

# Turquoise Coast Island Nature Reserves

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Analysis of Public Submissions

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2003

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DEPARTMENT OF  
**Conservation**  
AND LAND MANAGEMENT

*Conserving the nature of WA*



Conservation Commission  
of Western Australia



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## BACKGROUND

This document is an analysis of public submissions to the Turquoise Coast Island Nature Reserves Draft Management Plan 2001.

The Turquoise Coast Island Nature Reserves Draft Management Plan was released for public comment on 19 December 2001 for a period of 2 months. Late submissions were accepted. A total of 17 public submissions were received. All submissions have been summarised and changes have been made to the plan where appropriate.

Following the release of the plan, advertisements were placed in local and Statewide newspapers advising that the draft management plan was available for comment. The draft plan was distributed to State Government departments, tertiary institutions, recreation and conservation groups, local authorities, libraries and other individuals who expressed interest during the preparation of the draft. The plan was available for viewing or downloading from the Department of Conservation and Land Management's NatureBase website and electronic submissions could be made from the same site. Printed copies of the plan were available for inspection at CALM's offices and the libraries of the Shires of Gingin, Dandaragan, Coorow and Carnamah. The plan was available for purchase from CALM's State Operations Headquarters, Cervantes Office and Jurien Bay Office.

## Analysis Of Public Submissions

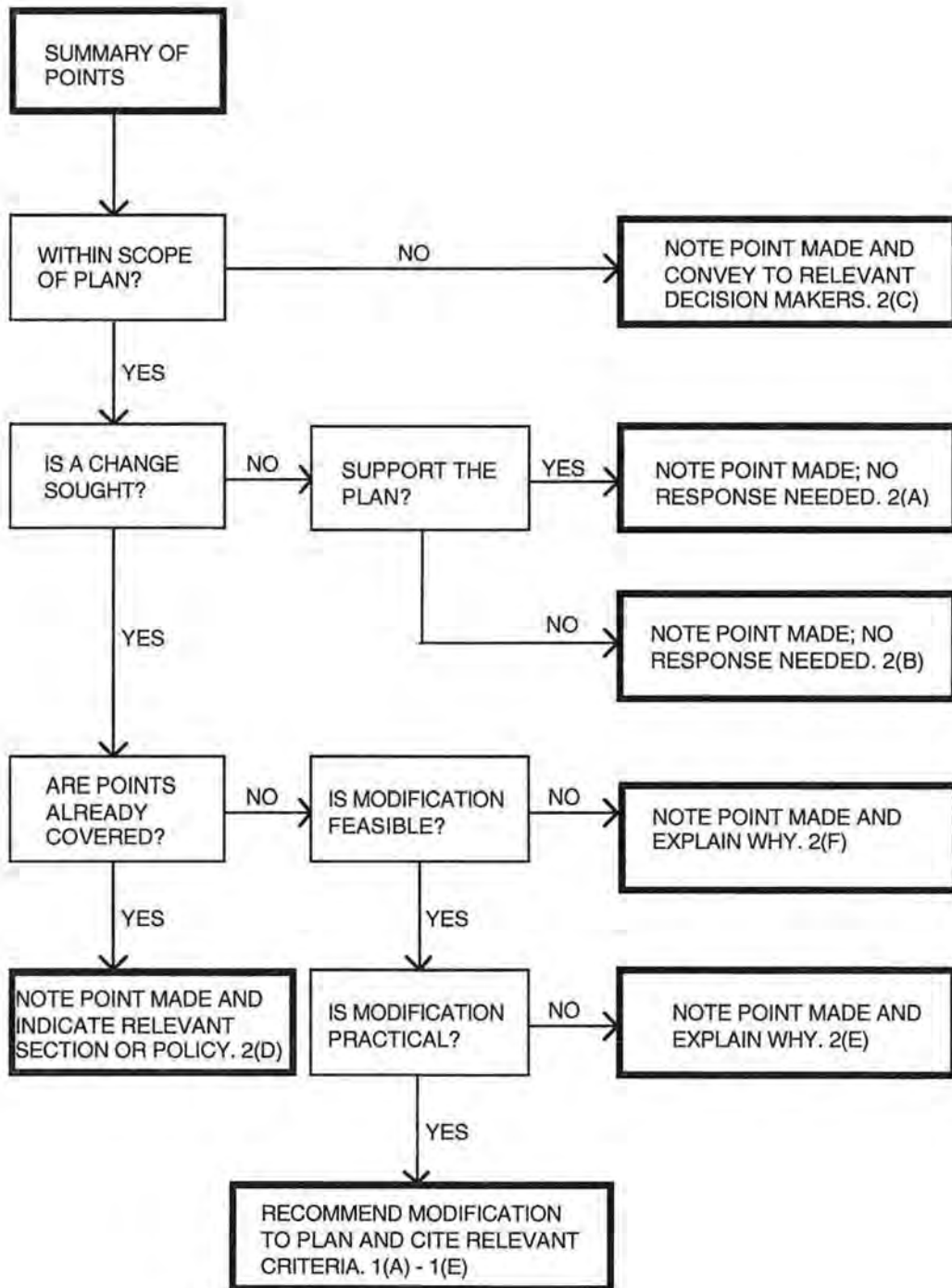
### Method of Analysis

The public submissions to the Turquoise Coast Island Nature Reserves Draft Management Plan were analysed according to the process depicted in the flow chart overleaf. More specifically:

- ❖ The points made in each submission were collated according to the section of the draft plan they addressed.
  
- ❖ Each point made was assessed using the following criteria:
  1. The draft management plan *was amended* if the point:
    - (a) provided additional resource information of direct relevance to management;
    - (b) provided additional information on affected user groups of direct relevance to management;
    - (c) indicated a change in (or clarified) Government legislation, management commitment or management policy;
    - (d) proposed strategies that would better achieve management goals and objectives; or
    - (e) indicated omissions, inaccuracies or a lack of clarity.
  
  2. The draft management plan *was not amended* if the point:
    - (a) clearly supported the draft proposals;
    - (b) offered a neutral statement, or no change was sought;
    - (c) addressed issues beyond the scope of the plan;
    - (d) was already in the plan, or had been considered during plan preparation;
    - (e) was one amongst several widely divergent viewpoints received on the topic and the recommendation of the draft plan was still considered the best option;
    - (f) contributed options which were not possible (generally due to some aspect of existing legislation, Government or departmental policy).
  
- ❖ The reasons why recommendations in the draft plan were or were not changed, and the relevant criteria used, were discussed with each comment. Minor editorial changes referred to in the submissions have also been made.

Submissions have been assessed entirely on the cogency of points raised. No subjective weighting has been given to any submission for reasons of its origin or any other factor which would give cause to elevate the importance of any submission above another.

# Analysis Process



COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
<b>GENERAL COMMENTS</b>					
1.	3	It was easy to obtain a copy of the plan.	Supports the draft plan.	No	2a
2.	1	A job well done and extremely interesting to read.	Supports the draft plan.	No	2a
3.	4	The plan was easy to understand and covered the main issues	Supports the draft plan.	No	2a
4.	1	The plan contained sufficient information to draw conclusions	Supports the draft plan.	No	2a
5.	1	We are pleased to advise that we support the directions delineated in the plan.	Supports the draft plan.	No	2a
6.	1	For the most part the plan is good and includes much useful information.	Supports the draft plan.	No	2a
7.	1	The islands should not be considered as individual entities but rather as a whole.	In some instances it is important to consider overall management of the islands, in others it's necessary to focus on the specific management issues on each island.	No	2d
8.	1	It is unlikely that petroleum activities in the area will have an impact on the conservation value or the management of these reserves. However, it is suggested that should there be any petroleum activities which may affect the Turquoise Coast Island Nature Reserves in the future, that the Department of Minerals and Petroleum Resources and CALM discuss any management issues at that time.	Petroleum activities have the potential to affect the islands.	Yes	1e
9.	1	I do not think the plan covered the main issues or contained sufficient information to draw conclusions. In particular, no mention is made of how strategies will be carried out or applied. There is no mention of how Key Performance Indicators (KPIs) will be measured, ie. details of a monitoring program.	Detailed information for the implementation of strategies and monitoring is addressed in the context of the Region and District Operations Plans.	No	2c
10.	1	The plan seems concerned with maintaining the status quo and appears to be based upon the premise that the ecology of these islands is in a stable state. This is not the case and KPIs proposed are thus unrealistic.	The KPIs have been reviewed.	Yes	1e
11.	1	We recognise the need to protect the marine environment and the flora and fauna of the islands, considering the expected increase in growth and development pressures on the Central Coast area.	Supports the draft plan.	No	2a
12.	2	Please include more detailed maps for all islands, showing boat landing areas, beaches and proposed walkways (where applicable), as well as distribution of introduced plant species, and sensitive areas that should not be accessed.	Such detail is beyond the scope of an area management plan.	No	2c
13.	1	Some colour photos in the final management plan would be appreciated. Nomenclature	Noted.	No	2f
1.	1	As Noongars did not have a written language, it does not mean a lot to refer to variant spellings. Why not just state that the spelling 'Noongar' is how the Noongar Land Council styles itself?	Current text considered appropriate.	No	2d

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
		<b>PART A. INTRODUCTION</b>			
		<b>1. Overview</b>			
1.	1	Brief, but to the point.	Supports the draft plan.	No	2a
2.	1	There seems to be a discrepancy between the 38 islands stated in the Introduction and 40 islands stated in Visitor Access.	Text amended to clarify.	Yes	1e
		<b>2. Key Values</b>			
1.	1	Suggested addition to the list of Key Values: The ecology of these islands is dynamic and may provide a sensitive indicator of environmental changes taking place in the coastal seas, both as a result of changes in the Leeuwin Current and as a result of increasing urbanisation along the mainland coast.	Noted. Text amended.	Yes	1e
2.	1	Suggested addition to the list of Key Values: The marine environment of the central west coast is strongly transitional and sensitive to variations in the Leeuwin Current. The observed changes in seabird populations in this region indicate that the islands are of scientific importance for measuring ecological shifts caused by changes in ocean climate.	Noted. Text amended.	Yes	1e
		<b>3. Public Participation</b>			
		<i>No submissions</i>			
		<b>PART B. MANAGEMENT DIRECTIONS AND PURPOSE</b>			
1.	1	Well explained and supported.	Supports the draft plan.	No	2a
		<b>4. Vision and Goals</b>			
1.	1	The draft management plan provides a sound overall vision for the Turquoise Coast Islands and has the support of the Department for Planning and Infrastructure subject to the comments regarding the boundary of Reserve 19206 being clarified. (see section 6 of this document)	Support for the draft plan. Note: Reserve 19206 is situated on the mainland and is not within the scope of this management plan.	No	2a
2.	1	The vision statement must conform with the requirements of the Wildlife Conservation Act with respect to the disturbance (ie. taking) of wildlife.	CALM manages reserves according to the CALM Act and the Wildlife Conservation Act.	No	2b
3.	1	The vision statement needs to reflect that "recreation", if it is to occur on this category of land, must be focussed on the formal or informal enjoyment of natural history and that the use of the islands does not encompass other boat or beach-based activities, whether these are deemed to be "ecologically sustainable" or not.	Nature reserves are managed according to their gazetted purpose and this governs the activities that are considered appropriate.	Yes	1e
4.	2	These nature reserves are not being managed according to their legislative purpose of nature reserve.	CALM manages nature reserves according to their gazetted purpose.	No	2b

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
		<p><b>5. Key Result Areas and Key Performance Indicators</b></p> <p>The move to auditable performance objectives and measures is a desirable one. However, with respect to biological conservation KRAs, these have to be based on a sound understanding of the ecological processes in operation. The use of "island biogeography theory" as the underlying concept for this system of small continental islands is not entirely appropriate and has generated spurious KPIs (see comments Section 8 of this document).</p>			
1.	1		The KPIs have been reviewed and text amended in relation to island biogeography.	Yes	1e
		<p><b>6. Land Tenure and Reserve Boundaries</b></p>			
1.	1	The area to the south of Jurien Bay shown on Maps 1 & 2 as 'reserves for the purpose of parkland, recreation and letting of cottages' may need to be reconsidered or amended to reflect recent planning being undertaken for the future development of Ardross lands in this area. If it is proposed that the foreshore land area (shown in Map 1 as part of reserve 19206) be part of the Island Nature Reserves then this may limit the recreation opportunities of the foreshore and lead to possible conflict with the adjoining proposed residential and tourist land uses.	The maps included in the plan show the islands addressed by the plan and the adjoining coastline for context. The reserve in question is outside scope of the draft plan.	No	2c
2.	1	The proposed Jurien Bay Marine Park should be extended north to the Beagle Islands NR to include all the islands within the marine park. This would also provide a continuous reserve for wildlife adjacent to the existing Beekeepers NR.	Outside scope of the draft plan. Comment will be referred to the relative body.	No	2c
		<p><b>7. Land Classification</b></p>			
1.	1	It is impossible to comment on the land classification proposal without maps of the islands marked with the position of beaches and proposed walkways. These should be shown in the management plan.	The need for walkways will be assessed through monitoring. Detailed access plans will be developed prior with public consultation as necessary.	No	2c
2.	1	Access plans need to be done before any Section 62 Notices can be issued for the limited access islands. This should have been completed in developing the draft management plan as at present the respondents have no detail as to what is proposed.	The level of detail is considered sufficient for a management plan. The plan recommends that detailed access plans be prepared.	No	2d
3.	1	The use of temporary control areas is unlikely to solve the problem of protecting species that nest on beaches or creche on beaches after nesting in rocky or vegetated areas. Some suitable beach and rocky shore areas need to be made limited access areas to provide for the maintenance of these species in the region. These limited access areas should be considered before the designation of the boat landing areas.	There is now also a provision under the <i>Conservation and Land Management Act Regulations 2002</i> (Regulation 44) to quickly facilitate the closure of an area of CALM-managed land if necessary. This requires the approval of the CALM Executive Director.	Yes	1c

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<b>PART C. MANAGING THE NATURAL ENVIRONMENT</b>					
<b>8. Biogeography</b>					
1.	2	Island Biogeography is not a good basis for island management. On small islands that are attractive as refuges to large populations of marine animals, the relationships between species and island area (as described by the theory of Island Biogeography) break down. Factors other than those of island biogeography will play a dominant role in driving ecological processes and determining conservation outcomes.	Noted. Plan amended.	Yes	1a
2.	1	The vegetation ecology on islands subject to natural disturbance would be better explained using "patch-dynamics" models rather than Island Biogeography.	Plan amended.	Yes	1a
3.	1	Much of the marine wildlife, and many of the plant species, are capable of dispersal throughout the system and therefore probably exist as components of regional meta-populations. The existence of a variety of meta-populations should change the focus of biological conservation. At least some of the objectives and KPIs should be based on measuring long term trends in populations in the region rather than on short term changes in species diversity on individual islands (as is proposed in the plan).	This comment has been considered in the revised KPIs.	Yes	1a
<b>9. Climate, Geology and Geomorphology</b>					
1.	1	The "Successive periods of glaciation and deglaciation" and "large fluctuations in sea level" were over by 10 000 years ago .	Text amended to clarify intent.	Yes	1e
2.	1	Human access can certainly accelerate the already rapid erosion of the islands.	Supports the draft plan.	No	2a
<b>10. Native Plants and Plant Communities</b>					
1.	1	Add reference for Keighery <i>et al.</i> (2002) for text	Reference added.	Yes	1e
2.	2	A seventeen year old survey is not ideal as a baseline as work on the islands off the Perth coast has shown that there have been marked changes in the vegetation during the past 25 years, especially on the smaller islands where seabirds nest (Rippey et al 1998, Abbott, Marchant and Cranfield 2000).	According to Keighery <i>et al.</i> (2002), it can be considered that the results of other researchers, combined with the results of this survey, comprise an acceptable baseline inventory of flora on the islands. Keighery <i>et al.</i> (2002) compares other researchers' flora survey results and provides evidence of changes in native species recorded by researchers.	No	2d
3.	1	The floral survey counted species present indicating biodiversity. Also of interest would be information regarding cover by plant species, and vegetation distribution. Ideally this sort of information should be recorded using GIS.	Keighery <i>et al.</i> (2002) includes a map of each island's vegetation cover.	No	2d
4.	1	Island vegetation is not in a steady or stable state but shows cyclical changes (Gillham 1961, Rippey 1998,2001).	Noted. This may be detected by the long-term monitoring of the islands' vegetation.	No	2b



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5.	1	Regular and frequent monitoring is necessary and key performance indicators based on maintenance of diversity or cover of native vegetation are inappropriate in the presence of cyclical vegetation changes on seabird nesting islands.	This comment was taken into account when revising the KPIs.	Yes	1a
6.	1	Should birds be encouraged at the expense of the vegetation or vice versa? Especially as if all the vegetation is destroyed the islands become much less suitable for nesting.	This issue was considered when determining management objectives for the islands.	No	2d
7.	1	Nitre Bush appears to have a competitive advantage over other woody shrubs where the substrate is cavitating (typically talus slopes), but on the Turquoise Coast Islands also occurs on dunes that are heavily undermined by seabird burrows.	Noted.	No	2a
8.	1	With the exception of the larger Boullanger Island the vegetation of the islands is quantitatively very different from the adjacent coastline.	Noted. Text amended to clarify.	Yes	1e
9.	1	Add to Key Points: There has already been significant change in the vegetation of some Islands (eg. Lancelin), with the loss of low woody native species and invasion by exotic annual grasses and iceplant <i>Mesembryanthemum crystallinum</i> .	Noted. Text amended.	Yes	1e
10.	1	Add to Key Points: Changes in vegetation structure caused by the invasion of exotic plants (Boxthorn, Ice Plant, grasses) have degraded seabird breeding habitat and possibly reduced the area suitable for the Lancelin Island Skink. Maintenance of habitat (ie. vegetation) structure should be the main objective of vegetation management on the Islands.	Noted. Text amended. This submission has also been considered in the revised KPIs.	Yes	1a
11.	1	Strategy 2. The greatest loss of native vegetation and weed invasion on the islands off Perth has resulted from increased bird populations, not visitors. Small islands not accessed by humans should therefore also be monitored, because excessive guano and trampling can render the environment unsuitable for some flora and fauna, and strongly favour others.	Noted. Text amended.	Yes	1e
12.	1	Management Targets: KPI "No loss of diversity or cover of native vegetation due to human impact over the life of the Management Plan." If this is to be monitored, maps must be included in the management plan showing the existing distribution of native vegetation.	Noted. The KPIs have been revised. Vegetation maps for each island are available in Keighery <i>et al.</i> (2002).	Yes	1a
13.	1	Add to Management Targets: Rehabilitate areas now dominated by introduced grasses on Lancelin Island by re-establishing native woody shrub species. <b>11. Native Animals and Habitats</b>	Text amended.	Yes	1e
1.	2	The draft appears to cover most issues, but several papers dealing with the vertebrate fauna of the area have not been cited. These references deal with issues of relevance to the management and conservation of the fauna. (list of references provided)	The reference list has been revised.	Yes	1e
2.	1	The west coast sea-lion population may be in continued slow decline, possibly due to a small, insular gene pool (N. Gales pers.com.).	Noted.	No	2b

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3.	1	Sea-lion pup production may not in itself be an adequate measure of trends in the sea-lion population. We would suggest that the maximum number of adult females at the three breeding colonies would provide a better indicator of recruitment in the population.	For most pinnipeds a suitable age-class for meaningful population surveys is new-born pups (Gales et al. 1993).  In addition, the sea-lion KPI has been aligned with that for the Jurien Bay Marine Park.	No	2e
4.	1	<i>Sminthopsis griseoventer</i> also occurs in Banksia Woodland on the adjacent coastal plain and on the South Coast.	Supports intent of existing text. Text amended to better reflect the intended meaning.	Yes	1e
5.	1	Dibblers may well eat House Mice.	It is currently unclear whether the house mice are a threat or a resource for island dibblers.	No	2b
6.	1	The guano-based detrital food chain on Lancelin Island may allow 6 lizard species, including <i>Ctenotus lanceolini</i> to co-exist on a relatively small land area (7ha). What are the species turnover implications of introducing <i>C. lanceolini</i> to other islands with equilibril lizard assemblages?	When selecting a suitable site for <i>C. lanceolini</i> translocation, various factors are taken into account, one of these being that the introduction will have no significant conflicts with other conservation values, nor lead to the demise or decline of any other species. Another factor considered is the absence of potential competitors. Niche competition is considered (if a species has a similar morphology, diet or activity patterns to <i>C. lanceolini</i> ). There are no obvious competitors to <i>C. lanceolini</i> recorded on these islands. The precautionary principle is followed and translocations closely monitored.	No	2d
7.	1	Update total bird species stated in the first sentence in consideration of the additions to Appendix 8.	Appendix 8 reflects the seabirds known to breed on the islands, rather than listing all of the birds observed on the islands.	No	2d
8.	1	Bird nesting sites may change each year, from island to island and really numbers need to be estimated throughout all the islands to obtain meaningful information about metapopulations rather than individual populations.	This comment was considered in revising the KPIs for the plan.	Yes	1e
9.	1	Seabird nesting affects the nature of the vegetation and its quantity and quality. Numbers of birds nesting appear to be increasing (Rippey 2002) in southern islands as well as on Lancelin Island. This can have a deleterious effect on the vegetation and poses a considerable management problem.	Text amended to reflect impacts of nesting birds.	Yes	1e

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
10.	1	In the vicinity of the Leeuwin Current, climatic changes potentially associated with the longer picture should be mentioned to the colonisation of islands by subtropical - tropical seabirds. It should be mentioned to create a dynamic picture over evolutionary time that enables us to appreciate that things as we know it may not be so in the future.	Noted.	No	2d
11.	1	Burrowing birds only make one annual breeding attempt which is very time and energy consuming (ie: increase time to build burrow, incubation and fledgling time) and that burrow trampling is often terminal.	The plan provides for the protection of burrowing birds through education of island visitors and by prohibiting access to vegetated areas and recommending the use of appropriate mechanisms under the CALM Act and the CALM Act Regulations 2002.	No	2d
12.	1	During fledgling time of burrow nesting species bright lights should be banned from near islands as birds are easily disorientated.	Outside the scope of the management plan.	No	2c
13.	1	Adjust 'egg and chick mortality can be increased...'	Text amended.	Yes	1e
14.	1	All islands should be monitored for changes in bird breeding populations, as changes have occurred dramatically on islands near Perth - both those that are accessible to the public and those that are not.	This comment has been taken into account when revising the KPIs for the plan.	Yes	1e
15.	1	Islands cannot be monitored in isolation. Some bird species nest on different islands in different years; so the chain of islands must be considered a unit.	This comment has been considered in the revised KPIs.	Yes	1e
16.	1	Studies in other parts of the world suggest that an inter-visible distance of about 300 metres between people and surface nesting sea-birds was necessary to prevent disturbance to colonies.	This issue will be considered when boardwalks and/or pathways are considered necessary. Closed areas could be declared over the area of beach necessary to protect nesting seabirds.	No	2d
17.	1	Temporary control areas for the protection of nesting seabirds will be difficult to implement, as birds will not start to nest in areas of disturbance, and, CALM would need to be aware that seabirds were starting to nest and act immediately.	There is now also a provision under the CALM Act Regulations 2002 (Regulation 44) to quickly facilitate the closure of an area of CALM-managed land if necessary. Text amended.	Yes	1c
18.	1	Pleased to discover that the island reserves extend to low water mark and that intertidal species will be monitored. The extension of reserves to low water mark creates the possibility of making sanctuaries or 'no-take' areas to protect abalone and other molluscs on the reefs of those islands on which landing is prohibited.	Noted.	No	2d
19.	1	If the reef platforms on the islands on which it is proposed to prohibit landing are not protected under CALM legislation, that they be designated 'no-take' areas under fisheries legislation.	The islands to which access is prohibited are currently gazetted to low water mark and are therefore managed under the CALM Act.	No	2d

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
20.	1	Since there is no baseline data, monitoring the impact of fishing and collecting is pointless unless some islands are closed to collecting so that fished and non-fished areas can be compared over say a five-year period.	The effect of fishing and collecting will be monitored over the term of the plan, in conjunction with the Jurien Bay Marine Park Management Plan.	No	2d
21.	1	Add Key Point: The regional Rock Parrot is dependent on the Islands for secure breeding sites. Also important breeding sites for Ospreys (numerous) and White-breasted Sea Eagles (eg. Tern Island).	Text amended.	Yes	1e
22.	1	Possibly add strategy- map suitable sites for burrow nesting birds and restrict access/establish boardwalks.	Noted.	No	2d
23.	1	Strategy 4. Critical Approach distance - note the existence of 2 issues, a) where bird flies away b) where animal is stressed - elevated heart rate etc. but stays put both can affect breeding performance etc.	Noted.	No	2d
24.	1	Add Management Target 3: The small (prohibited access) islands do not have the same range of breeding seabirds (or population sizes) as the larger (limited access) island, so this KPI is nonsense. The smaller islands cannot be used as "controls" for the larger ones.	This comment was considered in the revision of the plan's KPIs.	Yes	1e
25.	1	Suggested KPI: Surface-nesting seabirds, sensitive to human disturbance (Pacific Gull, Crested Roseate, Caspian and Fairy Terns), continue to nest on Islands with limited access.	This comment was considered in the revision of the plan's KPIs.	Yes	1e
26.	1	Suggested KPI: Approach distances to surface-nesting seabirds decrease or remain constant (a measure of increasing tolerance and habituation). The Bridled Tern would be the most convenient species to monitor (Dunlop 1996).	This comment was considered in the revision of the plan's KPIs.	Yes	1e
27.	1	Suggested KPI: The number of seabird species breeding in the Turquoise Coast Islands (collectively) is stable or increasing.	This comment was considered in the revision of the plan's KPIs.	Yes	1e
		<b>12. Landscape</b> <i>No submissions.</i>			
		<b>13. Fire</b> <i>No submissions.</i>			
		<b>14. Environmental Weeds</b>			
1.	1	The ranking of weeds in the <i>Environmental Weed Strategy for Western Australia</i> is based on mainland/large island-low nutrient, low natural disturbance ecosystems. Introduced plants may behave in different ways on small islands dominated by colonial marine vertebrates. The significance of weeds should be re-evaluated with small island ecology in mind.	Text amended. The significance of weeds on the islands has been revised. The <i>Environmental Weed Strategy</i> is considered an adequate guide to the control methods available for environmental weed management.	Yes	1e

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
2.	1	Seabird nesting islands are prone to weed invasion even without human visitation and need careful monitoring. <i>Malva dendromorpha</i> poses a special threat, particularly at risk are those islands on which the native <i>M. australiana</i> grows (32/38 islands covered by the plan). Regular and frequent monitoring is necessary and key performance indicators based on maintenance of diversity or cover of native vegetation are inappropriate in the presence of cyclical changes.	The <i>Environmental Weeds</i> section of the plan has been revised. This comment was also considered in the revision of the plan's KPIs.	Yes	1e
3.	1	Introduced Malvaceae, which are can be devastating on small islands and eliminate the native <i>M. australiana</i> , should be removed if they appear on the Turquoise Coast Islands.	Noted, text amended.	Yes	1e
4.	1	Weeds also stabilise areas in which burrow nesters breed.	Noted. This emphasises the importance of combining weed removal with the re-planting of native species, as recommended in the plan.	No	2d
5.	1	Lycium urgently requires removal from the islands. If cover by introduced species is to be monitored the management plan should have a map showing their distribution.	The plan proposes the systematic removal of Lycium. Detailed weed maps for monitoring purposes are outside the scope of a management plan.	No	2c
6.	1	How will species number and cover be monitored (method and periodicity)?	This level of detail is outside the scope of a ten-year management plan.	No	2c
7.	1	Management Target 1 does not acknowledge the current need for remedial action where habitat values have already diminished.	Text amended.	Yes	1e
8.	1	Add to Management Targets: Eliminate African Boxthorn from the Turquoise Coast Islands.	This comment was considered in the revision of the KPIs.	Yes	1e
		<b>15. Introduced Animals</b>			
1.	1	There is no mention made of the huge impact of feral bees on the coastal limestone cliffs. Many nest sites for birds (owls, hawks, ducks) have been taken over by feral bees. Controls should be put in place to prevent further detrimental impacts from this feral species.	There is no evidence to suggest that feral bees have had a detrimental effect on the islands to date. Feral bee hives will be destroyed as they occur (opportunistic destruction).	No	2d
		<b>PART D. MANAGING OUR CULTURAL HERITAGE</b>			
		<b>16. Cultural Heritage</b>			
1.	1	Noongars did not eat gastropods; none of the early explorers' accounts mention this. A reference is required if this is indeed so.	Information sourced from the <i>Jurien Bay - Regional Perspective</i> (CALM 2000) indicates that the middens showed signs of limpet, turban whelk, abalone and chiton shells.	No	2d

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2.	1	'significance of the islands to Noongar people'. Noongars had no watercraft and did not swim though they would wade into the water. Thus it is hard to determine what 'significance' refers to - is it possible that the islands were regarded as places where departed spirits went? If this is so, then it should be stated.	Key point in text is ambiguous and caused confusion. Refers to the need to determine whether the islands significant to Noongar people in any way. Text amended to clarify.	Yes	1e
3.	1	I wish more information was included on how all the islands were named. The brief history was good for those islands mentioned-but could gone further on the history of all the others.	Current level of detail considered appropriate.	No	2d
4.	1	The military history of the islands could be mentioned and can be interpreted.	Noted.	No	2d
<p><b>PART E. MANAGING RECREATION AND TOURISM</b></p> <p><b>17. Visitor Access</b></p>					
1.	1	A detailed public access plan would need to: map the spatial distribution of surface-nesting seabird colonies and critical approach distances around areas occupied (sometimes intermittently) by sensitive species; and map other habitat areas that may be impacted by visitors (eg. burrowed areas, beach-nesting areas, locations vulnerable to erosion, limestone overhangs, undercut cliff edges and so on). From this the following needs to be determined: areas that will be open to public access; the recreational activities that will be acceptable; the placement, where necessary, of hardened walkways and lookouts; the location and capacity of designated boat access areas; and, the on-island information and interpretive aids necessary to support the land classification.	Noted. A strategy is now included in relation to detailed access planning.	Yes	1d
2.	1	To gauge the effectiveness of proposed measures to manage visitor access, there is a need to estimate plant cover as well as species numbers and the necessity of making vegetation maps of the area if possible.	Support for the plan.	No	2b
3.	1	Useful comment on the design of tourist access cannot be given as no sketch maps are shown in the draft management plan.	More detailed access planning is to be undertaken as necessary. Community consultation will be part of this process where appropriate.	No	2e
4.	1	The areas proposed for prohibited access have largely been limited to islands or rocks that are either remote and/or difficult to access. Where access prohibition is proposed for islands where access is possible (eg. Beagle Islands), we recognise the overriding conservation values inherent in the plan.	Support for the plan.	No	2a
5.	1	Our support for the proposed levels of access does not imply ongoing support for further loss of access. The incremental loss means that we are more likely to oppose any future attempt to further limit access to those islands for which day use is proposed. Recreational fishers highly value their ability to access these locations. While we recognise the need to manage island conservation values we will insist on the level of access, (ie. to intertidal reef platforms and beaches), which is proposed in the current draft, continuing into the future.	Support for the plan. Significant changes to the visitor access will be referred for public comment as necessary.	No	2a

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
6.	1	I support the idea of the 30 islands being declared as prohibited access areas, but also am pleased that some islands are proposed limited access - provided that access is controlled to prevent unnecessary erosion and harm to wildlife and their nesting sites etc.	Support for the plan.	No	2a
7.	1	We support the proposal to classify Wedge Island as limited access.	Support for the plan.	No	2a
8.	1	We do not support the proposal to classify the periodic sandbar which connects Wedge Island to the mainland as a temporary control area. The demarcation will be impossible to manage and will not achieve the intended outcome. An arbitrary line on the sand would exacerbate current conflict of where the island commences and hence where restrictions commence. The solution suggested is to create a physical barrier (eg large limestone rocks) on the solid intertidal reef area along the high water mark.	The track on Wedge Island has been closed to vehicles. Strategy relating to sandbar as temporary control area removed.	Yes	2b
9.	1	People utilising reef platforms cause significant disturbance to seabird colonies in some locations. These areas should be identified for closure in the access plan for each limited access island.	Closed areas may be designated to prevent access for the protection of nature conservation values. Detailed access planning is proposed in the final management plan.	Yes	1d
10.	1	The access plans for each of the limited access islands should examine intertidal and beach areas that should be declared prohibited entry to protect both marine life on the nature reserve and to reduce disturbance to on island wildlife.	See response for comment above.	Yes	1d
11.	1	Monitoring of visitor access would have to be ongoing to assess impact.	Agreed. Text amended.	Yes	1e
12.	1	Revised Draft CALM Policy Statement No. 18 does allow boating in terrestrial and marine reserves, but only by way of a management plan or interim management guidelines after consideration of the likely environmental and social impacts of any activity or where there is a pre-existing arrangement in place.	Noted. Text amended.	Yes	1c
		<b>18. Recreation Use and Opportunities</b>			
1.	1	An increasing permanent and seasonal/tourist population will increase demand for recreational access to and use of the foreshore reserves and offshore waters and recreational facilities will need to be well planned and managed.	Agreed. Recreational facilities are planned in the context of the whole District and Region.	No	2d
2.	1	It's good see proposed boardwalks to eliminate adverse effects on nesting birds- especially important for burrow nesters.	Support for the plan.	No	2a
3.	1	Largely unmanaged uses of island beaches include surfing, skiing/scurfing, jet-skiing, wind-surfing, beach sports, kite flying, erection of shelters, consumption of alcohol and so-on. Why are we pretending that this is not happening? These activities are not consistent with the purpose of a Nature Reserve and many are unlawful.	Inappropriate use of the nature reserves is determined by the islands' purpose and is managed accordingly. Appropriate use of the nature reserves will be encouraged through education, information and interpretation. Activities in the marine park are designated according to zones.	No	2d

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
4.	1	The visitor pressures on Lancelin Island at least are already a significant problem.	Noted. The effect of increasing visitor numbers will be monitored. The land classification scheme can be used to minimise effects as can conditions placed on licence holders. The plan allows for management of visitor numbers through site hardening etc.	No	2b
5.	1	The policing of visitor behaviour on the islands needs clarification.	CALM encourages appropriate behaviour through an information, education and interpretation program.	No	2d
6.	1	An increase in water based activities will occur and potential future conflicts with the management zones of the Marine Reserves immediately adjacent the main towns may occur requiring a greater policing and management effort by CALM.	Outside the scope of this management plan for the islands.	No	2c
7.	1	Design and location of facilities and signage must be supported with monitoring (community) and enforcement (CALM) presence.	Noted.	No	2d
<b>19. Tourism and Commercial Operations</b>					
1.	1	The use of the islands for ecotourism with qualified tourist operators, commercial or volunteer, would be preferable to unlimited access.	Noted.	No	2a
2.	1	Nature-based tourism needs to be defined in the context of the islands.	Part E of the plan does so.	No	2d
3.	1	Commercial tourist visitors shouldn't be allowed exceptional rules from that of the public.	All visitors to the islands are subject to the same restrictions. In some circumstances, licensing is advantageous for management and allows further conditions to be placed on the commercial operators visiting the islands.	No	2d
4.	1	Commercial operators should be encouraged to support research (ie. lifts to the island or money for research) and should keep a log of visitor numbers and wildlife spotted (basic monitoring).	This is already a requirement of the licence holders under the general conditions of both marine and terrestrial licences (condition i and xiv).	No	2d
5.	1	While this section is clearly aimed at terrestrial operators, there is also likely to be interest in the inter-tidal areas, which is potentially of concern to the Dept of Fisheries. Need to ensure appropriate management of the inter-tidal area between high and low water mark, possibly through a MoU between CALM and Fisheries.	CALM liaises with relevant government Departments as necessary in the management of reserves.	No	2d
6.	1	As a potential developer we seek to have an option to incorporate sustainable activities involving Wedge Island and the Buller, Whittell and Green Island Nature Reserve. The considerable investment in providing visitor services in these areas under a CALM management plan needs to be recognised.	Addressed in the <i>Tourism and Commercial Operations</i> section of the plan.	No	2d



COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
7.	1	Is it possible that there may be a need to issue a lease in the future for a ground-based operation associated with tours (eg. a tent-based campsite on one of the islands to accommodate overnight tours or fishing/diving tours)? If so, wording regarding commercial leasees may be required, perhaps in Key Points on p27, in the third dot point. Amend this to say "Commercial operations will be managed through the issuing of limited licences and leases with strict conditions"	Leases are not considered appropriate for the islands, licences can adequately cover all appropriate activities and uses. Note that the islands are day-use only therefore no island accommodation will be necessary.	No	2f
8.	1	Has the number of Marine Mammal Interaction licences altered recently?	Text amended.	Yes	1e
9.	1	para2. last sentence, suggest alteration to text "...is permitted (Appendix 3) in accordance with the Conservation and Land Management Act and Regulations, subject to...specified in the Marine Tour Operator Handbook (CALM 1999)".	Text amended.	Yes	1e
10.	1	para4. first sentence, suggest addition of text: "The licensing of <i>commercial tour operators to access</i> the islands..."	Text amended.	Yes	1e
11.	1	para5. first sentence, suggestion: "The islands will be monitored and if commercial tour operators are <i>permitted</i> , a <i>precautionary approach will be taken to ensure that there is no significant impact from these operations</i> . Therefore the number of licences would be limited and licence conditions developed to ensure this. Conditions include..."	Agreed. Text amended.	Yes	1e
12.	1	All of the strategies are dependant on baseline monitoring of the islands and strategies 2-6 are dependant upon strategy 1.	Agreed.	No	2d
13.	1	In our view CALM's management of commercial tourism on islands, particularly Carnac Island, has been poor. The draft management plan for the Turquoise Coast Islands seems to leave it open for another Carnac style debacle.	The plan proposes a precautionary approach to tourism and commercial operations on the islands.	No	2d
14.	1	We believe the following steps are necessary for introducing commercial tourism regardless of CALM's current policy and ad hoc. licensing procedures. 1) Generic product outlines need to be developed that support the interpretation plan for the islands and enhance research, monitoring and enforcement capacity. 2) A pre-cautionary limit needs to be set on the number and flow of people on the islands (commercial tour and informal recreational). Small numbers frequently and predictably are preferable to large groups irregularly. 3) Licences and conditions should ensure that the cap on the number and time-density of visitors is maintained. 4) Expressions of interest should be sought from commercial tourism proposals meeting the generic product specifications. 5) The best proposals, meeting the numbers cap, should be licensed and accredited as eco-tourism products for the islands. 6) The limited entry licences should be perpetuity renewable subject to performance measures and compliance. Licences should be made tradeable.	Noted. Support points 1-4. Point 5, CALM doesn't accredit operators, rather it gives benefits to tour operators who achieve industry-based accreditation programs. Point 6 is inconsistent with government policy. Licences are for 5 plus 5 years maximum and can be renewed after the first term ends but must be advertised after expiry of the second term. Licences are not tradeable. This is government policy. Licence replacement can occur subject to consultation with the Conservation Commission of Western Australia and with the approval of the Minister for the Environment.	No	2d
		<b>20. Recreational and Commercial Fishing and Collecting</b>			
1.	1	The planning considerations behind the proposed plan have reasonably accommodated the needs of recreational fishers.	Support for the plan.	No	2a

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
2.	1	The islands are gazetted to low water mark, therefore include inter-tidal reef platforms, provide habitat for the Western Rock Lobster, this is a significant fishery in the area and is subject to specific management measures by the Dept of Fisheries. There is potential for confusion with respect to the management of the inter-tidal area by CALM and the Dept of Fisheries. It is essential that issues, for eg. costs associated with management of the rock lobster industry, be carefully identified and addressed, as has been the case for the Abrolhos Islands, and the proposed Jurien Bay Marine Park.	CALM will liaise with the Department of Fisheries on management of intertidal areas as necessary.	No	2d
3.	1	The Club strongly supports the proposal that fishing and collecting be controlled by declaring a Fisheries Notice over the area to be protected.	Support for the plan.	No	2a
4.	1	It is unfortunate that the Fisheries Resource Management Act takes precedence over the Wildlife Conservation Act, thus fragmenting control over the islands and reefs.	Noted.	No	2b
		<b>21. Visitor Safety</b>			
1.	1	There is a possible human safety problem posed by collapse of limestone cliffs - a factor ranking high in the minds of authorities on the islands off Perth.	This is addressed in the text.	No	2d
		<b>22. Domestic Animals</b>			
		<i>No submissions.</i>			
		<b>PART F. INVOLVING THE COMMUNITY</b>			
		<b>23. Information, Education and Interpretation</b>			
1.	1	I would appreciate greater detail on the information/education approach that is to be taken.	Appropriate programs will depend upon the requirement at the time, as visitor numbers are expected to increase with the new road and mainland development. The development of detailed information, education and interpretation program is now a requirement of the plan.	No	2c
		<b>24. Working with the Community</b>			
1.	1	As a general policy the Conservation Sector would like to see more formal, empowered and accountable "co-management" structures developed for the management of lands vested in the Conservation Commission. (see Appendix 2 of this document)	Noted. Text amended.	Yes	1d
2.	1	Volunteers can be of great value in monitoring areas of natural history interest and also in effecting management measures requiring intensive individual action. Groups such as the Friends of Lancelin Island are to be encouraged and perhaps other groups could be formed in other centres such as Cervantes, Jurien Bay and Leeman.	Agreed.	No	2d
3.	1	Just as Fisheries Volunteers play an important role in educating and informing the public as well as in controlling their activities, voluntary honorary rangers could be trained to keep an eye on the islands during the summer months when visitor numbers are likely to be high.	Noted.	No	2c

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
4.	1	The Friends of Lancelin Island are concerned that the proposals in the draft plan will lead to a community focus on those islands that happen to be in the proposed Jurien Bay Marine Park to the detriment of the management needs of those islands (many at least as important for conservation) north and south of it. We propose that there should be two Advisory Committees, one for all the islands and the other for the waters of the Marine Park (if implemented?). Our preferred structure is shown schematically (see Appendix 2).	Text amended.	Yes	1d
		<b>PART G. MONITORING AND IMPLEMENTING THE PLAN</b>			
1.	1	Fully supportive.	Supports the plan.	No	2a
		<b>25. Research and Monitoring</b>			
1.	1	It would be extremely valuable if baseline data could be established, recording key ecological information at the start of the 10 year plan. (Not after 2 years). Monitoring would then involve updating the data for comparison.	Agreed. Text amended.	Yes	1d
2.	1	Please detail the monitoring system to be instituted. What factors are to be monitored, how often and at what time of year etc? Photography from a low-flying aircraft gives an effective record of gross changes, but ground-truthing is an essential adjunct.	The type of monitoring is considered too detailed information for a ten-year management plan.	No	2c
3.	1	If monitoring public access to the islands, the public should be aware of restrictions to their use before they leave the mainland.	Agreed. Text amended.	Yes	1d
		<b>26. Administration</b>			
		<i>No submissions.</i>			
		<b>27. Performance Assessment</b>			
		<i>No submissions.</i>			
		<b>REFERENCES</b>			
1.	1	Add reference for Appendices 5 & 7.	References added.	Yes	1e
		<b>APPENDICES</b>			
1.	1	Request for more baseline data, especially visitation pressure for the islands needs to be quantified.	Collection of baseline information is a requirement of the plan.	No	2d
2.	1	App1. 'Dept of Minerals and Energy' should read 'Dept of Mineral and Petroleum Resources'	Text amended (now known as Department of Industry and Resources).	Yes	1e
3.	1	App 5. Add source for Appendices 5 & 7	Text added.	Yes	1e

COMMENT NUMBER	NUMBER OF SUBMISSIONS	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	PLAN AMENDED	CRITERIA
4.	3	App 8. Request complete bird list in the Appendix and suggested an addition, questioned whether other island surveys might be incomplete (for Lancelin Island: Breeding- Little Shearwater; Regular Visitors- Peregrine Falcon, Little Eagle, Black-shouldered kite, White-bellied sea Eagle, Rock Parrot) Please include all 64 bird species in the final plan. Researchers and Friends of Lancelin Island members have recently discovered a colony (est. 20-25 pairs) of Little Shearwaters breeding on Lancelin Island and autumn/winter nesting Roseate Terns on Edwards Island.	Noted. Text amended where appropriate.	Yes	le

## **APPENDIX 1.**

### **Submitters to the Draft Management Plan**

#### Individuals

I. Kirsten

D. James

E. Rippey

J. Rippey

#### Community Organisations

Friends of Lancelin Island

Recfishwest

Conservation Council

Western Australian Naturalists' Club

Wedge Island Protection Association

#### State Government

Department of Conservation and Land Management (x 3)

Water and Rivers Commission

Department for Planning and Infrastructure

Department of Minerals and Petroleum Resources (now Department of Industry and Resources)

Department of Fisheries

Western Australian Museum

## APPENDIX 2.

### Proposed Co-Management Structure (see Section 24)

