will improve knowledge of Roebuck Bay's habitats, biological communities and patterns of human use and provide better information to assess the health of the environment over time. The joint management plan commits the Commission and the Joint Management Body to undertaking a five-year review of the adequacy of the zoning arrangements for the marine park. This adaptive management approach allows for the need for a sanctuary zone to be considered further as part of this review.

Customary fishing

No changes are required in response to the issues raised on customary fishing in the public submissions. The plan includes strategies to work with Yawuru Traditional Owners to develop sustainable management arrangements for the customary take of finfish, as well as for vulnerable species such as dugong and turtles. It is noted that customary fishing refers to the customary right to access a resource and carries no implicit requirement for traditional methods to be used.

Dredging and dredge spoil dumping

Dredging and dredge spoil dumping has been assigned as 'assess' in the permitted activities table for both zone types. Additional text has been included to provide clearer direction on what dredging will be permitted, stating: "Only small scale dredging for the purpose of public access and safety will be considered."

Non-ground disturbing mineral and petroleum exploration

Marine parks are created for multiple uses and mineral and petroleum exploration and development can be permitted in appropriate zones. 'Ground-disturbing' activities associated with mineral, petroleum and geothermal exploration and development are not permitted in this marine park. 'Non-ground-disturbing mineral and petroleum exploration and development' remains unchanged as 'assess' in the permitted activities table for both zone types. It is considered appropriate that any potential environmental impacts that may occur as a result of this activity will be considered as part of assessments under State and Commonwealth legislation (i.e. the *Environmental Protection Act 1986* and *Environmental Protection and Biodiversity Conservation Act 1999* respectively). The plan states that assessments will need to be cognisant of the management objectives and targets for identified values of the marine park.

Temporal closures

No changes have been made regarding temporal closures. Temporal closures are a valid tool that can be employed to manage disturbance to marine values. They have been identified as a potential adaptive management tool that may be used if the monitoring program indicates the health of certain values is declining, or under threat, and can be clearly linked to a particular activity. The explicit inclusion of the potential to use temporal closures is considered important for the plan to achieve its strategic and management objectives.

Vessel speed restrictions

No changes are required in response to issues raised on the potential to use vessel speed restrictions. Vessel speed restrictions are an important management strategy that may be implemented to manage disturbance to marine values if vessel speeds are creating a demonstrated impact on the park's values.

Commercial fishing and aquaculture

The comments made on commercial fishing and aquaculture have been noted however no significant changes are required in response to the issues raised. Large scale aquaculture and commercial trawling have been listed for a number of values as 'Existing and potential uses and/or pressures' and the monitoring program will allow these pressures to be tracked. Additional contextual information has been included around the purchase of the two commercial gillnet licences operating in the area prior to 2014.

Water and sediment quality

No significant changes are required in response to the issues raised on water and sediment quality in the public submissions. However additional contextual information has been included in response to updated information on factors that may be contributing to a decline in water and sediment quality in Roebuck Bay and their linkages to the periodic blooms of *Lyngbya majuscule*.

Waterbirds including migratory gamirda-gamirda (shorebirds)

Additional strategies have been included to restrict vehicle access to designated areas only and to restrict dogs to designated areas and vessels only. An additional strategy has been included to investigate the causes, scale and level of impact that mangrove encroachment may be having on waterbirds.

Marine mammals

Marine mammals (including snubfin dolphins and dugongs) have been designated as a key performance indicator in recognition of their conservation value and broad community priority for management.

Other modifications of significance

Additional strategies have been included to address identified pressures to further enhance conservation outcomes for waterbirds (including migratory shorebirds), finfish (including threadfin and bluenose salmon), invertebrates (including mud crabs), intertidal sand and mudflat communities, salt marsh and saline grassland communities and fossil dinosaur footprints.

Amendments have been made to the outer boundary of the marine park as it relates to Broome Port waters to reflect straight lines of latitude and longitude to facilitate user understanding and compliance.

Appendix 1

Commercial fishing and pearling

- Western Australia Fishing Industry Council
- Pearl Producers Association
- The Paspaley Group

Conservation groups

- Broome Bird Observatory
- Environs Kimberley Broome Community Seagrass Monitoring Project
- Environs Kimberley
- Australian Conservation Foundation
- The Kimberley Like Nowhere Else
- The Wilderness Society
- WWF
- PEW
- Global Flyway Network

Government

- Tourism WA
- Department of Fisheries
- Department of Aboriginal Affairs
- Department of Mines and Petroleum
- Department of Environment (Commonwealth)
- Department of Transport
- State Heritage Office
- LandCorp
- Landgate
- Water Corporation
- Department of Lands
- Department of Agriculture & Food
- Shire of Broome
- Aboriginal Lands Trust

Others

- Wildflower Society of WA
- RJ Menzies & Associates Pty Ltd
- Broome International Airport

Recreational Fishing

- Recfishwest
- Broome Fishing Club
- Mary Island Fishing Club

Scientific/research

- WA Museum
- Murdoch University various
- UWA Centre for Marine Futures
- Western Australian branch of the Australian Marine Sciences Association

Tourism Operators

- Broome Hovercraft
- Reel Teaser Fishing Adventures
- Sentosa Charters
- Eco Beach Resort

Appendix 2

List of nations that submissions were received from (66 in total).

Country	Country	Country
Algeria	Hong Kong	Panama
Argentina	Hungary	Peru
Armenia	India	Philippines
Australia	Indonesia	Poland
Austria	Ireland	Portugal
Bahamas	Israel	Romania
Belgium	Italy	Russian Federation
Brazil	Jamaica	Serbia
Canada	Japan	Singapore
Chile	Kazakhstan	Slovakia
China	Lithuania	South Africa
Colombia	Luxembourg	Spain
Cook Islands	Malaysia	Sri Lanka
Costa Rica	Malta	Sweden
Croatia	Mexico	Switzerland
Denmark	Montenegro	Thailand
El Salvador	Nepal	Trinidad and Tobago
Finland	Netherlands	Turkey
France	New Zealand	Ukraine
French Polynesia	Nicaragua	United Kingdom
Germany	Norway	United States
Greece	Oman	Uruguay