Future Directions: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo Coast

Prepared for the Western Australian Planning Commission by the Department for Planning and Infrastructure as part of the public consultation process for the Carnarvon-Ningaloo Coast Regional Strategy



July 2003

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Foreword

The release the *Future Directions: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo Coast* provide the public with an important opportunity to have a say into the future use and management of the coastal area between Carnarvon and Exmouth.

The Future Directions scenario is the first step in identifying a sustainable plan to



manage the increasing visitor numbers, demands for services and uncontrolled access that is having a significant environmental impact on this section of coast.

The Future Directions scenarios have been prepared with detailed input from the steering committee and technical advisory group who reported to the Western Australian Planning Commission. A community stakeholder advisory group has provided input into the vision and broad principles for the future of the coast.

The feedback the Western Australian Planning Commission receives will be used an important component in the formulation of the draft Carnarvon-Ningaloo Coast Regional Strategy.

The regional strategy will provide a framework for future land management, tourism and recreation development, to ensure an integrated and sustainable future for the Carnarvon-Ningaloo Coast. The regional strategy will also assist in the determination of a conservation and recreation coastal reserve for future generations.

The Government is also committed to progressing a World Heritage nomination for the Ningaloo coast and this document will assist that process.

The *Future Directions: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo Coast* paper is being released in for a two-month public comment period.

For your views to be taken into account, please take the time to consider these scenarios and provide your comments to the Western Australian Planning Commission.

filled

Dr Geoff Gallop MLA **PREMIER**

Hon Alannah MacTiernan MLA MINISTER for PLANNING and INFRASTRUCTURE

How to make an effective Public Submission on the

Future Directions: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo Coast

The purpose of releasing the Future Directions paper is to seek public reaction to the various scenarios expressed in this document. This will allow the Western Australian Planning Commission to be informed of the community's views relating to the future land use along the Carnarvon-Ningaloo Coast prior to preparation of the draft Carnarvon-Ningaloo Coast Regional Strategy.

Receipt of submissions will be acknowledged in writing and addressed in the submissions report. All submissions will be treated individually and will receive full consideration in the review process. Your submission can be as short or long as you consider appropriate, but if your submission is long it would be appreciated if you could summarise your major points.

An effective submission should:

- clearly state your opinion on the information and proposals in the report;
- state the reasons for your opinions;
- if possible, state how your concerns could be solved or outline any suggestions for alternatives;
- · list any references to data that could be used to support your opinion; and
- if relevant, include the section and page number of the report to which your comments refer.

A reply paid public submission form is included in this document for your convenience. If you prefer to make a submission in a different format, please remember to include the relevant details as outlined on the submission form.

The submission period closes on Friday 12th September 2003.

If you do not use the reply paid submission form provided, please send your submission to:

Future Directions: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo Coast Western Australian Planning Commission Albert Facey House 469 Wellington Street PERTH WA 6000

by facsimile to: (08) 9264 7566

by email to: carnarvon-ningaloo@dpi.wa.gov.au

If you have any queries, please contact the Infoline on 1800 626 477

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The Future Directions: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo Coast

Coa	Future Directions: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo ast paper outlines a series of scenarios for the future use of the coast. Please indicate your ference to the following questions:
1.	Should all large-scale and high-impact developments or infrastructure provision (either residential, commercial or tourist) be located in Carnarvon or Exmouth: \Box YES \Box NO
2.	What size population do you believe Coral Bay should be planned to accommodate? \Box 2,500 \Box 3,000 \Box 4,500 \Box Other (please specify)
3.	Do you believe planning for more than 2,000 people at Mauds Landing in addition to Coral Bay is appropriate? \Box YES H_{NO}^{OO} RAWN
4.	Which Scenario do you prefer?Scenario AScenario BScenario CScenario DScenario ENone
	Your Reason:
5.	How many sites do you believe should be developed as new or expanded as either primary or secondary coastal tourist nodes (as described in the paper)?
6.	Which coastal tourist nodes from those listed below should caterfor this future tourist use?YESNOBlowholes SettlementYESNONingaloo Homestead PrecinctYESNOGnaraloo Homestead PrecinctYESNOQuobba Homestead PrecinctYESNORed Bluff (Quobba)YESNOWarroora Homestead PrecinctYESNO3 Mile Camp (Gnaraloo)YESNOYardie Homestead Caravan ParkYESNOCardabia Homestead PrecinctYESNOLighthouse Caravan Park
7.	Do you believe all camping should be in planned and formalised areas (such as those provided in Cape Range National Park)? \Box YES \Box NO
8.	Do you believe that some areas of the coast (Map 1) should have limited or no vehicular access to give a "remote" visitor experience and provide environmental refuge areas? \Box YES \Box NO
9.	 Do you believe it would be appropriate to expand the current fish refuge areas from 6% to protect fish stocks and enable sustainable resource management? □ YES and my suggested area would be: □ 20% □ 30% □ 40% □ 50% □ Other □ NO
10.	Do you believe there are sufficient boat access points along the coast (formal boat ramps and identified beach launching areas)? \Box YES \Box NO Where are they required?
11.	Do you support the existing management model (CCWA/MPRA) for managing marine or national parks in the study area? Yes No Which of the nominated alternatives do you prefer? Wet Tropics WHA Rottnest Island Phillip Island Great Barrier Reef Shark Bay WHA Other
12.	Who would you like to see involved in the co-operative, on-the-ground management of the coast? CALM Fisheries local government Gnulli Indigenous Group Pastoralists Other

Thank you for your time

Fold here and moisten gum to seal

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	Map 1: Future Directions: Consolidated Scenarios	Sleeve at Rear



1. INTRODUCTION

The feedback on the Future Directions: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo Coast to the Western Australian Planning Commission will be an important component in the formulation of the draft Carnarvon-Ningaloo Coast Regional Strategy.

The regional strategy will provide a framework for future land management, tourism and recreation development, to ensure an integrated and sustainable future for the Carnarvon-Ningaloo Coast. The Western Australian Planning Commission currently is undertaking the draft Carnarvon-Ningaloo Coast Regional Strategy to develop a sustainable land use framework for the Carnarvon-Ningaloo Coast which will assist Government to ensure that significant values of the area are protected. The Government actively is supporting the nomination of the area for World Heritage status and approval will be sought from Cabinet shortly to commence the public consultation on the proposal.

The Commission is involved in an open and inclusive planning process guided by a steering committee which includes all the major regional stakeholders. In addition a community stakeholder advisory group, local government and government agencies have provided input.

The proposed Coral Coast Marina Development has focused attention on this area. The Environmental Protection Authority recommended that a planning framework is required for potential development along and use of the Ningaloo Coast.

The current accommodation facilities for the workers in Coral Bay are sub-standard and a matter of concern. Work is under way to ensure that land for lessee worker accommodation will be available once the sewerage is connected. Pastoral lessees were notified in November 2002 of areas to be excluded from leases when they are renewed in 2015. The exclusions proposals range from a 2km-wide coastal strip adjacent to the existing marine park and current proposed extensions, to a 1km-wide coastal strip adjacent to areas being examined as proposed new extensions to the marine park.

The pressure on the Carnarvon-Ningaloo Coast has built up over many years and the Government is committed to protecting the potential World Heritage values of the area through the identification of sustainable planning outcomes, making resources and infrastructure available to protect the values and achieve long-term security of this rare natural resource for future generations of Western Australians.

The Government has allocated \$7.6 million for the provision of sewerage in Coral Bay. Earthworks are due to commence in the near future. The provision of public services to Coral Bay will support the orderly and sustainable development of the settlement and means that other improvements such as provision of appropriate workers' accommodation can be implemented.

The Shire of Carnarvon had sole control over proposed development at Coral Bay until the State identified during the preparation of *Coral Bay Taskforce Report* that the shire should institute a moratorium on development due to environmental degradation and unsuitability of infrastructure services within Coral Bay.

2. STUDY AREA

While the study area for the draft Carnarvon-Ningaloo Coast Regional Strategy extends north from the town of Carnarvon to the Exmouth Gulf and includes all land west of the North West Coastal Highway and extends to the western seaward boundary of the proposed and existing marine park, this Future Directions paper focuses on the coastal portion of this study area (Figure 1).

3. PURPOSE

This Future Directions paper is the first step being undertaken by the Western Australian Planning Commission in the process of developing a regional strategy for the Carnarvon-Ningaloo Coast. Submissions submitted as a result of this public consultation exercise shall provide guidance in the preparation of the draft Carnarvon-Ningaloo Coast Regional Strategy.

The purpose of the draft Carnarvon-Ningaloo Coast Regional Strategy is to:

- Review the Gascoyne Coast Regional Strategy and incorporate the recommendations of other relevant planning documents, including the Exmouth-Learmonth (North West Cape) Structure Plan, relevant statements of planning policy and the draft Focus on the Future – Western Australian Sustainability Strategy.
- Co-ordinate with other concurrent planning activities in the study area such as, the *Ningaloo Marine Park Management Plan, Cape Range National Park Management Plan,* Ramsar listings as wetlands of international significance and (possible) World Heritage nomination;
- Identify the most appropriate and sustainable long-term tourism and development options for the coast within the study area;



Figure 1: Study Area



• Western Australian Planning Commission •

- Identify and recommend the preferred vesting and management options for the conservation and recreation strip along the coast;
- Prepare revised structure plans for Carnarvon and Exmouth;
- Prepare settlement or site plans for Coral Bay and the future Blowholes tourist node;
- Prepare environmental and planning guidelines for tourism development on the Carnarvon-Ningaloo Coast; and
- Prepare an implementation strategy to achieve sustainable outcomes for the study area.

The strategy is guided by the steering committee with input from a community stakeholder advisory group (community representation) and the technical advisory committee. The community stakeholder advisory group has developed a vision for the Carnarvon-Ningaloo Region (see Section 4).

4. VISION

The Gascoyne Coast Regional Strategy outlined the following vision for the region:

"To develop the [Carnarvon-Ningaloo Coast] into a tourism region of international significance focussing on its unique natural features. This would be achieved in a manner that is ecologically sustainable, retains the sense of wilderness and provides local and regional economic and social benefits. The development of existing and new industries which are complementary to this vision will be encouraged."

Carnarvon-Ningaloo Coast community stakeholder advisory group has proposed the following community vision¹ :

> "The Carnarvon-Ningaloo Coast is an internationally recognised sustainable (social, economic, environmental and spiritual) success, which combines the preservation of ecosystems with low impact tourism. This is achieved through a management plan for conservation and public usage that is well funded, protected by legislation and supported through education and the wisdom of heritage."

¹A copy of the community stakeholder advisory group's Visioning Workshop Outcomes Report Feb 2003 is available on the Commission's website www.wapc.wa.gov.au.



5. GUIDING PRINCIPLES FOR THE FUTURE OF THE CARNARVON-NINGALOO COAST

The following guiding principles will be used in planning for tourism and other land uses on the Carnarvon-Ningaloo Coast whilst preserving, enhancing and protecting the environment for future.

Sustainable Development

Meeting the needs of current and future generations through simultaneous environmental, social and economic improvement.

Community Aspirations

Community aspirations are essential to the strategy as these are the desired outcomes of the community in relation to the study area. The community of the Carnarvon-Ningaloo Coast includes people who may live locally, intrastate, interstate or overseas. Vision statements of the community stakeholder advisory group and other relevant visions give guidance to addressing community aspirations. Equity of access is paramount as a wide variety of user groups utilise the study area for a range of experiences and different settings.

Indigenous Heritage

The strategy recognises the need for ongoing protection of indigenous heritage, especially relating to the marine environment and the continuation of indigenous use and stewardship of the land. There is also the opportunity for the development of culturally appropriate tourism though the interpretation of indigenous heritage.

Economic Development

The strategy recognises the need to actively assist in the creation of regional wealth, support the development of new industries and encourage economic activity in accordance with sustainable development principles. Effective regional development depends on the provision and maintenance of infrastructure based on sustainability principles to service these regional communities. Developing and upgrading tourism infrastructure improves the attractiveness of an area both to visitors and residents alike and encourages more tourists to visit and come back to the region.

Interdependence

Ecological processes include both physical and biological systems, which are strongly interconnected. Changing one part of the environment may have an impact on other parts.



Limits of Acceptable Change

The limits of acceptable change are defined as the degree of change a system can accommodate or buffer while still sustaining or returning to its desired characteristics. The limits may be defined by environmental, social or economic concerns. What is acceptable or appropriate is determined by consultation with governments and communities, as well as by legislation and regulations. The limits of acceptable change establish the maximum level of 'alteration' for a resource that society is prepared to accept.

Precautionary Principle

Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason to postpone measures to prevent environmental degradation. The precautionary principle should be used as a tool to underpin decision-making, however, development that may cause environmental degradation should not proceed in the absence of full scientific certainty.

Cumulative Impacts

The demand for and subsequent provision of tourism or recreational development along the coast may result in cumulative impacts as each new development proposal is added to existing development. The ad hoc establishment of developments along the coast has the potential to erode the wilderness and environmental values of the area over time and also may affect the economic viability of the individual development projects.

Protection of High-Conservation Values

Planning should be based on the protection of high-conservation areas such as the Ningaloo Marine Park, Cape Range National Park and surrounds. These areas are rare and irreplaceable natural assets with outstanding scenic, recreational and scientific value, which have been identified as a possible World Heritage area.

Protection of Remote Values

Remoteness is a dynamic concept, rather than a static one. It varies from place to place, through time as society's values change, and from person to person, therefore it is useful to describe remoteness in terms of relative values, rather than providing a definition. The strategy will attempt to address specific issues which may affect remoteness values, for example emission of noise (e.g. power generation, vehicles and boats), light, smoke or dust, waste disposal (e.g. refuse disposal site, evaporation ponds and pipe outfalls), visual impact (e.g. buildings and roads) or odour (e.g. sewage treatment).

Protection of Biodiversity

Biodiversity underpins the processes that make life possible. Healthy ecosystems are necessary for maintaining and regulating atmospheric quality, climate, fresh water, marine productivity, soil formation, cycling of nutrients, and waste disposal. Biodiversity is intrinsic to values such as beauty and tranquillity. Australians place a high value on native plants and animals, which contribute to a sense of cultural identity, spiritual enrichment and recreation. Biodiversity is central to the cultures of Aboriginal and Torres Strait Islander peoples. Australian plants and animals attract tourists and provide food, medicines, energy and building materials. Our biodiversity is a reservoir of resources that remains relatively untapped.

6. CONSERVATION VALUES

Much has been written about the exceptional conservation values of the Carnarvon-Ningaloo Coast and the acceptability or otherwise of tourism development. The values of the area include:

- biological diversity;
 - terrestrial flora
 - terrestrial fauna
- karst;
 - karst formations and
 - subterranean fauna
 - stygofauna
 - troglobitic fauna
- offshore islands;
- fringing coral reef;
 - marine flora
 - marine fauna
- mangrove systems;
- · landscape and landform attributes; and
- social and cultural attributes.

Considerable discussion and debate have occurred regarding the location, scale and design of future tourism developments. The Select Committee on Cape Range National Park and Ningaloo Marine Park, Western Australian Government's response to the Select Committee's report, Gascoyne Coast Regional Strategy, Exmouth-Learmonth (North West Cape) Structure Plan, EPA Cape Range Position Statement all cite and/or recognise the need to implement appropriate planning and management measures for the area to protect theareas conservation values. More importantly, they provide the background reference and principles on which these guidelines have been formulated as well as a number of policy statements. The publication Coastal Tourism: A Manual for Sustainable *Tourism* provides proponents with a good source of additional information.

7. PREVIOUS STUDIES

As the Carnarvon-Ningaloo Coast has grown in tourism popularity in recent times, more attention has been directed to the area by government at all levels. The core planning and other related documents have been reviewed to provide a context for the development of this Future Directions paper.

Planning Studies

- State Planning Strategy
- Focus on the Future The Western Australian State Sustainability Strategy -Consultation Draft
- Coasts WA: Better Integration the Western Australian Government's Response to the Coastal Taskforce Report
- Statement of Planning Policy No. 2.6 State Coastal Planning Policy
- Gascoyne Coast Regional Strategy
- Exmouth-Learmonth (North West Cape) Structure Plan
- Draft Carnarvon Coastal Strategy
- Environmental and Planning Guidelines for Tourism Development on the North West Cape
- Existing Town Planning Schemes: Carnarvon and Exmouth
- Coral Bay Taskforce Report on Infrastructure Requirements for Coral Bay
- Coral Bay Settlement Plan

Other Studies

- State Squatter Policy
- A 12-Month Survey of Recreational Fishing in the Gascoyne Bioregion of Western Australia During 1998-99
- Draft Fisheries Environmental Management Plan for the Gascoyne Region (June 2002)

- Gascoyne Regional Transport Strategy
- Roads 2020 Regional Road Development Strategy – Gascoyne
- First Report of the Legislative Council Select Committee on Cape Range National Park and Ningaloo Marine Park (December 1995).
- Cape Range National Park Management Plan 1987-1997
- A Representative Marine Reserve System for Western Australia
- Ningaloo Marine Park Management Plan 1989-1999
- Ningaloo Marine Park (Commonwealth Waters) Management Plan
- Jurabi and Bundegi Coastal Parks, and Muiron Islands (1999)
- Exmouth Gulf Coastal Plan
- Environmental Protection Authority Report and recommendation on the proposed Coral Coast Resort at Mauds Landing (October 2002)
- EPA Cape Range Position Statement
- North West Cape Wilderness Lodge Proposal (Reference File)
- Designing Tourism Naturally A review of World Best Practice in Wilderness Lodges and Tented Safari Camps
- Coral Coast Resort Revised Structure
 Plan and Development Proposal
- North West Cape Tourism Development Study

Key points relevant to the preparation of the draft Carnarvon-Ningaloo Coast Regional Strategy from each of these documents is set out in Appendix Two.

8. CURRENT TOURISM USE

This section examines the current and potential future tourist use of the Carnarvon-Ningaloo Coast based upon work undertaken by independent researchers. An example of the impact of tourism is evident in that the Shire of Exmouth has a population less than 2,500 people but services annual visitor numbers over 130,000 each year.

Tourism development along the Carnarvon-Ningaloo Coast has taken place on a somewhat ad hoc basis. Coral Bay, one of the region's most popular tourist destinations, has grown incrementally from a family camping spot to a small town. However Coral Bay has a town planning scheme that postdates much of the town's development and has little basic infrastructure such as sewerage, a factor that causes concern to visitors and land managers alike.

Smaller, predominantly informal camping developments occur along the coast on stations between Quobba and Ningaloo where some locations support an estimated four to six hundred people. Here, many campers pitch their tents or park their caravans within the boundary of the Ningaloo Marine Park, which extends forty metres above the high water mark, and dispose of waste in the dunes and unlined, open tips. Other tourists stay at formal campsites in the Cape Range National Park and tourism developments on the West Cast of the Exmouth Peninsula at Yardie Station and adjacent to the Lighthouse and in Exmouth.

The Department of Conservation and Land Management undertakes aerial surveys of campsites adjacent to Ningaloo Marine Park which are completed during the April (during the annual whale shark migration) and July (current peak usage and coincides with the annual whale migration) school holiday periods. The results of these surveys showing the number of campsites visible on the three pastoral stations adjacent to the Ningaloo Marine Park are outlined on the following page.

Recreational Camping on Pastoral Leases Adjacent to Ningaloo Marine Park in April and July School Holidays

	July 1995	July 2002	April 1998	April 2003	
Ningaloo	74	208	19	87	
Cardabia	20	24	4	14	
Warroora	56	110	18	72	
TOTAL	150	342	41	173	

Remote Research² has also undertaken work on the coastal strip between Coral Bay and Cape Range National Park for the period July 2001 through June 2002 with the following key findings for the area between Coral Bay and Yardie Creek:

- Total number of vehicles entering for year July 2001 to June 2002 amounted to 12,112 of these it is estimated approximately 5-10% are campers
- Average campsite occupancy was 2.57 people in August 2001 and 4.69 people in April/May 2002
- Average length of stay was 47 days and 45% of campers stay longer than 22 days
- 87% of camping groups in August 2001, and 77% in April/May 2002 had previously camped in the study zone
- The average daily spend on supplies per campsite was \$24.70 in August 2001 and \$41.65 in April/May 2002
- If the same growth trend continues, between 220,000 and 426,000 visitor nights per annum will be spent camping in the study zone by 2010

²Taken from report by Remote Research (December 2002) *Summary Report on Findings of Surveys of unmanaged Camping in the North West Cape Region of Western Australia – August 2001 and April/May 2002.*

³Dr D. Wood (2003) *Tourism on the Carnarvon-Ningaloo Coast Between Quobba Station and Exmouth and its Implications for Sustainability of the Coast.* The complete report is available on the Commission's website – www.wapc.wa.gov.au

Tourism Demand Implications for Sustainable Planning and Management³

To better understand tourism in the Gascoyne, researchers from Curtin University of Technology have been undertaking surveys which collected information about:

- visitor origins;
- modes of travel to and in the Northern Gascoyne;
- the socio-economic status of travellers, their age and whether they travel alone or in groups;
- why people choose the region for a holiday;
- what tourists do in the region;
- where tourists stay and their future accommodation preferences in terms of location and type;
- how much money tourists spend and on what they spend it on;
- if and when tourists will return; and
- visitor satisfaction levels with holidaying in the region.

Based upon this research the Carnarvon-Ningaloo Coast is a popular destination for tourists from Western Australia, other Australian states and from overseas. The latter outnumber local tourists in Exmouth in April and many international tourists also stay at Coral Bay and in Exmouth at other times of the year contributing significantly to local economies. Local tourists also stay at Coral Bay and Exmouth but many choose coastal pastoral stations, camping in and adjacent to the Ningaloo Marine Park, where there are no formal systems for waste disposal and where many create their own access tracks through the coastal dune system leading to coastal degradation.Furthermore, these visitors launch boats from beaches using 4-wheel-drive vehicles causing additional negative environmental impacts on the coastal zone and adding to marine management issues.

Most visitors to Coral Bay and Exmouth cite snorkelling as their preferred recreational activity and attach little importance to fishing, a reversal of Dowling's 1989-1991 findings. However, most campers on coastal stations and in Cape Range National Park in July cite fishing as their most popular activity. The combination of the popularity of fishing, the proportion of campers who fish and their long duration of stay raise concern for the preservation of fish stocks in the Ningaloo Marine Park, a problem exacerbated by many fishers' admission that they do not stop fishing when they have enough fish for meals for a couple of days.

Guidebooks and word of mouth are the primary sources of information that stimulate visits to the region, a finding that has serious implications for limiting future growth should that be a priority. However tourism has positive economic impacts on the Carnarvon-Ningaloo Coast contributing around \$80 million to the Exmouth economy in direct expenditure. Tourists to Exmouth spend another \$40 million in other parts of the State and a significant proportion of all tourism expenditure is from international and interstate visitors, significantly impacting on the State's economy.

Many of the negative impacts of tourism on the coastal pastoral stations and at Coral Bay can be attributed to incremental growth and the absence of appropriate plans and management regimes. The future sustainability of tourism in the region depends on maintenance of the natural environment, the very attribute that attracts visitors to spend their discretionary dollars on the Carnarvon-Ningaloo Coast rather than competing destinations in Australia and abroad.

The following key findings of this study with particular reference to Exmouth are drawn from a paper by Wood and Hopkins (2001) which reports the findings of a tourism survey conducted between Yardie Creek and Exmouth in 2001.

Visitor Origins

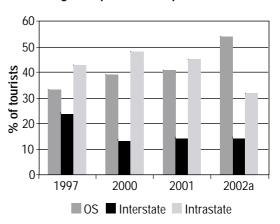
There has been significant growth in the proportion of international and interstate tourists visiting to the North West Cape between 1989 and 2002. The following survey data is grouped and provides figures from the two survey periods 1989-1991 and 1997-2002.

Place of origin	1989- 1991 (%)	1997- 2002 (%)
Western Australia	85	42
Interstate	8	15
International	4	43

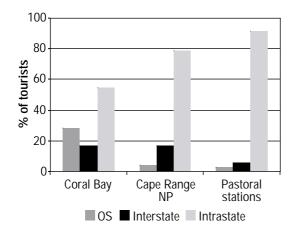
While the proportion of international and interstate travellers has grown the above figures do not necessarily represent a decline in intrastate travellers, but rather reflect the increasing number visiting the Carnarvon-Ningaloo Coast.

During the month of April, the proportion of overseas visitors to Exmouth now exceeds the proportion of travellers from other parts of Western Australia (intrastate) and Australia (interstate). This trend of steady growth in international markets has been evolving since 1997.



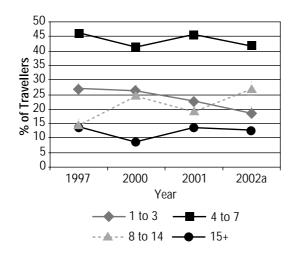


Visitor origins in July 2002



Duration of Stay

Most tourists visit the area for less than two weeks but the number of tourists staying for one to two weeks is growing while the proportion of short stay tourists (1 to 3 days) is declining, a finding that bodes well for Exmouth's tourism industry.



Visitor Incomes

Over half (57.7%) the visitors to Exmouth have a household income of greater than \$50 000 and a large percentage of visitors (24.0%) have household incomes greater than \$100,000.

Visitor household income April 2001

Household income	Number of respondents	% of respondents
\$10 000 - \$20 000	16	9.1
\$20 001 - \$30 000	16	9.1
\$30 001 - \$40 000	16	9.1
\$40 001 - \$50 000	26	14.9
\$50 001 - \$100 000	59	33.7
\$100 001+	42	24.0

Finding out about Exmouth

Most visitors to Exmouth find out about the area through friends and word of mouth (52.2%) or through guidebooks (30.2%). It should be noted that 53.6% of international visitors find out about Exmouth from guidebooks.

How respondents discovered Exmouth by place of origin

-		
Intrasta	te Interstat	
(%)	(%)	(%)
4.4	7.1	16.6
2.2	0.0	3.6
6.6	0.0	0.0
2.2	0.0	7.1
8.8	28.6	53.6
2.2	17.9	10.7
62.6	53.6	41.7
nt 5.5	3.6	3.6
	(%) 4.4 2.2 6.6 2.2 8.8 7 2.2 62.6	4.4 7.1 2.2 0.0 6.6 0.0 2.2 0.0 8.8 28.6 2.2 17.9 62.6 53.6

Why people choose Exmouth for their holiday

The Ningaloo Marine Park is the major attraction of the Exmouth area. Other important reasons why tourists visit Exmouth are access to the coast, the natural environment, the Cape Range National Park, peace and quiet and access to activities. International visitors tend to value the Ningaloo Marine Park as a stronger drawcard for visiting the area.

Expenditure

Visitors to Exmouth in April spend approximately \$142 per day most of which is spent on accommodation, food and drinks and on activities. While these figures are undoubtedly inflated by the fact that many visitors in April swim with whale sharks, an activity that costs up to \$300, there is an appreciable difference between per capita daily expenditure in the towns of Coral Bay and Exmouth and the Cape Range and station campsites as illustrated by the following table.

Mean daily expenditure

Item	Exmouth (April 2001)	Cape Range (July 2002)	Coral Bay (July 2002)	Stations (July 2002)
Local travel	\$15.50	\$12.90	\$43.10	\$16.40
Accommodation	\$41.22	\$11.10	\$16.10	\$14.30
Food/drinks	\$46.58	\$10.30	\$12.20	\$7.50
Activities	\$34.84	\$6.90	\$19.00	\$11.90
Equipment	\$3.88	\$4.90	\$5.50	\$2.90
Total	\$142.02	\$46.10	\$95.90	\$53.00

A category for other expenditure has been excluded from these tables because while most visitors spend around \$13.00 per day, figures for Coral Bay greatly exceed this amount suggesting that a small number of people have allocated a very high sum to this category. Closer examination of individual questionnaires will clarify this anomaly.

While it is difficult to establish annual visitor figures, it is believed that Exmouth hosts over 100,000 tourists each year and each tourist stays for an average of six days, which equates to a local spend of about \$85.2 million annually. Allowing for this figure to be inflated by spending on whale shark expeditions in April, it is estimated that tourists contribute a minimum of \$80 million to the local economy based average activity spending in Coral Bay and allowing for higher spending during the whale shark season, which is April to late June.

Visitor satisfaction

87.8% of visitors were satisfied with their holiday in Exmouth. Over 2/3 of visitors will visit Exmouth again and the majority of these (72.6%) will visit between the months of April and July of the following year.



9. CARNARVON-NINGALOO SCENARIO PLANNING PROCESS

The tourist and recreational pressure on the Carnarvon-Ningaloo Coast has built up over many years and, in keeping with the objective of seeking World Heritage listing for the area, the Government has a commitment to protecting the potential World Heritage values of the area. The State Government seeks to achieve this through the identification of sustainable planning outcomes, making resources and infrastructure available to protect the values and achieve long-term security of this rare natural resource for future generations of Western Australians.

This paper provides a vehicle for community input into the preparation of the draft Carnarvon-Ningaloo Coast Regional Strategy and examines:

- five future use scenarios for the Carnarvon-Ningaloo Coast, ranging in scale from larger intense focal points to smaller more dispersed points, based upon accommodating and managing tourism and visitation pressure (see Map 1); and
- the recommended future tenure and possible on-ground management options that are available for management of pastoral lease exclusion areas along the Carnarvon-Ningaloo Coast.

Under the direction of the steering committee, the technical advisory committee undertook detailed work to assess the capability and suitability of a range of sites along the Carnarvon-Ningaloo Coast by preparing an

⁴Carnarvon-Ningaloo Coast: Inventory and Assessment of Coastal Usage Patterns and Site Conditions, by the Department of Planning and Infrastructure with the assistance of the Technical Advisory Committee is available as a separate background paper on the Commission's website - www.wapc.wa.gov.au.

 ${}^{\scriptscriptstyle 5}\! The$ Glossary is reproduced in Appendix One.

Inventory and Assessment of Coastal Usage Patterns and Site Conditions⁴. The scenarios outlined in the Future Directions paper have resulted from the synthesis of a number of key elements.

The first element was the development of a range of detailed inventory and assessment criteria including:

- hierarchy of sites, facilities and services;
- identifiable user groups;
- recreation and tourism opportunity spectrum;
- elements of the tourism hierarchy
- tourism accommodation spectrum;
- inventory and assessment of coastal camping;
- · roads and tracks classification; and
- develop a glossary of terms for future use⁵.

The second element was then a detailed examination of the current usage and suitability for continued use, of 71 individual sites or coastal sectors (including the Mauds Landing site) against a range of site specific criteria including:

- Site name and number
- Site description (geographic setting, marine context, geomorphic sector)
- Main attractions or features (biophysical, social, cultural, scenic)
- Established user patterns (numbers, season, age)
- Access (road class and type, condition; parking - definition, number, proximity, to feature; walking tracks - class, condition, destination)
- Level of on-site modification (visual impact, facilitation, information, interpretation, signing)
- Level of social interaction (organised activities, individual, group)

- Level of management presence (permanent staff, frequent, infrequent)
- Suitability for recreation/tourism development (capacity to absorb change)
- Immediate needs
- Future potential
- Master/Site Management Plan (available, required)
- Target user group (based on 9 types)
- Desired Recreation Setting Class (based on 5 classes of naturalness from remote undeveloped to significantly developed)

Work was then undertaken to review and critic recommendations in all previous studies for the nature, scale and form of tourism uses along the coast. Based upon the broad guidelines set by the Steering Committee and the vision of the Community Stakeholder Advisory Group, the Scenarios were then reviewed and refined with the interaction and support of the Steering Committee and Technical Advisory Group.

The draft Carnarvon-Ningaloo Coast Regional Strategy that will follow this Future Directions paper will provide a framework for future land management and tourism and recreation development, leading to an integrated and sustainable future for the Carnarvon-Ningaloo Coast and other important features such as Coral Bay and the Blowholes. It will include structure plans for Carnarvon and Exmouth, and settlement plans for Coral Bay and The Blowholes.

10. PRESUMPTIONS USED AS THE BASIS FOR ALL SCENARIOS

The Western Australian Planning Commission has proposed five possible scenarios for the future use of the Carnarvon-Ningaloo Coast, each providing different options for public consideration. The proposed scenarios are based on a number of common presumptions that **apply to all scenarios**. These are:

Coastal management

A series of crown reserves for conservation and recreation will be gazetted along the coast and managed as an integrated whole to maintain the area's environmental values, especially those which are linked to the potential World Heritage nomination.

Protection of Ecological Values

Planning is based on the protection of high-conservation areas such as the Ningaloo Marine Park, Cape Range National Park and surrounds. These areas consist of rare and irreplaceable natural assets with outstanding scenic, recreational and scientific value, and have been identified for possible World Heritage nomination.



Visitor Experience

The numbers of tourists seeking a remote and natural experience when visiting the Carnarvon-Ningaloo Coast. The number of tourists seeking this type of experience will continue to increase. All scenarios are designed to retain this visitor experience, and Carnarvon and Exmouth will provide higher-order opportunities for visitors and residents, in order to service the entire region, build on existing infrastructure and protect its remote and natural experience. The towns will provide a built experience to complement, contrast and service the surrounding remote and natural area.

Visitor Numbers

As a continual increase in tourist numbers is expected, visits to the region also are expected to spread out over the year as more people, especially international visitors, seek to visit the region during traditional domestic off-peak times. This will provide a greater base load of visitor numbers over the entire year.

Boat-launching

A marina and boat harbour is located in Carnarvon whilst Exmouth has an existing boat harbour with an adjacent marina development presently under construction. Boat launching facilities are available in both towns. A constructed boat-launching facility exists at Tantabiddi (within Cape Range National Park) with a facility proposed adjacent to Coral Bay. Additionally areas will be identified where beach-launching of trailer boats may occur without long-term environmental damage to the marine environment, beach and dune profile and enhances marine safety.

Roads

Access to coastal areas will be through the rationalisation of existing network of access tracks/roads and the realignment/formation of certain tracks where action is required to address/prevent long-term environmental damage. Any proposed new access will require detailed environmental assessment and would be supported only upon finalisation of the vesting and management of relevant coastal areas. The principle of remote and natural areas discourages sheeted or sealed roads.

Development Guidelines

Any development to establish or expanded a sub-regional centre, primary coastal tourist node, secondary coastal tourist node or camping coastal node will be required to be assessed against the guiding principles in this document and the *Draft Planning and Environmental Guidelines for Future Tourism Development on the Carnarvon-Ningaloo Coast* as outlined in Appendix Three.



Regional Centres

Carnarvon and Exmouth - will cater for high-order and high-impact development, infrastructure and tourist facilities. These shall include a range of accommodation, food services, groceries, automotive service, information, tours and packaged activity options and other amenities associated with an urban centre which are not appropriate for a remote or semiremote environment. All future residential land releases shall be appropriately located in Carnarvon and Exmouth in order to capitalise on existing infrastructure and available services.

Carnarvon - currently Carnarvon represents approximately 83% of the total Shire of Carnarvon population.

Exmouth - currently Exmouth represents approximately 78% of the total Shire of Exmouth Population.

Census 2001 Population

	Estimated Residential	Estimated Visitors Population
Carnarvon		
Town of Carnarvon	5,545	1,727
Settlement of Coral Bay	247	845
Shire of Carnarvon	6,723	No figures provided
Exmouth		
Town of Exmouth	1,815	1,322
Shire of Exmouth	2,306	No figures provided

Population Projection (WAPC 2000)

	Shire of Shire of Carnarvon Exmouth	
2001	6,300	2,300
2006	6,500	2,500
2011	7,000	2,700
2016	7,500	2,900

Sub-Regional Service and Supply Centre (Small Townships)

This type of centre provides a limited range of accommodation and food services, groceries, minimal automotive services, information, tours and packaged activity options and other amenities. A complementary node to the regional centres of Carnarvon and Exmouth, a subregional service and supply centre shall not expand to become a regional centre in the future. A sub-regional centre therefore shall not provide the same level of servicing and facilities of the regional centres. This shall ensure the efficient use of infrastructure and services located in Carnarvon and Exmouth.

Coral Bay - will be serviced with power, water and sewerage in order to provide a more environmentally sustainable future for the settlement. No private residential freehold will be considered for the townsite. Worker's accommodation will be provided under a lease arrangement to improve upon existing facilities for staff employed in Coral Bay. Coral Bay is to be appropriately serviced and effectively managed. All new or expanded facilities need to meet the requirements of low-key development and "lightly" touch the landscape, and so provide ecotourism facilities. Currently Coral Bay has approximately 2000 visitor beds.

Mauds Landing – is a gazetted townsite zoned for resort development, which is partially located within a samphire wetland and is adjacent to a turtle rookery beach. Any dry-lot development would need to have floor levels raised above storm surge and flood levels. Analysis of Category 5 cyclonic storm and rainfall events indicates that any development will need to be set at a minimum ground level of between 2.5 and 3.5m AHD with a finished floor level for most buildings of no less than RL 3.65m AHD to provide an adequate safety factor. As a consequence of these limitations, the Mauds Landing site has not been identified as suitable for any development except in Scenario A, which recognises historical proposals.

Coastal Tourist Node

Primary Coastal Tourist Node – Service and supply centres catering for up to 500 visitors and tourist settlements. These nodes provide a range of visitor services and amenities such as accommodation, camping, utilities, limited food and grocery facilities and perhaps fuel. Example: Vlamingh Head Caravan Park.

Secondary Coastal Tourist Node – Tourist centres catering for up to 200 visitors. These sites generally provide camping and may include some covered accommodation with a local focus and character. Provision of supplies and services are limited. Example: Red Bluff, Quobba.

Ecolodges/Eco-camps

Ecolodges/eco-camps may be located at any site currently identified as a primary or secondary coastal tourist node or as a coastal camping node. However, this will require expressions of interest and be restricted to low-key, small-scale minimal impact ecolodges or eco-camps with small numbers of visitors. It also requires that the numbers catered for be reduced from any adjacent sites. In addition, they will be assessed against the guiding principles in this document and the Draft Planning and Environmental Guidelines for Future Tourism Development on the Carnarvon-Ningaloo Coast as outlined in Appendix Three.

Camping

All camping along the coast is formalised into managed camping across a range of experiences within remote to semi-remote settings. This will assist in the reduction of environmental degradation (vegetation clearance, ad hoc creation of 4-wheel drive tracks, waste management, etc.) caused by unmanaged camping. Camping may include the delineation of single camp sites to multiple camp sites, camping grounds, small groupings, small commercial operations such as drover's or safari tent proposals in association with coastal features or activities. Rationalisation of some existing campsites to prevent longterm environmental damage may occur and lead to defined and managed campsites that do not detract from the natural and remote visitor experience.

NOTE: Final size of each camping node is subject to further consideration (including public comment) and will be detailed in the site management plan. The draft Carnarvon-Ningaloo Coast Regional Strategy will propose indicative numbers to which the detailed site plans will be prepared.



Day Use

Day use visitation will be managed in a similar way to camping to reduce potential for conflict between uses (e.g. car parking and pedestrian access). Impacts of day use on sites will be considered and if significant degradation to the environment is occurring action may be taken to remedy the situation. Day use of sites will be further considered in site plan management.

Accommodation Options

There is a range of accommodation options that could be provided for at any given node in a Scenario. The range of tourism accommodation options that could be provided, as outlined in the tourism accommodation spectrum below:

Regional and Sub Regional Centres – may include provision for the following

- Hotel
- Motel
- Bed & Breakfast
- Caravan Parks
- · Camping Grounds

Primary and Secondary Coastal Tourist Nodes – may include provision for the following

- Ecolodge/eco-camp
- eco-camp (permanent) includes Drovers' tents
- eco-camp (semi-permanent)
- Limited covered accommodation – chalets
- Caravan parks/bays
- Camping nodes/sites

Camping Nodes – may include provision for the following

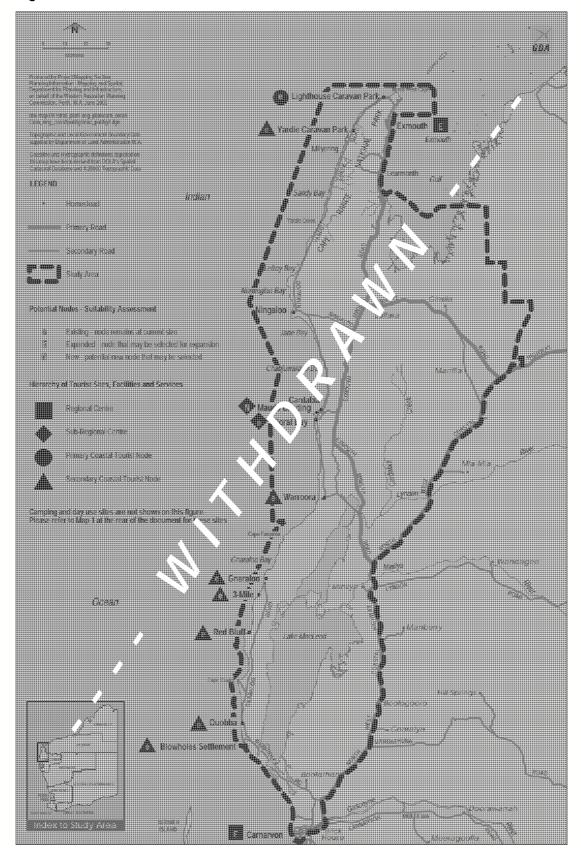
- eco-camp (permanent) includes Drovers' tents (maximum of 10)
- eco-camp (semi-permanent) (maximum of 10)
- Caravan bays (semi remote camping)
- Camping nodes/sites (both semi remote & remote camping)



Comparative Table of All Scenarios

	Existing	Scenario A WITHDRAWN	Scenario B Figure 3 Section 10.2	Scenario C Figure 4 Section 10.3	Scenario D Figure 5 Section 10.4	Scenario E Figure 6 Section 10.5
Regional Centres	facilities. These s information, tour shall be appropri	xmouth will cater t shall include a rang s and packaged ac ately located in Ca ilable for residents	ge of accommodat ctivity options and rnarvon and Exmo	ion, food services other amenities.	, groceries, autom All future residenti	otive service, al land releases
Coral Bay	A tourist settlement catering for up to: - Workers 200 - Tourist Beds 1,800 - Day Visitors 500 Total 2,500 (current legal limit,	A tourist settlement catering for up to: - Workers 200 - Tourist Beds 1,800 - Day Visitors 500 Total 2,500 (capped to current	A tourist settlement catering for up to: - Workers 200 - Tourist Beds 1,800 - Day Visitors 500 Total 2,500 (capped to current	A tourist settlement catering for up to: - Workers 400 - Tourist Beds 3,800 - Day Visitors 300 Total 4,500 (equivalent to	A tourist settlement catering for up to: - Workers 250 - Tourist Beds 2,450 - Day Visitors 300 Total 3,000 (capped below	A tourist settlement catering for up to: - Workers 250 - Tourist Beds 2,250 - Day Visitors 500 Total 3,000 (capped below
	but less than current peak usage)	legal Low but less than current peak usage	legal limit, but less than current peak usage)		current peak usage)	current peak usage)
Mauds Landing	Vacant crown land zoned, resort development in a gazetted townsite	A deveryment accommodates over 20 peop H L I M	No development occurs, the townsite is removed and the land re-zoned from resort development to conservation and recreation	No development occurs, the townsite is removed and the land re-zoned from resort development to conservation and recreation	No development occurs, the townsite is removed and the land re-zoned from resort development to conservation and recreation	No development occurs, the townsite is removed and the land re-zoned from resort development to conservation and recreation
Coastal Nodes	1 primary tourist node and 7 secondary tourist nodes	No new nodes and no expansion of capacity of existing nodes	No new nodes and no expansion of capacity of existing nodes	Up to two new nodes or expanded capacity in existing secondary tourist nodes	Up to three new nodes or expanded capacity in existing tourist nodes, which may include 1 primary tourist node	Three or more new nodes or expanded capacity in existing tourist nodes, which must include 1 primary tourist node
Camping	remote to semi-r (safari tents) in a existing campsite	g the coast is form emote settings, an ssociation with co es to prevent long- o not detract from	d includes campg astal features or a term environment	rounds, small grou ctivities. This may al damage and wil	upings, including of lead to the ration I lead to the ration I lead to defined a	drover's tents alisation of some

Figure 2: Scenario A - WITHDRAWN -



10.1. SCENARIO A - WITHDRAWN -

The proposed scenarios for future use of the Carnarvon-Ningaloo Coast are based on a number of common presumptions that *apply to each and every scenario*.

Carnarvon and Exmouth

All new development and any increases in tourist accommodation will occur in Carnarvon and Exmouth. These centres will provide the locations for all high-order and high-impact development, infrastructure and tourist facilities within the region. All future residential freehold land releases occur in these regional centres in order to capitalise on existing infrastructure and services available for residents.

Coral Bay

Coral Bay remains a tourist settlement accommodating up to **2,500** people:

- Workers 200
- Tourist Beds 1,800
- Day Visitors 500

Mauds Landing

The Mauds Landing townsite is used to provide tourist accommodation for over 2,000 people. (For example, the proposed Coral Coast development accommodated between **2,025** (proponent estimate) and 3,860 (DPI estime) people in Stage 1.)

Coastal Tourist Nodes

No New Nodes Required No Expansion of Capacity of E

Existing Primary:

Lighthouse Caravan Park

Existing Secondary:

- Blowholes Settlem Int
- Quobba Homestead Precinct
- Red Bluff
- 3 Mile Camp
- Gnaraloo Komestead Precinct
- Warroora Homestead Precinct
- Yardie Homestead Caravan Park

Coastal Camping Nodes and Day Use Sites

Are as per sites identified on Map 1.

The Carnarvon-Ningaloo Coast will continue to be provided for with regional services such as health and education, sport and recreation facilities, and accommodation being accessed in Carnarvon and Exmouth.

These towns will build upon vibrant communities and continue to be at fractive options for people seeking to relocate to the region for lifestyle and climate casons. All future land development or expansion, apart from Mauds Landing, will be focused on the Carnarvon and Exmouth townsites to take advantage of existing facilities and infrastructure. Major retail and commercial uses will also be concentrated in the two towns.

Resort style acc. amodation development, along with other trurist facilities will be further developed to Varnarvon and Exmouth to cater for increasing tourist visitation from intrastate, interstate and overseas. This will protect the remove experience offered away from the towns les.

oral Bay will remain a low-key tourism destination for 2,300 visitors with no freehold residential subdivision. Leased workers' accommodation will be provided although the townsite shall not develop beyond the current approved settlement plan. Coral bay will remain as a popular tourism destination providing an alternative to the semi-remote environment between Carnarvon and Exmouth. Mauds Landing will be developed as an other subregional centre accommodating more than 2,000 people and offering a range of accommodation from camping to resort facilities.

On a smaller scale, ecolodges/eco-camps may be considered for any campsite based upon expressions of interest and will be restricted to low-key, small-scale proposals catering for small numbers. Camping along the coast will present a range of experiences and be managed to protect this rare environment. Limited services and camping facilities are offered at Yardie Homestead Caravan Park, Quobba, Gnaraloo and Warroora Homestead Precincts and the Blowholes settlement although none will be permitted to expand beyond existing approved levels.

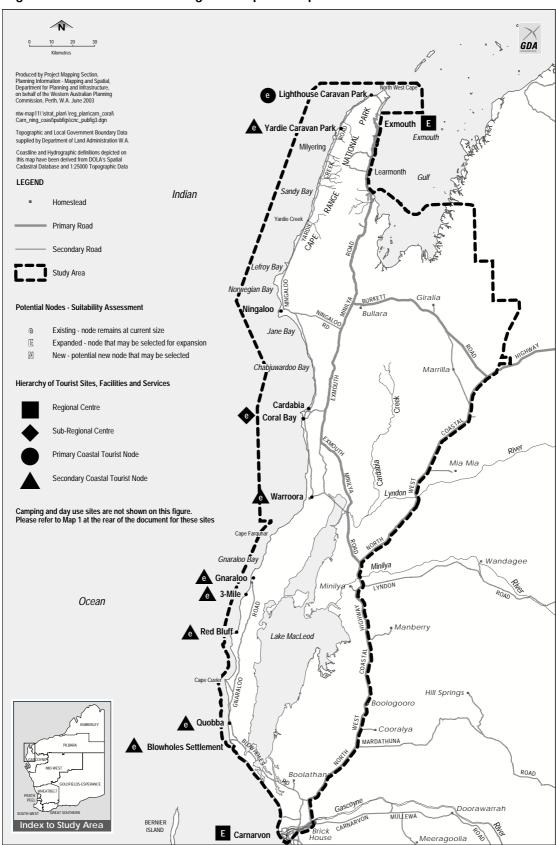


Figure 3: Scenario B - Existing Development Option

10.2. SCENARIO B - Existing Development Option

The proposed scenarios for future use of the Carnarvon-Ningaloo Coast are based on a number of common presumptions that *apply to each and every scenario*.

Carnarvon and Exmouth

All new development and any increases in tourist accommodation will occur in Carnarvon and Exmouth. These centres will provide the locations for all high-order and high-impact development, infrastructure and tourist facilities within the region. All future residential freehold land releases occur in these regional centres in order to capitalise on existing infrastructure and services available for residents.

Coral Bay

Coral Bay remains a tourist settlement accommodating up to **2,500** people:

- Workers 200
- Tourist Beds 1,800
- Day Visitors 500

Mauds Landing

No development occurs, the townsite is removed and the land re-zoned from resort development to conservation and recreation.

Coastal Tourist Nodes

No New Nodes Required No Expansion of Capacity of Existing Nodes

Existing Primary:

Lighthouse Caravan Park

Existing Secondary:

- Blowholes Settlement
- Quobba Homestead Precinct
- Red Bluff
- 3 Mile Camp
- Gnaraloo Homestead Precinct
- Warroora Homestead Precinct
- Yardie Homestead Caravan Park

Coastal Camping Nodes and Day Use Sites

Are as per sites identified on Map 1.

Carnarvon and Exmouth will continue to provide regional services such as health and education, sport and recreation facilities, and accommodation. All growth, within the region, shall be directed toward the 2 regional centres with no further consideration of new, large-scale tourist accommodation facilities for any other locations within the region.

These towns will build upon vibrant communities and continue to be attractive options for people seeking to relocate to the region for lifestyle and climate reasons. All future land development or expansion in tourism activity will be focused on the Carnarvon and Exmouth townsites to take advantage of existing facilities and infrastructure. Major retail and commercial uses will be concentrated in the 2 towns.

Coral Bay will remain a low-key tourism destination catering for 1,800 overnight visitors, 500 day visitors and a resident working population of 200. No freehold residential land will be available in Coral Bay as all residential subdivision will be catered for in Carnarvon and Exmouth. It will remain as a popular tourism destination providing an alternative to the semiremote environment between Carnarvon and Exmouth.

On a smaller scale, ecolodges/eco-camps may be considered for any campsite based upon expressions of interest and will be restricted to low-key, small-scale proposals catering for small numbers.

Camping along the coast will present a range of experiences and be managed to protect this rare environment. The Lighthouse Caravan Park will provide a basic range of services to an anticipated 500 visitors. Limited services and camping facilities are offered at Quobba, Gnaraloo and Warroora Homestead Precincts, Yardie Homestead Caravan Park, the Blowholes settlement, Red Bluff and 3 Mile Camp however no expansion beyond existing approved levels will be considered.

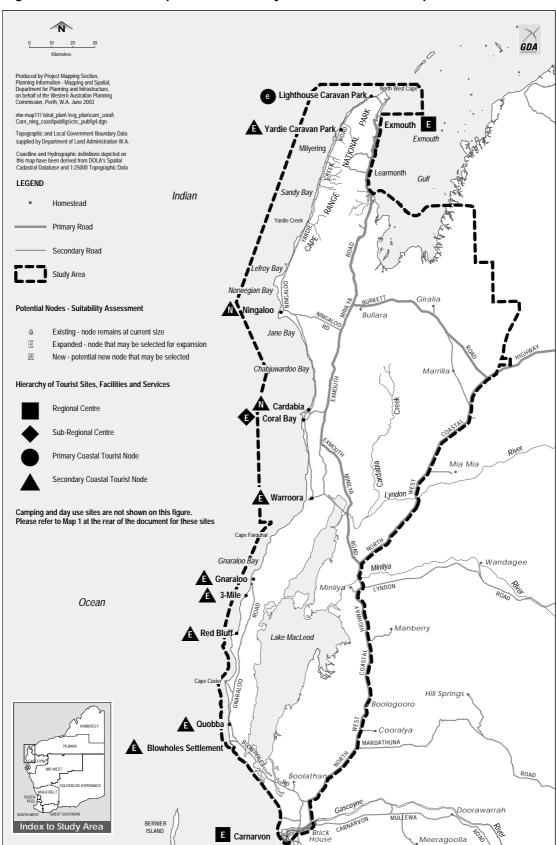


Figure 4: Scenario C - Expanded Coral Bay and Coastal Nodes Option Variation 1

10.3. SCENARIO C -Expanded Coral Bay and Coastal Nodes Option Variation 1

The proposed scenarios for future use of the Carnarvon-Ningaloo Coast are based on a number of common presumptions that *apply to each and every scenario*.

Carnarvon and Exmouth

Carnarvon and Exmouth provide the locations for all high-order and high-impact development, infrastructure and tourist facilities within the region. All future residential freehold land releases occur in these regional centres in order to capitalise on existing infrastructure and services available for residents.

Coral Bay

Coral Bay becomes a tourist settlement accommodating up to **4,500** people:

- Workers 400
- Tourist Beds 3,800
- Day Visitors 300

Mauds Landing

No development occurs, the townsite is removed and the land re-zoned from resort development to conservation and recreation.

Coastal Tourist Nodes

Up To 2 New or Expanded Nodes to be Selected from the Following Possible Sites (No additional Primary Coastal Tourist Nodes)

Existing Primary:

• Lighthouse Caravan Park

Possible New Secondary:

- Cardabia Homestead Precinct
- Ningaloo Homestead Precinct

Existing Secondary (may not currently be fully developed):

- Blowholes Settlement (no further growth)
- Quobba Homestead Precinct
- Red Bluff
- 3 Mile Camp
- Gnaraloo Homestead Precinct
- Warroora Homestead Precinct
- Yardie Homestead Caravan Park

Coastal Camping Nodes and Day Use Sites

Are as per sites identified on Map 1.

Carnarvon and Exmouth will continue to provide regional services such as health and education, sport and recreation facilities, and accommodation. Most growth within the region shall be directed toward the 2 regional centres with no further consideration of new, large-scale tourist accommodation facilities for any other locations within the region. These towns will build upon vibrant communities and continue to be attractive options for those seeking to relocate to the region for lifestyle and climate reasons. Major retail and commercial uses will be concentrated in the two towns.

Two potential sites for new or expanded secondary tourist accommodation for up to 200 people will be considered outside Carnarvon and Exmouth townsites.

Ecolodges or eco-camps will be recognised as a feature of the region with specific guidelines for their development.

Coral Bay will grow as a tourism destination to cater for 3,800 overnight visitors and 300 day visitors. No residential freehold will be permitted however staff accommodation will be provided for 400 workers based on a lease agreement. This is the largest growth scenario for Coral Bay. It will remain as a popular tourism destination providing an alternative to the semi-remote environment between Carnarvon and Exmouth.

Camping along the coast will present a range of experiences and be managed to protect the exceptional environment.

Limited services and camping facilities are offered at Quobba, Gnaraloo, Warroora Homestead Precincts, Yardie Homestead Caravan Park, the Blowholes settlement, Red Bluff and 3 Mile Camp. Up to 2 locations (excluding the Blowholes) can be expanded including the possibility of new sites at Cardabia and Ningaloo Homesteads.

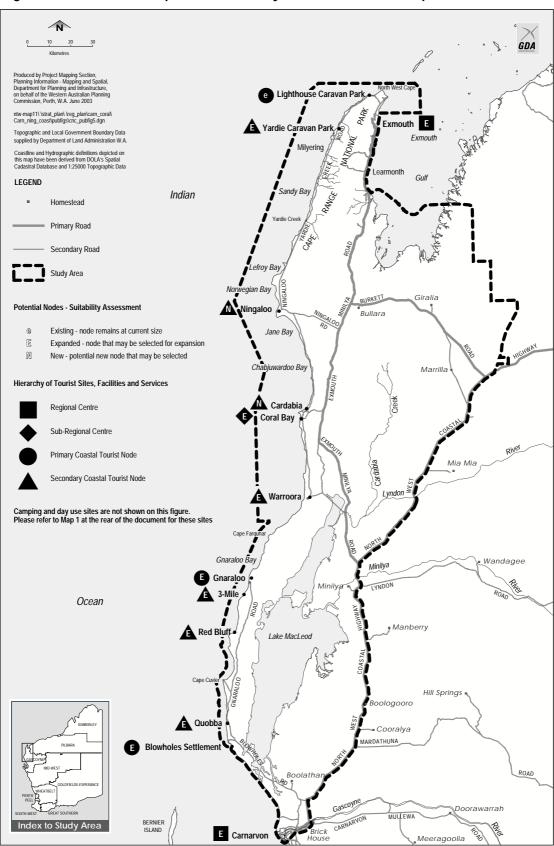


Figure 5: Scenario D - Expanded Coral Bay and Coastal Nodes Option Variation 2

10.4. SCENARIO D -Expanded Coral Bay and Coastal Nodes Option Variation 2

The proposed scenarios for future use of the Carnarvon-Ningaloo Coast are based on a number of common presumptions that *apply to each and every scenario*.

Carnarvon and Exmouth

Carnarvon and Exmouth provide the locations for all high-order and high-impact development, infrastructure and tourist facilities within the region. They develop extra tourist capacity to accommodate future tourism needs. All future residential land releases occur in these regional centres in order to capitalise on existing infrastructure and services available for residents.

Coral Bay

Coral Bay becomes a tourist settlement accommodating up to **3,000** people:

- Workers 250
- Tourist Beds 2,450
- Day Visitors 300

Mauds Landing

No development occurs, the townsite is removed and the land re-zoned from resort development to conservation and recreation.

Coastal Tourist Nodes

Up To 3 New or Expanded Nodes to be Selected from the Following Possible Sites - May Include 1 *Primary Coastal Tourist Node*

Existing Primary:

Lighthouse Caravan Park

Possible Primary:

- Blowholes Settlement
- Gnaraloo Homestead Precinct

Possible New Secondary:

- Cardabia Homestead Precinct
- Ningaloo Homestead Precinct

Existing Secondary:

- Quobba Homestead Precinct
- Red Bluff
- 3 Mile Camp
- Gnaraloo Homestead Precinct
- Warroora Homestead Precinct
- Yardie Homestead Caravan Park

Coastal Camping Nodes and Day Use Sites

Are as per sites identified on Map 1.

The Carnarvon-Ningaloo Coast will continue to be provided with major services such as health and education, sport and recreation facilities, and accommodation by Carnarvon and Exmouth. Most future land development or expansion in tourism activity will be focused on the Carnarvon and Exmouth townsites to take advantage of existing facilities and infrastructure. The opportunity to develop up to 3 new or expanded tourist nodes that may include 1 primary tourist node is offered. Consideration of the Blowholes and Gnaraloo Homestead Precinct are the two options for the new major tourism development outside of Carnarvon and Exmouth.

Ecolodges/eco-camps may be considered for any campsite, major or secondary tourist node based upon expressions of interest and will be restricted to low-key, small scale proposals. This form of tourist facility will be recognised as a feature of the region with specific guidelines for the development of ecolodges/eco-camps being required.

Coral Bay will remain a low-key tourism destination for 2,750 visitors with no permanent residential development. It will remain as a popular tourism destination providing an alternative to the semi-remote environment between Carnarvon and Exmouth.

Camping along the coast will present a range of experiences and be managed to protect the exceptional environment. The Lighthouse Caravan Park will provide a basic range of services to an anticipated 500 visitors.

Limited services and camping facilities are offered at Quobba, Gnaraloo and Warroora Homestead Precincts, Yardie Homestead Caravan Park, the Blowholes settlement, Red Bluff and 3 Mile Camp. Up to 3 locations can be expanded including the possibility of new sites at Cardabia and Ningaloo Homesteads and the expansion of the Blowholes Settlement and Gnaraloo Homestead Precinct to a Primary Tourist Node catering for up to 500 people.

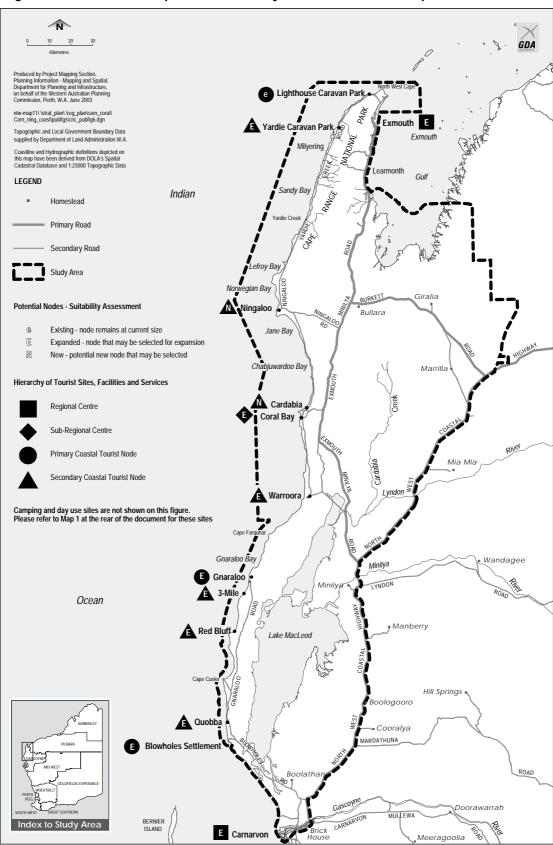


Figure 6: Scenario E - Expanded Coral Bay and Coastal Nodes Option Variation 3

10.5. SCENARIO E -Expanded Coral Bay and Coastal Nodes Option Variation 3

The proposed scenarios for future use of the Carnarvon-Ningaloo Coast are based on a number of common presumptions that *apply to each and every scenario*.

Carnarvon and Exmouth

Carnarvon and Exmouth provides the locations for all high-order and high-impact development, infrastructure and tourist facilities within the region. They develop extra tourist capacity to accommodate future tourism needs. All future residential land releases occur in these regional centres in order to capitalise on existing infrastructure and services available for residents.

Coral Bay

Coral Bay becomes a tourist settlement accommodating up to **3,000** people:

- Workers 250
- Tourist Beds 2,250
- Day Visitors 500

Mauds Landing

No development occurs, the townsite is removed and the land re-zoned from resort development to conservation and recreation.

Coastal Tourist Nodes

3 Or More New or Expanded Nodes to be Selected from the Following Possible Sites - Must Include 1 Primary Coastal Tourist Node

Existing Primary:

• Lighthouse Caravan Park

Possible Primary:

- Blowholes Settlement
- Gnaraloo Homestead Precinct

Possible New Secondary:

- Cardabia Homestead Precinct
- Ningaloo Homestead Precinct

Existing Secondary:

- Quobba Homestead Precinct
- Red Bluff
- 3 Mile Camp
- Gnaraloo Homestead Precinct

- Warroora Homestead Precinct
- Yardie Homestead Caravan Park

Coastal Camping Nodes and Day Use Sites

Are as per sites identified on Map 1.

The Carnarvon-Ningaloo Coast will continue to be provided with major services such as health and education, sport and recreation facilities, and accommodation by Carnarvon and Exmouth. Most future land development or expansion in tourism activity will be focused on the Carnarvon and Exmouth townsites to take advantage of existing facilities and infrastructure. One major tourist node of up to 500 people and two expanded or new secondary tourist nodes catering for up to 200 people will be considered outside of Carnarvon and Exmouth.

Ecolodges or eco-camps may be considered for any campsite, major or secondary tourist node based upon expressions of interest and will be restricted to low-key, small-scale proposals. This form of tourist facility will be recognised as a feature of the region with specific guidelines for the development of ecolodges/eco-camps being required.

Coral Bay will remain a low-key tourism destination for 2,750 visitors with no freehold residential land being provided. It will remain as a popular tourism destination providing an alternative to the semi remote environment between Carnarvon and Exmouth.

Camping along the coast will present a range of experiences and be managed to protect the exceptional environment.

Up to 2 tourism sites may be expanded to cater for up to 200 people out of Quobba, Gnaraloo, Warroora and Yardie Homestead Precincts, the Blowholes settlement, Red Bluff and 3 Mile Camp. This option includes possible new sites developed at Cardabia and Ningaloo Homesteads instead of expanding an existing site.

Either Gnaraloo Homestead or the Blowholes will expand to provide better services and cater for up to 500 visitors and thus become a primary tourist node within the region.

11. FUTURE TENURE, MANAGEMENT AND PLANNING CONTROLS

The government has made a commitment for the Carnarvon-Ningaloo Coast to be managed as public lands for conservation and recreation (i.e. crown reserves). Areas of pastoral leases to be excluded for this purpose will be removed from the pastoral stations in 2015 when leases are renewed. Pastoralists were notified of the proposed exclusions in November 2002. The exclusions range from up to a 2km wide coastal strip adjacent to the current Ningaloo Marine Park and proposed extensions (to date), to up to 1km adjacent to areas being examined as new proposed extensions to the Marine Park south to Carnaryon. A coastal exclusion along the Exmouth Gulf to provide for aquaculture development is also proposed.

Numerous studies have recommended that for appropriate ongoing environmental management of the Carnarvon-Ningaloo Coast, the State should pursue an exclusion of the coastal portion of the Learmonth Bombing Range (Lyndon Location 97) for addition to Cape Range National Park in the short term and the whole bombing range in the longer term. These actions would result in a series of crown reserves for conservation and recreation being gazetted along the coast and managed as an integrated whole to maintain the area's environmental values, especially those which are linked to the potential World Heritage nomination.

A background discussion paper⁶ has been completed for the Western Australian Government that provides a brief analysis of various governance models and offers recommendations for the future management of the Carnarvon-Ningaloo Coast. There were found in this report to be 5 examples of *"specific management entities"* which have been identified around Australia, which could have some relevance and might be of interest in considering future management models for the Carnarvon-Ningaloo Coast. These relate to the management of:

- the Great Barrier Reef;
- Rottnest Island;
- Phillip Island;
- the Wet Tropics World Heritage Area; and
- the Shark Bay World Heritage Area.

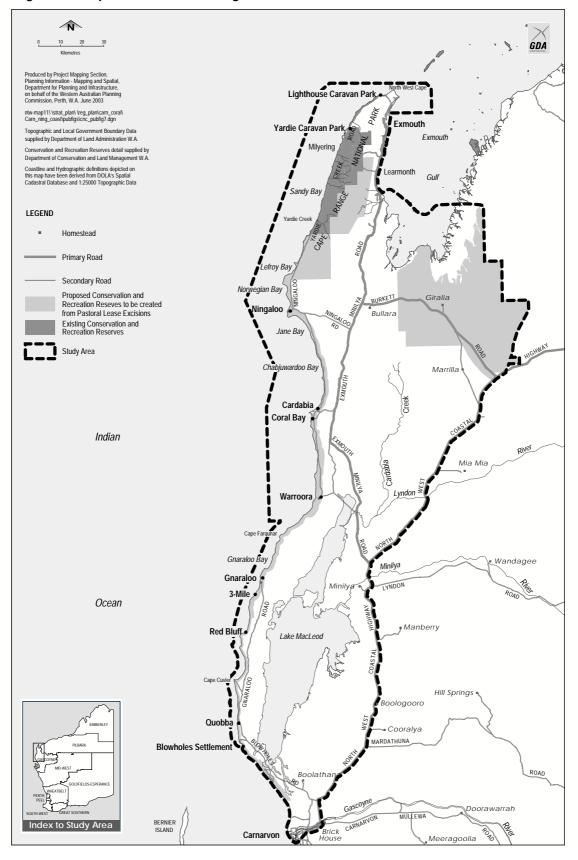
The most common model elsewhere in Australia is that national parks and areas of natural significance are vested in a parks authority and managed by the relevant "parks" agency of each State. In Western Australia the vesting authorities are the Conservation Commission of Western Australia (CCWA) for terrestrial areas and the Marine Parks and Reserves Authority (MPRA) for marine areas. The Department of Conservation of Land Management undertakes management for both statutory authorities. The discussion paper concluded that there was not a strong case for a new management authority that would divert potential resources from on-the-ground management on the Carnarvon-Ningaloo Coast into servicing the administration of any new authority and that this would be contrary to the Governments Machinery of Government Taskforce Report.

Efforts should be made to enable greater involvement in the on-the-ground management of the local indigenous people (Gnulli people) and also the adjacent pastoralists from whose lease the exclusions are occurring.

CALM becoming the prime management authority would not exclude the active involvement of the lessees of the adjacent pastoral stations or local indigenous interests. There are more than adequate powers in the *Conservation and Land Management Act 1985*

⁶The complete paper Errington, A. 2003, *Carnarvon-Ningaloo Coast: Governance Models Discussion Paper*, is available on the Commission's website www.wapc.wa.gov.au

Figure 7: Proposed Coastal Management



• Western Australian Planning Commission •

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for co-operative arrangements to be entered into. In the case of pastoralists, who have responded to community demands in the past by providing access and basic facilities to visitors, there is no reason why the arrangement could not continue if mutually satisfactory working measures could be agreed upon between the pastoralists and CALM.

Within Western Australia there are several models of planning mechanisms that could be used for the Carnarvon-Ningaloo Coast, ranging from:

- Statutory Region Scheme e.g. Peel Region Scheme;
- Statement of Planning Policy e.g. Leeuwin-Naturaliste Ridge Statement of Planning Policy No.7; and
- Strategic Regional Plan coordinated with a consistent local government Town Planning Scheme.

Both State and local government are undertaking planning for the area. The Western Australian Planning Commission is preparing the draft Carnarvon-Ningaloo Coast Regional Strategy, in conjunction with the CCWA review of the *Cape Range National Park Management Plan* and the and MPRA review of the *Ningaloo Marine Park Management Plan* to facilitate a coordinated planning approach for the Carnarvon-Ningaloo Coast. The Shire of Carnarvon is currently reviewing its town planning scheme and the Shire of Exmouth will review their town planning scheme at the completion of the final regional strategy. Both reviews will set out the statutory requirements for development, under the guidance provided by the Carnarvon-Ningaloo Coast Regional Strategy.

The discussion paper concluded that the existing arrangement of preparing a strategic region plan with coordination to ensure a consistent local government town planning scheme was appropriate. However, it was recommended that a Carnarvon-Ningaloo Coast Co-ordinating Committee should be established to co-ordinate and oversee the implementation of recommendations, which flow from the Strategy. The Committee should comprise State Government, local government and community interests and report to the proposed Coastal Planning and Co-ordination Council, which was announced in April 2003. The committee would have a limited life related to implementation objectives.



12. CONCLUSION

The Future Direction: Sustainable Tourism and Land Use Scenarios for the Carnarvon-Ningaloo Coast will set the direction for the draft Carnarvon-Ningaloo Coast Regional Strategy.

The scenarios outlined in the Future Directions Paper provide protection for the remote values of the coast and each is equally valid.

The purpose of releasing the Future Directions paper is to seek public reaction to the various scenarios expressed in this document. This will allow the Western Australian Planning Commission to be informed of the community's views relating to the future land use along the Carnarvon-Ningaloo Coast prior to preparation of the draft Carnarvon-Ningaloo Coast Regional Strategy.

Each issue raised will be addressed in the submission report and taken into account in the formulation of the draft Carnarvon-Ningaloo Coast Regional Strategy. The draft Carnarvon-Ningaloo Coast Regional Strategy that follows the Future Directions Paper will also be available for public comment. This draft strategy will incorporate balanced consideration of the public submissions to this paper, highlight the preferred scenario and will detail the location, nature and scale of development and land uses at each site along the coast.

Please provide your comments and ensure your voice is heard.



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APPENDIX ONE: Glossary

Attraction

A physical or cultural feature of a particular place that individual travellers or tourists perceive as capable of meeting one or more of their specific leisure-related needs. Such features may be ambient in nature (e.g. climate, culture, vegetation or scenery), or they may be specific to a location, such as a theatre performance, a museum or a waterfall.

Camping/Camping Ground

A form of accommodation where no hardening or built infrastructure is required. The accommodation is therefore not permanent and is easily removed.

Campsite

An area of land on which caravans/vehicles and tents fitted or designed for habitation are situated for habitation (derived from the *Caravan Parks and Camping Grounds Act 1995* WA)

Campsite (Unsupervised)

Campsites that have no, or minimal, supervision and rely on the patrons to camp and access in a responsible way. These campsites may or may not have facilities (e.g. water, toilets).

Campsite (Supervised)

Camping areas where some form of supervision occurs on a regular basis either by a government agency (e.g. Conservation and Land Management) or a private caretaker (e.g. station caretaker). The campsite may or may not facilities (e.g. water, toilets).

Caring for Country

Indigenous term for the traditions derived from the individual and group identities attained from their own particular area of land and sea, often referred to as 'country'. Throughout life indigenous peoples retain their cultural association with, and responsibilities to look after, their traditional country - even though they may no longer have ownership of even access to it. It is this sense of responsibility to country that makes indigenous groups particularly keen to be involved in the management of coastal areas.

Carrying Capacity

The maximum number of people who can use an area without an unacceptable alteration in the physical environment and a decline in the quality of the experience. It refers not only to physical and biological factors but also to social issues.

Covered Accommodation

Any form of accommodation under a permanent roof. Within this category there is a spectrum of accommodation types from single sleeping unit huts to multiple sleeping unit structures.

Day Use

An area which is designated and managed to provide visitor amenity for day use only (eg parking facilities, barbecues, toilets, picnic areas), but not for overnight stays or longer.

Development

The *Town Planning and Development Act 1928* states that, development or use of any land, including any demolition, erection, construction, alteration of or addition to any building or structure on the land and the carrying out on the land of any excavation or other works.

Drovers' Tents or Safari Tents

The term "Safari Tents" is a generic term, which is well accepted within the tourism industry to refer to a tented camp, either semi-permanent or permanent. While originating from East Africa (Safari is a Swahili word), the term is used in the tourism industry in English-speaking countries to refer to a specific form of accommodation and experience.



Example of safari tent

Ecolodge

An industry label used to define a category of accommodation that meets the philosophy and principles of ecotourism. A tourist accommodation that requires special care in design, construction and operation so as not to destroy the very resources or qualities tourists come to experience. An eco lodge should be simplistic, utilise sustainable power, be low energy incorporating passive design, minimal water use, ecologically sensitive waste disposal and recyclable processing of al waste with no pollutant product

Ecotourism

Ecotourism is nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable. There are five key principles which are fundamental to ecotourism. They are that ecotourism is nature based, ecologically sustainable, environmentally educative, locally beneficial and generates tourist satisfaction.

Informal boat-launching

This occurs where boats are launched at locations other than designated constructed boat-launching sites e.g. beaches.

Low-Impact Development

Means the use and development of land in such a manner that it does not detract from the rural and natural amenity of the locality, and includes the following criteria:

- development being located so as to avoid ridge lines, escarpments or visually exposed sites and situated where screening vegetation or land form can be utilised;
- (ii) use and development being sensitively located and designed to minimise impact on vegetation, water courses, soil quality and existing land uses;
- (iii) development being of a scale and nature so as to be self-sustaining on the lot, or demonstrating the ability to provide servicing without significant modifications to existing infrastructure:
- (iv) development that by the nature of its scale, design, colours, materials, landscaping and use, has minimal impact on its site and surrounding areas; and
- (v) where the land use and any development has a minimal off-site consequences.

Low-Impact Tourism Development

Low-impact tourism accommodation is a style of development that recognises the principles of ecologically sustainable development and displays sensitivity to the area in which it operates.

Nature Based Tourism

A broad term that includes a range of tourism experiences, including adventure tourism, ecotourism, and aspects of cultural and rural tourism. Indigenous culture is included as a part of nature-based tourism because of its inextricable link with the natural environment.

Protected Areas

An area dedicated primarily to the protection and enjoyment of natural or cultural heritage; to maintenance of biodiversity and/or maintenance of ecological life-support services.

Remote

A site or visitor attraction is considered remote when it is not connected to services such as power, water, sewerage or waste disposal. Hence, the remoteness of the place is perceived because of how it affects visitor amenity. It may also be perceived to be an area that has few permanent residents and is isolated from services, thus providing a closer interaction with the non-human environment.

Remote Camping

Camping which takes place in an area which is not connected to any services or infrastructure.

Semi-remote camping

Camping within an area which provides some services or infrastructure such as hardening of campsites, provision of designated fireplaces, or toilet facilities.

Station Accommodation

Roofed accommodation provided close to the station homestead and related to a working station. The pastoral-based tourism activity must be supplementary to the operation of the station and requires a permit from the Pastoral Lands Board.

Sustainability

Meeting the needs of current and future generations through simultaneous environmental, social and economic improvement.

Sustainable Tourism

Able to be carried out without damaging the long-term health and integrity of natural and cultural environments.

Sustainable Design

The use of design principles and strategies which help reduce the ecological impact of buildings by reducing the consumption of energy and resources, and by minimising disturbances to existing vegetation.

Tented Safari Camp/Semi-Permanent Camp

A generic term to include tented lodges and tented camps. A **tented lodge** has permanent public areas but sleeping accommodation is in tents. Tented lodges usually have luxuriously appointed furnishings with swimming pool and are usually located in remote areas. A **tented camp** will have tented public areas as well as sleeping accommodation and are generally smaller than tented lodges. In all cases, tents have bathroom facilities and usually hot and cold running water and flushing toilets. These low-key accommodations are constructed primarily of canvas or canvas like material.

Tourist Accommodation

Establishments, which provide predominantly short-term accommodation (i.e. for periods of less than two months) to the general public. These include hotels, motels and guest houses with and without facilities; holiday flats, units and houses; and visitor hostels. Caravan Parks which provide either predominantly shortterm (i.e. for periods of less than two months) or predominantly long-term (i.e. for periods of two months or more) accommodation to the general public and which provide powered sites for caravans and toilet, shower and laundry facilities.

Tourist Day Visitation

Location that is accessible to humans by vehicle or walking however, any form of overnight stay is prohibited. Signage, monitoring and supervision are part of the education for such sites. This will generally occur where the area is perceived to be sensitive to change or may have been notably degraded already through 4-wheel-drive access and unsupervised camping. Rehabilitation of former camping areas to a revegetated state will assist in the education and awareness of day users.

Under Roof Accommodation

This is roofed accommodation including ecolodges, chalets, caravan parks and ecocamps. It may be delineated as low-key development.

Viewshed

The views and visual aesthetics offered by a particular site and/or buildings.

Wilderness

A large tract of wild comparatively pristine country, with its native plant and animal communities substantially unmodified by human activity and managed to protect or restore wilderness values. Wilderness, in a tourism sense, is an experience or a perception rather than a physical reality. From a tourism management point of view, the purpose of a wilderness is to create a sense of being alone or at one with nature. It is preferable that wilderness landscapes be left in their natural state, but it is also recognised that some wilderness landscapes have been impacted by human activity eg pastoralism. Because wilderness is a tourist perception, it does not have to occur outside of a certain distance of an urban area. Wilderness in a tourism context therefore allows for human interaction within the place.

Wilderness Lodge/Camp

Used synonymously with the term 'ecolodge' to generally mean environmental sensitive accommodation developments in or within areas exerting high environmental values. Usually located in a wilderness setting. The key difference between a wilderness lodge and a wilderness camp is that sleeping accommodation for a camp can be easily removed (i.e. tented). The term wilderness lodge is used synonymously with the term ecolodge to refer to environmentally sensitive accommodation developments within areas exerting high environmental values. A wilderness camp is perceived to be similar to a wilderness lodge, however, the sleeping accommodation in a camp can be removed easily (semi-permanent).

World Best Practice

Achieving a level of business or operational performance that meets industry agreed to, world class bench marks.

APPENDIX TWO: Previous Studies

Planning Studies

State Planning Strategy

The *State Planning Strategy* (December, 1997) was prepared by the Western Australian Planning Commission, and stated that the Gascoyne Region should be developed as a premier water-based tourism area.

The strategy recommended that significant natural and environmental areas in the region were protected and infrastructure requirements were satisfied through the following strategies:

- incorporate CALM management strategies into future regional planning and development initiatives for the Gascoyne Region;
- review management plans for tourist areas to protect them from future degradation;
- promote environmentally responsible tourist operations in the Gascoyne Region;
- provide water and sewerage services to tourist centres, especially Coral Bay; and
- implement transport initiatives such as the *Gascoyne Regional Transport Strategy*.

Focus on the Future - The Western Australian State Sustainability Strategy - Consultation Draft

The draft strategy was designed to provide background to the concept of sustainability as well as propose actions for sustainability in Western Australia. Its goals was to ensure that the State makes the transition to a sustainable future, to recognise Western Australians role in the global challenges of sustainability, protect the environment and resources, plan settlements that reduce the ecological footprint while enhancing the quality of life, supporting communities and assisting businesses in benefiting from and contributing to sustainability.

Particular aspects of relevance, including forming new and just relationships with indigenous people, conservation of our highly significant globally recognised biodiversity, including nature-based tourism, ecologically sustainable management of fisheries, sustainable tourism which protects the attracting natural resources, highlighting the importance of sustainability as a driving concept for future coastal planning, providing a sustainable future for rangelands, greater recognition of cultural values and improved health and education, are detailed along with other aspects not included here.

Coasts WA: Better Integration - the Western Australian Government's Response to the Coastal Taskforce Report

This document, released in April 2003, was the Western Australian Government's response to the *Coastal Taskforce Report*. The taskforce did not find that specialist legislation was required however, recommended the strengthening of current arrangements through the reform of the Coastal Zone Council and by addressing:

- Confusion regarding the role and membership of the Coastal Zone Council;
- The lack of understanding in the community of the planning processes; and,
- The need to strengthen the integrated framework for planning and management of the coast.

The Government has resolved that the composition of the coastal council should include greater community representation and clarify the relationship between the coastal council and the Western Australian Planning Commission.

Statement of Planning Policy No. 2.6 State Coastal Planning Policy

The *Coastal Planning and Development* discussion paper resulted in the preparation and gazettal of the coastal Statement of Planning Policy No. 2.6 in April 2003. The policy is intended to assist in the consideration and planning of proposed development along the Western Australian coastline and includes requirements for coastal setbacks. The objectives of the policy are to:

- protect, conserve and enhance coastal values, particularly in areas of landscape, nature conservation, indigenous and cultural significance;
- provide for public foreshore areas and access to these on the coast;
- ensure the identification of appropriate areas for the sustainable use of the coast for housing, tourism, recreation, ocean access, maritime industry, and commercial and other activities; and
- ensure that the location of coastal facilities and development take into account coastal processes, including erosion, accretion, storm surge, tides, wave conditions, sea level change and biophysical criteria.

Gascoyne Coast Regional Strategy

The *Gascoyne Coast Regional Strategy* identified Carnarvon as the regional centre, Exmouth as a sub-regional centre and Coral Bay as a tourism development site. In regard to the Blowholes, the strategy stated the settlement should be rationalised. Additional low-key tourist development may have been appropriate, provided was in keeping with the existing environmental values and sense of place.

Key findings of the strategy were:

• Tourism, recreational activities and increased visitation to the Gascoyne Region have placed considerable

pressure on the natural environment and created a significant demand for additional tourist accommodation and related activities.

- There is a need to plan the tourist facilities and other uses of the coast to minimise environmental impacts and to develop a management framework that protects the natural features of the region.
- The report recommends that tourism developments comply with environmental guidelines in order to protect the terrestrial and marine environments.
- Management guidelines must be implemented for coastal development proposals to ensure the wilderness setting and environmental values of the coast are retained through the provision of appropriate coastal setbacks, management support and the assessment of cumulative effects of each development proposal in relation to existing developments.

Key tourism recommendations included:

- "ensure tourism developments comply with strict environmental criteria designed to protect the terrestrial and marine environments and other development conditions....";
- limit tourist development to low-key tourist facilities between Gnaraloo and Point Quobba in the short to medium term;
- promote Carnarvon as a popular tourist destination with features such as the Fascine development and local attractions such as Red Bluff, Cape Cuvier and Lake MacLeod;
- support tourist and accommodation facilities with appropriate transport infrastructure;
- target Australian and international tourism markets; and

• develop a co-ordinated approach to the marketing and promotion of nature based tourism with strong involvement from industry.

Exmouth-Learmonth (North West Cape) Structure Plan

The Ministry for Planning prepared this structure plan on behalf of the Western Australian Planning Commission. The structure plan covered the Shire of Exmouth and Ningaloo pastoral station, which was under consideration to become part of the shire. It supported a limited amount of development, preferably in the form of wilderness lodge style accommodation (i.e. low-impact accommodation) in order to retain the wilderness values of the west coast. It recommended that all tourism development proposals be assessed in accordance with the *Environmental and Planning Guidelines for Tourism Development on the North West Cape*.

Key conservation and tourism recommendations:

- ensure the conservation and preservation of land with environmental value;
- ensure the protection of groundwater as part of the human and subterranean environment;
- retain the wilderness value of the fragile environment of the west coast which is of international significance; and
- encourage major tourist development such as hotels, motels, resorts, to locate within the Exmouth townsite at a scale and design in accordance with the townscape and landscape plans for Exmouth.

The structure plan makes specific references to the style, number and location of tourism developments appropriate for the west side of Cape Range:

• Support a limited amount of development, preferably in the form of wilderness lodge style accommodation

(i.e. low-impact accommodation) in order to retain the wilderness values of the west coast. Other forms of tourism development will be considered only where it is demonstrated that it will protect the wilderness values and environmental sensitivities of the west coast.

• Limit the development of tourism accommodation in the short to medium term to 2 of the following general locations: Milyering, Lefroy Bay, Winderabandi, Ningaloo, in addition to a site north of Yardie Creek offered to the preferred developer of the resort at the Exmouth Marina in accordance with Cabinet's decision.

Draft Carnarvon Coastal Strategy

The draft Carnarvon Coastal Strategy was released for public comment in July 2001. As a result of public consultation, the strategy was not progressed and has been superseded by the preparation of the draft Carnarvon-Ningaloo Coast Regional Strategy.

The draft strategy was prepared with the assistance of Commonwealth funding from the Natural Heritage Trust. Management of the consultant preparing the study was undertaken by the then Ministry for Planning on behalf of the Shire of Carnarvon.

The purpose of the draft Carnarvon Coastal Strategy was to:

- review and evaluate the study area's resources and uses to accommodate existing and future land uses;
- identify and relocate future coastal development pressures and determine the level of development at the alternative sites identified;
- recommend the most appropriate type, scale, form and location of activities and infrastructure within the study area;



- provide strategic and specific recommendations for visitor access and appropriate management plans for the study area;
- provide specific concept plans where nodes of development have been identified;
- make recommendations concerning the implementation of the Strategy; and
- provide a framework for consideration of development proposals and guidance for the relevant Shire of Carnarvon town planning schemes.

The draft strategy presented development concept plans for four specific sites, being Blowholes Precinct, Ningaloo Precinct, Quobba Station and Gnaraloo Station - as well as generic development concept plans for camping and day use adjacent to the coast.

The Minister for Planning and Infrastructure initiated the development of the draft Carnarvon-Ningaloo Coast Region Strategy in order to address the public submissions and to incorporate the North West Cape and land west of the North West Coastal Highway to the Shire of Exmouth's eastern boundary.

Environmental and Planning Guidelines for Tourism Development on the North West Cape

The Department of Environmental Protection and the Ministry for Planning prepared the guidelines on behalf of the Gascoyne Coast Planning Co-ordinating Committee of the Western Australian Planning Commission.

The guidelines recommended:

- In view of the fragile coastal environment of national significance, it is preferred that large-scale development not occur due to the lack of water resources, power generation capacities, wastewater treatment and disposal facilities, and access difficulties.
- Low-impact/small-scale tourism development is preferred on the west

coast. The level of development should be monitored to ascertain its impact on the environment.

The guidelines also contained policies and guidelines to which proposed tourism development should have due regard. These guidelines and policies included:

- Location
- Development scale
- Wilderness protection
- Foreshore setback
- Marine infrastructure
- · Water availability
- Cyclones, flooding and drainage
- Sewage treatment
- Waste disposal
- Access
- Energy generation
- Construction and management

Existing Town Planning Schemes: Carnarvon and Exmouth

Planning control over the study area currently is implemented through town planning schemes administered by the Shires of Carnarvon and Exmouth. Each scheme is reasonably comprehensive in its application to coastal development although there are likely to be changes required to the documents once the draft Carnarvon-Ningaloo Coast Regional Strategy is finalised. The Carnarvon town planning schemes are being reviewed in conjunction with the preparation of this strategy, while the Exmouth scheme will be reviewed after completion of this strategy.

Coral Bay Taskforce Report on Infrastructure Requirements for Coral Bay

The report released in December 1996 contained 23 recommendations for Coral Bay. The recommendations were framed in order that the infrastructure situation can be clarified and future development in the Coral Bay area could proceed in an orderly and coordinated fashion. The provision of infrastructure will rely on:

- conformity with and implementation of the structure plan of future development;
- contribution of all operation to common systems;
- contribution by government to the capital and operating costs of the systems; and
- urgent calls for expressions of interest in provision of the infrastructure.

Coral Bay Settlement Plan

The Settlement Plan prepared by the Shire of Carnarvon, indicates four new development nodes to the south of the existing settlement. It proposes the construction of a new spur road to access adjacent land to the south of existing development, which would improve access to previously developed sites and new workers' accommodation facilities. The plan included criteria on which site development should proceed, including the resolution of servicing constraints, environmental issues, access issues and infrastructure contributions.

Other Studies

State Squatter Policy

The State Government policy on squatter shacks has been reviewed in the context of the Carnarvon-Ningaloo Coast. This policy is of particular importance to the study area due to the implications for the Blowholes site.

The Squatter Policy was developed in the late 1980s to deal with the then escalating problems of illegal coastal squatter shacks along the Mid-West coastline. In areas such as Wedge Island and Sandy Cape, large numbers of illegal shacks were causing serious environmental impacts. The policy was developed by the coastal planning section of the then Department of Planning and Urban Development as a method by which the shacks could be phased out.

Essentially, the policy facilitated local governments collecting a minimum rate for the occupation of coastal land by the shacks for a phasing-out period of 6 years or less. The rate income was injected back into the area through the administration of the shack removal scheme and improved coastal management. Each shack owner entered into an agreement with the local government on this basis. The shacks whose owners did not enter into these agreements were demolished immediately. The policy was extremely successful in removing shacks along the Mid-West coastline and in other areas of the state.

In relation to the Blowholes, the Shire of Carnarvon and the Department for Planning and Infrastructure are progressing planning for a properly planned and serviced coastal tourist node to replace the existing shacks that are being removed.

A 12-Month Survey of Recreational Fishing in the Gascoyne Bioregion of Western Australia During 1998-99

This study was completed by the Department of Fisheries research staff was based on a 12month survey of recreational fishing in the Gascoyne bioregion of Western Australia during 1998/99. The study concluded that the main species taken by recreational fishers cannot support any increase in fishing pressure, an increase in boat-launching facilities or access will have unsustainable impacts upon the marine environment, and fish refuges are critical for sustainability. It also included a spatial context for recreational fishing in the region, details of main fished species in the Gascoyne (spangled emperor, pink snapper and narrow barred spanish mackerel), discussion of fishing regulations and needs of recreational fishers.

Draft Fisheries Environmental Management Plan for the Gascoyne Region (June 2002)

The review aimed to examine the environmental management of the Western Australian coastline from a broad fisheries perspective, and to make an initial and qualitative assessment of the environmental effects of fishing on a regional basis.

Gascoyne Regional Transport Strategy

This strategy was prepared by the Department of Transport to address transport issues in the Gascoyne Region. It highlighted that:

- Demand has increased for improved road access to the coast between Carnarvon and North West Cape via Coral Bay to improve access to sightseeing and fishing locations for residents and tourists.
- With respect to the Gnaraloo-Warroora Road, an assessment of the feasibility of reopening this section of the road to provide coastal access to Coral Bay should be undertaken, including addressing social/environmental concerns.

Roads 2020 Regional Road Development Strategy – Gascoyne

The strategy documented several issues that have direct implications for the Carnarvon-Ningaloo Coast. These included:

- A need existed for road access to be extended along the coast between Point Quobba, Ningaloo and Exmouth to assist the increasing tourism industry.
- A potential link between Coral Bay and Ningaloo required further investigation to determine travel demands and benefits for a coastal link.
- The strategy acknowledged that future tourism development along the North West Cape would place greater pressure upon the existing road system;

therefore, improvements to access would enhance the viability of future tourism development.

First Report of the Legislative Council Select Committee on Cape Range National Park and Ningaloo Marine Park (December 1995).

This report contained recommendations for the parks to ensure "sustainability in perpetuity". Twenty-four recommendations were made, including:

- encouragement of accommodation that is consistent with conservation management strategies;
- discouragement of a shore-based resort on the western side of Cape Range;
- development of environmental guidelines for accommodation facilities;
- excision of a coastal strip the length of the Marine Park to the Department of Conservation and Land Management to properly manage and control camping and vehicle use;
- Cape Range National Park should be extended to include Ningaloo Pastoral Station with fair and reasonable payment;
- adequate resourcing provision to manage both parks; and
- installation of adequate sewerage headworks for Coral Bay and examination of potential to relinquish Coral Bay from Shire of Carnarvon to Shire of Exmouth.

In 1996, the Western Australian Government released a response to the Select Committee's report. In summary, this response supported the intent and principle of the recommendations detailed. The response also considered that the Gascoyne Coast Planning Co-ordinating Committee provided an appropriate mechanism to develop and formalise the guidelines outlined in Recommendation 3, in the context of the *Gascoyne Coast Regional Strategy and Exmouth-Learmonth (North West Cape) Structure Plan,* rather than forming a separate strategy group.

Cape Range National Park Management Plan 1987-1997

Adopted in 1987, this management plan currently is under review. The general management objectives for Cape Range National Park are:

- protect and conserve indigenous plants and animals and their habitats;
- protect and conserve physical, cultural and scenic resources;
- provide opportunities and facilities for appropriate public recreation;
- regulate use to be consistent with the maintenance and protection of natural resource values and to minimise conflict between uses;
- promote visitor safety, awareness and appreciation of natural processes and the scientific and cultural attributes of park resources; and
- provide information, education and interpretive programs.

The management plan also recognised the relationship and need for integration with Ningaloo Marine Park as the 2 parks complement each other. The plan stated that the 2 parks would be managed integrally to increase efficiency of management operations.

A Representative Marine Reserve System for Western Australia

This report was prepared to review available data on the flora and fauna, habitats and geomorphology of Western Australian coastal waters. It identified areas of particular value for conservation, scientific and public recreation. Recommendations were made in regard to Ningaloo Reef and the section of coast between Red Bluff and Point Quobba.

Ningaloo Marine Park Management Plan 1989-1999

The Ningaloo Marine Park Management Plan currently is under review. The general management objectives of the management plan are:

- to manage state and commonwealth areas as one park;
- to integrate management and development of the park with adjacent areas of land to achieve maximum effectiveness and optimum allocation of management resources;
- to manage adjoining coastal land so access to the park is achieved with minimum disruption to the rights of adjoining owners;
- to conserve native species, habitats and natural processes;
- to provide recreational opportunities and facilities which maximise the quality of experience sought by visitors;
- to promote an appreciation and understanding of the marine environment and sites of cultural significance in the park, through information, interpretation and education;
- to manage recreational and commercial fishing without adversely affecting fish populations
- to provide for tourism, to an extent consistent with maintenance of resources;
- to ensure that all development and activities are consistent with the maintenance of species populations, habitats, natural features, and cultural and scenic values; and
- to conduct research programs aimed at understanding how impacts of use and natural processes affect the maintenance and management of the park.

Ningaloo Marine Park (Commonwealth Waters) Management Plan

The 2002 management plan specifies the management goals and strategies for Ningaloo Marine Park (Commonwealth Waters) and has a life of seven years. Goals are based upon:

- conservation;
- recreation;
- science and education; and
- national system.

Jurabi and Bundegi Coastal Parks, and Muiron Islands (1999)

This management plan forms part of the management agreement between the executive director of the Department of Conservation and Land Management and the Shire of Exmouth in whom the coastal areas of Jurabi and Bundegi are vested jointly. With regard to the Muiron Islands, which are vested jointly in the National Parks and Nature Conservation Authority and the Shire of Exmouth, this document in its final form will become a management plan under the Conservation and Land Management Act 1984. These reserves in the vicinity of the Cape Range Peninsula - Cape Range National Park and Ningaloo Marine Park (Jurabi and Bundegi Coastal Parks and the Muiron Islands) currently are managed as an integrated unit. This document complements management plans prepared for Cape Range National Park and Ningaloo Marine Park. This management plan involves a summary of the area's resources, the user pressures placed upon them and outlines goals and objectives to guide the development and management of the reserves.

Exmouth Gulf Coastal Plan

The Coastal Plan was adopted by the Shire of Exmouth in 2001 and contained recommendations for the coast abutting the Exmouth Gulf.

Environmental Protection Authority Report and recommendation on the proposed Coral Coast Resort at Mauds Landing (October 2002)

The Environmental Protection Authority (EPA) considered the proposal to develop Mauds Landing as a tourist centre and residential subdivision centred around an inland marina. The EPA noted that the Ningaloo Marine Park was a State, national and international icon and visitors to the area are likely to increase. The authority recognised that increased management of the marine park would be required if the proposal were to be supported.

The report recommended that the proposal should not be supported without the following steps:

- Identify and confirm the environmental management resources required across the natural resource management sectors to protect all values of the Ningaloo Marine Park and its adjacent coastline adequately, as well as having regard for potential World Heritage values from the impacts of additional human pressure;
- Confirm that any commitments by the proponent to support environmental management are legally and financially sound in terms of their capacity to deliver the necessary environmental management in the long term;
- Make a whole-of-government commitment to any environmental management arrangement with the proponent;
- Commit to prepare and implement an effective environmental management system, including the preparation of management plans and the provision of resources commensurate with the level of human-use pressures on the Ningaloo Marine Park, to ensure that the environmental values of the region are protected adequately in the long term.

The advice related mainly to the challenge of sustainable use of the Ningaloo and Cape

Range coastal area in the context of the commitment to pursue World Heritage listing for the marine park.

EPA Cape Range Position Statement

In March 1998, the EPA released a Preliminary Position Statement on the Cape Range Province. This position statement provided a number of principles for the protection of the Cape Range Province. Like the Select Committee's report, Government Response to the Select Committee and the Gascoyne Coast Regional Strategy, the EPA's statement provided a consistent vision for the region, for example:

- "The Cape Range Province should be managed according to sound ecologically sustainable development and biodiversity protection principles [...]." (Principle 1)
- "From the environmental perspective, there should be no major development permitted on the west side of Cape Range [...] Planning Units 2 and 3 in the Exmouth-Learmonth Structure Plan North West Cape [...]. Residential development should be confined to the existing townsite. [...] Although it may be appropriate to establish some low-key, high quality ecolodge[/]wilderness lodge/camping tourism areas on the west coast." (Principle 10)
- "All development proposals should take account of the above principles, and, if pursued, should be subject to environmental impact assessment. This should include, inter alia, consideration of alternative sites for the development outside the Cape Range Province, detailed consideration of on-site and off-site impacts of the development, as well as the cumulative effect of all proposed developments in the area on environmental values and ecological processes." (Principle 11)

North West Cape Wilderness Lodge Proposal (Reference File)

This document includes copies of detailed work undertaken on behalf of the Western Australian Planning Commission at the request of the Western Australian Planning Commission's Gascoyne Coast Planning Coordinating Committee to prepare detailed background material on feasibility and economic impacts of ecolodges on the North West Cape section of Carnarvon-Ningaloo Coast.

The reference file includes several key reports and outlines world's best practice in ecolodge design, construction, servicing and the financial requirements to make an ecolodge proposal successful. This reference file also includes a copy of the *Environmental and Planning Guidelines for Tourism Development on the North West Cape*, which is well regarded as they provide a high level of certainty to any future ecolodge proponents.

Designing Tourism Naturally - A review of World Best Practice in Wilderness Lodges and Tented Safari Camps

The Western Australian Tourism Commission released this strategy in July 2000. The strategy undertook a review of tented safari camps and wilderness lodges in five countries around the world to improve the knowledge base for planning for similar proposals in Western Australia. The key benchmarks formed by the review were that successful nature-based (or low-impact) tourism should incorporate sustainable design (including sense of place), interpretation to improve consumer awareness, local community involvement (in particular indigenous peoples), putting something back into the environment and a high degree of quality in food, beverage and hospitality services.

Coral Coast Resort - Revised Structure Plan and Development Proposal

The document, prepared in 1999, presents an overview of the current proposal for Mauds Landing which was scaled down from the original proposal. The document provides proponent's overview of the revised proposal and discussion to support the proposal. The proponents outline the regional benefits, both in terms of direct and indirect economic activity of the proposal.

North West Cape Tourism Development Study

The 1993 study looked at the potential for tourism within the North West Cape and made various recommendations for staged tourism development. This study looked at large scale tourism development for the area based on 102 site assessments.

APPENDIX THREE: Draft Planning and Environmental Guidelines for Future Tourism Development on the Carnarvon-Ningaloo Coast

(Derived from *Environmental and Planning Guidelines for Tourism Development on the North West Cape*, May 1999)

PURPOSE

The purpose of these guidelines is to:

- 1. provide State agencies, local government, community and proponents with clear guidance regarding tourism development;
- 2. delineate "limits of acceptable change", which will ensure that visitors continue to enjoy a remote and natural experience in the Carnarvon-Ningaloo Region; and
- 3. preserve, enhance and protect the environment.

APPLICATION

These guidelines primarily are intended to ensure **all** future tourism developments or expansion of existing developments on the Carnarvon-Ningaloo Coast, outside of the regional centres of Exmouth and Carnarvon and sub-regional centre of Coral Bay, from the Exmouth Gulf to Carnarvon townsite are *lowimpact tourism developments* (including campsites, camping nodes, drovers' huts and ecolodges) .

These guidelines must be read in conjunction with *Statement of Planning Policy 2.6* State Coastal Planning Policy.

PRELIMINARY

The Carnarvon-Ningaloo Region is a fragile natural area and is the home of rare marine and terrestrial species that could be damaged irretrievably by insensitive or ad hoc development. This fragile natural area, its flora and fauna, ruggedness and sense of remoteness also are the basis of a growing, economically important, nature-based tourism industry and the area is designated as a zone of opportunity in the State's Nature Based Tourism Strategy. The sustainability of the tourism industry and the natural area on which it depends will involve careful planning, management and sympathetic development.

Pressure for substantial developments has intensified over recent years due to the growth in tourism. The coast already is subject to a variety of developments, including roads, camping sites (formal and informal), toilets, car parks, boat ramps, moorings, interpretation centres, observation structures, accommodation, signs, shelters, paths, picnic areas and the like.

LOCATION

While the Gascoyne Coast Regional Strategy, the Exmouth-Learmonth (North West Cape) Structure Plan and the draft Carnarvon Coastal Strategy identified a number of potential sites along the Carnarvon-Ningaloo Coast for smallscale/low-impact tourism development, the draft Carnarvon-Ningaloo Coast Regional Strategy outlines acceptable uses for the coast with varying degrees of tourism servicing and facilities.

Camping activity is spread along much of the Carnarvon-Ningaloo Coast. Outside of the Cape Range National Park, much of it is occurring in an ad hoc and unmanaged way, with a detrimental effect on the environment resulting from uncontrolled access, rubbish dumping, increased fire risk, and weed invasion. These campsites need to be rationalised and those identified for retention managed adequately in the short term (prior to the creation of the coastal conservation and recreation reserves) through an integrated management process involving Department of Conservation and Land Management and pastoral leaseholders.

Policies

- P.1 Proposed tourism developments should be located consistent with the draft Carnarvon-Ningaloo Coast Regional Strategy and Cape Range National Park Management Plan.
- P.2 Until more baseline environmental information is available and within an appropriate planning context only staged proposals based on general locations should be considered.
- P.3 Camping in the Carnarvon-Ningaloo Region should be restricted to designated and managed campsites.

Guideline

- G.1 Proposed tourism developments should be located to ensure:
 - a. an appropriate distance from areas of cultural significance or heritage value is maintained;
 - b. stable ground conditions exist for access, building construction and visitor and management use patterns;
 - c. soil types are suitable for and capable of development;
 - d. buildings and infrastructure are located to ensure they are not subject to inundation and/or storm surge in compliance with *Statement of Planning Policy No.* 2.6 State Coastal Planning Policy;
 - e. insect breeding sites such as those of mosquitoes and biting midges are avoided;
 - f. risks and hazards to visitors are minimised;
 - g. locations of declared rare or priority flora and fauna species

are avoided or protected, and disturbance to important breeding or feeding areas is minimised;

- h. where possible, the potential for further expansion or upgrading can be accommodated without significant impact on the environment; and
- i. consideration of potential impacts upon marine park sanctuary zones, fish habitat protection areas and other sensitive marine environment areas.

DEVELOPMENT SCALE

The west coast of the Carnarvon-Ningaloo Region is a fragile coastal environment and its attraction is its remote values and scenic beauty. The development of major tourism accommodation shall be carefully considered so as not to detract from its remoteness appeal. The type of development envisaged for the west coast is generally low-impact accommodation, such as drovers' huts or ecolodge style which:

"is development that has regard to longrange environmental and natural resource conservation and symbioses with human communities. In providing facilities and activities for visitors, special care must be taken not to destroy the very resources or qualities they came to experience. In the ideal situation, if development is necessary it would be constructed of natural sustainable materials, generate its own energy from renewable resources such as solar or wind, and manage its own waste. It should not physically alter or have a visual impact on the existing natural environment." (The Ecotourism Society, 1995)

There is a demand for the provision of smallscale / low-impact tourism facilities. From a planning perspective, it is appropriate to encourage major (large-scale/high-impact) tourist development within the Carnarvon and Exmouth regional centres as proposed by the draft Carnarvon-Ningaloo Coast Regional Strategy, which:

- are physically capable and suitable for development;
- do not abut a sensitive marine environment; and
- have the available infrastructure i.e. roads, air transport, communications, boat harbour, community facilities, water, sewerage and power.

Given the development on the east coast of North West Cape, incorporating the Exmouth boat harbour and associated marina residential development, and Carnarvon Fascine, it is appropriate that further development be focused in those areas. It also is appropriate that the coast be retained largely in its natural state and its features preserved to cater predominantly for day use visitation and suitable small-scale and lowimpact, environmentally sensitive tourism accommodation nodes.

Policies

- P.4 Subject to environmental and planning approval large-scale resort style tourism proposals should be confined to Exmouth and Carnarvon regional centres.
- P.5 Development in the sub-regional centre of Coral Bay will be based on an approved settlement plan and appropriate services being provided.
- P.6 Proposed tourism developments outside these townsites should be small-scale, low-impact and highquality proposals, including drovers' huts or ecolodge developments in addition to camping nodes.

PROTECTION OF REMOTE AREAS

The remote values of the region are outstanding. Despite historic pastoral grazing, the landform and vegetation reinforce the unspoilt, natural and remote values of the area and its incredible natural beauty. The landform to the north is dominated by Cape Range. The range is flanked by highly eroded limestone terraces, drainage lines and gorges adjacent to red alluvial fans and flats, followed by a relatively narrow strip of aeolian white dunes adjacent to the beach. Vegetation is relatively uniform and low lying, ranging between 0.5m and 1.5m, apart from isolated stands of taller trees.

To the south, the area between Carnarvon and Miaboolya Beach is the Delta Coast, which characterised by mangroves, tidal inlets and salt flats. Between Miaboolya Beach and Point Quobba is a sedimentary coast and from Point Quobba to 3 Mile Camp is a cliff coast consisting of low limestone cliffs with rocky shores and occasional pocket beaches. The coast between 3 Mile Camp and the southern border of Cape Range National Park is dune and cuspate spit coast. The nature of the landform and vegetation contributes to a visual landscape that is highly sensitive to changes. Already, minor tracks, small telecommunication towers on the Cape Range and gravel pits are highly visible when viewed from Yardie Creek Road.

While the Milyering Visitor Centre, which is only single storey, is designed, constructed and landscaped sympathetically, it is highly visible from a considerable distance. Even essential standard roads signs indicating speed, direction and hazards have landscape impact. Notwithstanding this, most of the major and minor sites (e.g. low-lying areas or dune swales) provide some opportunity to minimise the visual impact of development.

Policies

P.7 To retain the remote values of the Carnarvon-Ningaloo Coast, only a limited amount of development should be supported outside the regional and sub-regional centres, in the form of small-scale/low-impact ecolodge style accommodation, consistent with the locations identified in the section on Location.

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P.8 Proposed tourism developments should demonstrate an understanding of and be sympathetic with the landform, visual context and resources, views and general landscape values of a particular site and how it is likely to affect the perception of the area's remote values.

Guidelines

- G.2 Building structures preferably should not exceed 1 storey or 5m from natural ground level. Buildings within up to 2 storeys or 9m from natural ground level may be considered in the sub-regional centres, provided the proponent demonstrates that the visual impact would not be significantly greater than an equivalent single-storey building.
- G.3 Proponents should prepare a visual resource management plan, which should address:
 - a. the existing landform, vegetation, prominent features and viewsheds (to and from the proposed site);
 - b. contour information at a minimum of 1m intervals; and
 - c. how the development proposal will affect remote landscape values using physical or computergenerated 3-dimensional models.
- G.4 The proposed tourism development should be designed, constructed and operated to ensure:
 - a. only locally indigenous vegetation is propagated for screening, windbreaks, rehabilitation and landscaping;
 - b. weeds are monitored and eradicated where appropriate;
 - c. minimal change is made to landform (cut and fill) and topography to accommodate buildings and infrastructure;

- d. disturbance or loss of natural vegetation is minimised or avoided;
- e. local sources of gravel, stone and earth are used, subject to environmental approval;
- f. architectural style, landscape design and construction materials reflect local elements (e.g. landform);
- g. impacts on visually prominent areas such as headlands, cliffs and ridges are avoided;
- h. materials with muted or recessive colours and low reflective qualities that closely complement the setting are used;
- i. noise pollution is minimised;
- j. lighting which may affect nocturnal animals is minimised;
- k. services, including powerlines are located below ground (where practical) provided the environmental impact is less than that of above-ground infrastructure; and
- isolated structures, such as car parks, toilet blocks, towers and storage areas, blend into the natural setting with appropriate selection of materials and with locally endemic vegetation.

FORESHORE SETBACK

The Carnarvon-Ningaloo Region has diverse landforms and natural systems and the coastal zone differs from place to place. Due to this diversity, setbacks for development within the coastal zone should be defined following consideration of the natural processes in specific areas. For example, some areas have extensive mobile dunes while others have rocky foreshores. Some areas have drainage systems which affect mangroves and others have coastal plains which are subject to tidal or run-off inundation. Some areas are important habitats for natural fauna while others have high recreational value.

The coastal zone is dynamic and changes over time. The coast is subject to erosion or accretion due to natural processes and/or as a result of human and animal activity. For example, dunes can be mobile as a result of natural processes or can become mobile as a result of vegetation removal. Therefore, on one hand, developments could be affected by dune mobility while on the other, they could affect vegetation and cause dune mobility.

Policies

- P.9 Development should be set back from the coast based on natural process constraints.
- P.10 Development should provide for appropriately managed public access to the foreshore in keeping with the recommendations of the draft Carnarvon-Ningaloo Coast Regional Strategy.

Guidelines

- G.5 An appropriate setback between the development and the line of permanent vegetation shall be determined consistent with *Statement of Planning Policy No. 2.6* State Coastal Planning Policy and in addition shall:
 - a. incorporate the primary and secondary dunes (where they exist);
 - address the stability (accretion/erosion) of the dune and beach system (beach sand cycle);
 - c. address inundation (e.g. on alluvial floodplains and drainage lines), including from extreme natural events (e.g. cyclone, storm surge or tsunami) and long-term changes in sea level;

- d. protect dunes, beaches and near shore waters which provide breeding, nesting or feeding areas for significant fauna; and
- e. set back development from visually prominent sites such as headlands, cliffs, beaches and other locations which are a focus of attention or in major viewsheds from other important locations.
- G.6 The land within the foreshore setback should be maintained and managed to conserve terrestrial, intertidal and near shore natural (physical and biological), landscape and cultural features through the preparation and implementation of a foreshore management plan, which should ensure:
 - a. signage, bollards, rubbish bins and small structures (water tanks or toilet blocks) within the foreshore reserve have a very low visual impact and are of a form (colour, materials and size) consistent with the amenity and character of the area;
 - b. foreshore access roads and car parks are sensitive to environmental constraints, minimising cut and fill and vegetation removal, and following natural contours;
 - c. pedestrian access is the principal form of access through the foreshore reserve (where one exists) and paths direct people away from environmentally sensitive areas;
 - d. 4 wheel-drive, off-road vehicles and motorbikes are not be permitted on the beach or within the foreshore reserve (unless beach access is designated), except for approved boatlaunching facilities; and

e. stabilisation, rehabilitation, revegetation and landscaping of the foreshore setback is undertaken using locally endemic plant species.

MARINE INFRASTRUCTURE

Direct marine impacts arise due mainly to water-based activities (e.g. boating) and generally have a localised impact, such as damage caused by anchor chains, the depletion of fish stocks through overfishing and the removal of corals and shells. Indirect marine impacts (e.g. increased turbidity, habitat disturbance and bilge discharge) usually are more difficult to control where large numbers of recreational boat enthusiasts have access to coral reefs. There also is an increased risk of contamination due to fuel spills and inappropriate rubbish disposal.

Marinas, canals and jetties have the potential to cause significant environmental impact, at the time of construction and on an ongoing basis. This infrastructure is not considered to be consistent with the wilderness values of the area and the intent of low-key ecolodge developments.

Demand exists to provide boat-launching facilities for recreational fishing or diving activities, but management plans should ensure uncontrolled access by vehicles and the accumulation of boats on the beach do not occur at informal beach launching sites.

Policies

- P.11 Marina and canal developments will be considered only in the designated townsites of Exmouth and Carnarvon.
- P.12 Marine structures (i.e. small jetties) will be considered only if they are consistent with the Ningaloo Marine Park Management Plan or have received environmental and planning approval.
- P.13 Boat-launching facilities may be allowed provided they are consistent with the Ningaloo Marine Park

Management Plan, draft Carnarvon-Ningaloo Coast Regional Strategy and have a strategic facilities plan and have been assessed by the EPA.

P.14 Dredging of sand or removal of coral to provide boating passage (e.g. blasting) will not be permitted.

WATER AVAILABILITY

Water availability has been recognised as one of the most significant constraints to the development of the region. The climate of the Carnarvon-Ningaloo Region ranges from hot, arid conditions at the tip of Cape Range in the north to warm semi-arid conditions around Carnarvon in the south. During January and February each year, the maximum daily temperature regularly reaches 45° C.

Rainfall in the region averages 300mm annually with peak falls in summer and winter. The sources of rain include tropical cyclones, the incursion of warm moist air from the Kimberley Region and mid-latitude depressions.

Groundwater occurs either as superficial or confined groundwater. Supplies of fresh, unconfined groundwater generally are restricted to the vicinity of the major rivers or in elevated areas such as the Cape Range. In the case of the Cape Range, fresh or brackish groundwater usually overlies very saline groundwater. Confined or artesian groundwater is under pressure and rises when intercepted by a bore or may naturally flow to the surface via springs.

Artesian groundwater occurs throughout most of the region and may be as much as 900m below the surface in coastal areas such as Coral Bay where alternative sources of groundwater generally are not available. Artesian groundwater is brackish to very saline, varies in temperature from 10° C to 100° C and is corrosive. It requires substantial treatment usually involving desalination, cooling, softening and removal of iron to attain potable water quality. Water availability also constitutes a significant environmental constraint. Pumping of fresh or brackish water which overlies saline water can cause saltwater intrusion to the surface. Recharge of the shallow aquifer may occur only after intense or long rainfall and in some years, this may not occur at all. Subterranean fauna, particularly stygofauna, also may be affected by changes in groundwater levels, quality and salinity due to groundwater extraction. Wastewater from the desalinisation and/or treatment of saline groundwater, corrosive artesian groundwater or sea water may be highly saline, alkaline, acidic or contain heavy metals and minerals, and therefore cause impacts to the environment if discharged. Evaporation or infiltration ponds and ocean outfall pipes, if visible, are likely to affect remote values.

Clearly, the issue of water availability needs to be considered in the context of the water required by a specific development proposal, the available water resources, proposed effluent treatment and recycling and specific site circumstances.

Policies

- P.15 The disposal of wastewater from desalinisation or the treatment of artesian water to the marine environment may be considered provided the site selection for infrastructure minimises impact on the environment and there is no suitable alternative or complementary water source. Disposal to the terrestrial environment may be considered, provided groundwater and surface water quality and quantity are maintained such that existing and potential uses, including ecosystem functioning, are protected.
- P.16 The scale of development and future expansion should be consistent with availability and sustainability of safe and reliable water sources.

- P.17 Extraction of shallow, unconfined groundwater must be sustainable, without affecting dependent ecosystems or physical processes.
- P.18 Development proponents should endeavour to obtain water from a variety of sustainable sources, with collection of rainwater being a priority.
- P.19 Development proponents should locate visible water supply and storage facilities sensitively within the landscape.

Guideline

G.7 Water conservation strategies (e.g. composting toilets, grey water and stormwater re-use and low-flow shower roses) should be incorporated in development proposals.

CYCLONES, FLOODING AND DRAINAGE

The Carnarvon-Ningaloo Coast is subject to frequent cyclones which cause strong winds, storm surge, and tsunamis leading to inundation of the coastal zone. More frequently, flooding of the coastal plain occurs as a result of the combination of rain, high tides and low-lying land. If sea levels rise, as predicted (Intergovernmental Panel on Climate Change), the coastal zone may be subject to additional and increasing inundation. Therefore, development sites will require careful selection to avoid adverse impacts from cyclones and flooding. Decision-making authorities carefully must assess and respond to development proposals to avoid liability for loss or damage to developments.

Policies

- P.20 Landforms and topography should not be altered substantially to deal with potential flooding.
- P.21 Developments shall not be located in areas subject to inundation.
- P.22 Developments shall be constructed to withstand the effects of cyclones.

Guideline

- G.8 Development proposals shall:
 - a. consider innovative pavement solutions as an alternative to bitumen and concrete to decrease the amount of stormwater run-off;
 - b. ensure buildings and infrastructure are located based on criteria derived from historical flooding data or best estimates;
 - c. be constructed to withstand the effects of cyclones; and
 - d. incorporate water-sensitive design principles and features into overall design of buildings, hard surfaces, landscaped areas and stormwater drainage.

SEWAGE TREATMENT

Sewage treatment presents a considerable environmental constraint to development. Conventional septic systems involve the leaching of nutrients and other pollutants which may affect subterranean fauna, marine water and groundwater quality and coral ecosystems. Unlike freshwater wetlands, the marine environment is sensitive to nitrogen rather than phosphorus. In addition, coral reef systems are very low in nutrients and small increases can result in a significant ecosystem response (Grigg and Dollar). Alternative treatment units (e.g. Ecomax or Biocycle) for secondary and postsecondary treatment still produce effluent containing nutrients, metals and sludge which require disposal. Evaporative or digestion ponds may produce odour, be highly visible and represent a risk to the environment if containment mechanisms (e.g. plastic or clay lining) fail. Tertiary treatment of sewage is likely to be uneconomic, given the anticipated scale of development and current technology (Baker, pers com).

Policies

- P.23 Appropriate management and monitoring should be established to ensure criteria are met and there are contingency plans for cases of infrastructure failure or where criteria are exceeded.
- P.24 Sewage treatment infrastructure should produce negligible odour and be appropriately separated from tourist accommodation.

Guidelines

- G.9 Best practice enclosed treatment plants will be considered for approval where:
 - a. an integrated and sustainable approach is adopted to minimise water use and maximise recycling;
 - b. treated sewage will contain a maximum of 2.5g/m³ total nitrogen, 1g/m³ total phosphorus, 5g/m³ biological oxygen demand, 5g/m³ suspended solids and 100 thermotolerant coliforms; and
 - c. treated sewage will be disposed via trickle irrigation to natural vegetation (not within 100m of beaches or wetlands) rather than disposal to the marine environment, groundwater via injection or evaporation ponds.
- G.10 Screened solids and sludge should be transported to an appropriate licensed landfill.
- G.11 Organic fertilisers may be used when derived from the development proposal itself (e.g. toilet compost) rather than inorganic fertiliser, subject to Health Department requirements.
- G.12 Sewage treatment and disposal systems should incorporate faunaexclusion strategies or make provision for fauna management.

WASTE DISPOSAL

Landfill sites in remote areas normally are unlined, uncovered and infrequently maintained (Mantle, pers com). This may result in odour, pollutants leaching into groundwater and rubbish dispersal from strong onshore winds. The location of a landfill site adjacent to tourism development has the potential to affect remote values and tourism amenity.

Policy

P.25 Organic and green waste should be collected, composted and appropriately stored for use as mulch, soil improver or fertiliser. Organic waste not used for this purpose and all inorganic waste should be transported to a licensed landfill facility.

Guideline

G.13 Development proposals should prepare and implement a waste management program which minimises waste production and maximises use, re-use and recycling.

ACCESS

Apart from the 45km of coastline within the Cape Range National Park from Vlamingh Head to Yardie Creek, the west coast of the Carnarvon-Ningaloo Region has limited management. Most of this area is contained within pastoral leases or local government reserves and frequently is accessed by locals and visitors travelling in 4-wheel-drive vehicles and caravans seeking a coastal holiday experience, adventure and/or solitude. The establishment of indiscriminate tracks to the coast leading to squatter shacks, accommodation at pastoral stations and fishing, diving and camping spots are causing loss of vegetation and subsequent dune destabilisation. This is compounded by inappropriate rubbish disposal, increased fire risk from camp fires and degradation to native vegetation from firewood collection.

The provision of a formed road from Coral Bay towards Yardie Creek and linking to Learmonth would provide the opportunity for traffic to avoid traversing the national park, thus reducing the number of road kills of native animals. The proposed tourism nodes should be sited well away from the coast with spur roads from the main north-south coastal road providing access to appropriate destinations. This strategy has been highly successful in Cape Range National Park by minimising indiscreet and uncontrolled beach access, usually by 4-wheel-drive vehicles. The spur roads also would need to be formed to remove the necessity for vehicle operators to create new tracks when existing ones become boggy.

Providing access to a particular tourism site may have significant environmental implications beyond its direct construction impacts. It would not be responsible to subject the coastal zone to increased use prior to development of supporting infrastructure. Furthermore, the quality of recreational experiences offered to the public may be substandard. It is imperative that development be co-ordinated so that when access to the park accommodates a larger user group, services, environmental protection measures and tourism infrastructure are available to ensure their experience is catered for and managed.

Yardie Creek is one of the main features of the Cape Range National Park, for its wildlife conservation, aesthetic, cultural (Aboriginal) and nature-based tourism values. The issue of a crossing for Yardie Creek has been discussed for some time. The provision of the Learmonth/Yardie Creek/Coral Bay road linkage would reduce the pressure for a permanent bridge, which would detract significantly from the amenity of the area and the current visitor experience of the naturalness, quietness and solitude of Yardie Creek. On balance, the construction of a flexible sacrificial crossing near the mouth of the creek would be more aesthetically and environmentally acceptable.

Policies

- P.26 Access to and from tourism developments between Vlamingh Head and Coral Bay should be via a formed road.
- P.27 The planning and construction of access roads, supporting management (e.g. car parks, signage, track closures, spur roads and rubbish collection) and proposed tourism nodes should be integrated and coordinated.
- P.28 The crossing at Yardie Creek should be via a flexible structure at the creek mouth that can function as a sacrificial crossing, rather than a large, all-weather crossing.
- P.29 The construction of a crossing of Yardie Creek and any coastal roads south of Yardie Creek to Carnarvon should be referred to the EPA for environmental impact assessment.
- P.30 Development proposals should emphasise and prioritise walking and hiking experiences, rather than vehicle tours.

Guidelines

- G.14 Roads, tracks and paths should be aligned and constructed to minimise disruption of native fauna movement patterns.
- G.15 In fragile environments, boardwalks and fenced walkways should be provided.

ENERGY GENERATION

Proposed tourism developments will require energy for water heating, air-conditioning, refrigeration, lighting, general electrical appliances, vehicles and water pumps. The Office of Energy has provided information which suggests that viable alternative energy sources are available (e.g. passive solar, solar, wind, gas, geo-thermal). Noise produced by conventional power generators may affect remote values. The Western Australian Tourism Commission is investigating the viability of alternative sources of power generation for heating, air-conditioning and power generation for low-impact tourist development at specified locations along the west coast.

Policies

- P.31 Proposed low-impact tourism developments should employ alternative/renewable energy sources where possible.
- P.32 The large-scale commercial sale of fuel should occur in Exmouth, Carnarvon, Coral Bay and Minilya Roadhouse.
- P.33 Diesel- or gas-powered generators should be used only as a backup to alternative energy sources or in emergency situations.

Guideline

- G.16 Proponents should ensure that development proposals:
 - a. have the capacity to generate their own power;
 - b. use northern solar orientation for passive heating and cooling;
 - c. minimise solid enclosure and thermal mass;
 - d. maximise roof ventilation;
 - e. use elongated or segmented floor plans to minimise internal heat gain and maximise exposure for ventilation;
 - f. separate rooms and functions with covered breezeways to maximise wall shading and induce ventilation;
 - g. isolate heat-generating functions such as kitchens and laundries from living areas;
 - h. control exposure to wind through building orientation and

configuration, number and position of wall and roof openings and relationship to gradient and vegetation;

- i. provide shaded outdoor living areas such as porches and decks;
- j. use suitable micro-climates for warm winter sites and cool summer sites;
- k. incorporate features to minimise energy use; and
- avoid the use of energy-intensive, environmentally damaging, wasteproducing and/or hazardous materials.

CONSTRUCTION AND MANAGEMENT

The following factors should be incorporated in the planning and implementation phases of the proposed development, through an environmental management system (ISO 14000 series, 1997) to minimise impacts and achieve a more sustainable development.

Guidelines

- G.17 Construction practices should ensure minimal site disruption.
- G.18 Proponents should develop on-site guidelines or controls for contractors, specifying appropriate construction practices.
- G.19 Proponents should provide briefing or training sessions for all contractors and their employees, specifying the desired practices and the consequences of non-compliance.
- G.20 Contractors should provide a performance bond or deposit which can be used to repair any environmental damage inconsistent with an environmental management plan.
- G.21 Environmental objectives and criteria should be documented.

- G.22 Monitoring and evaluation systems should be prepared and implemented.
- G.23 Regular environmental audits should be undertaken.
- G.24 Staff training and environmental education programs should be established.
- G.25 Interaction between tourists and physical and/or cultural environments should be documented and managed (e.g. visitor information and education facilities).
- G.26 Minimal use and disposal of chemical cleaning products should be encouraged. Where disposal is unavoidable, low-impact products should be sought.
- G.27 Construction and decoration materials should not produce or release harmful chemicals during or after manufacture.
- G.28 Proponents should prepare and adopt a product-purchasing policy which maximises use, re-use and recycling.
- G.29 Proponents should provide education for visitors on wildlife, cultural resources, historic and natural features.

APPROVALS PROCESS

Any proposed tourism development will be required to seek approval from three key agencies in most cases:

- environmental approval under the *Environmental Protection Act 1986* as amended, following assessment by the Environmental Protection Authority as required;
- planning approval under the *Town Planning and Development Act 1928* (as amended), from local government and, in some cases, the Western Australian Planning Commission; and

• for sites in the conservation estate, including Ningaloo Marine Park, approval from the Conservation Commission of Western Australia (CCWA) and/or Marine Parks and Reserves Authority (MPRA) under the *Conservation and Land Management Act* 1985.

Tourism developments on pastoral leases are managed by the Pastoral Lands Board and the Department for Planning and Infrastructure. Ancillary low-key accommodation (use of shearers' quarters) may be incorporated as a permit to an existing pastoral lease, where approval is sought from the Pastoral Lands Board. More significant development proposals requiring access, and specific tourism buildings and facilities are required to be accommodated under a separate lease. In this case, a medium-term (10-20 years) lease is issued by the Pastoral Lands Board and may be subject to public offer. Irrespective of the type of lease, applications are referred to various government agencies for comment.

The tenure, vesting and zoning of land, variations in planning schemes and management plans and the type of development proposal will determine the development approval required. Despite variations, it is important that tourism developments are considered in a coordinated, orderly and consistent way thereby ensuring the objectives and intended outcomes of these guidelines and the draft Carnarvon-Ningaloo Coast Regional Strategy are achieved.

Guideline

G.30 Prior to lodging an application for development proponents should liaise with the Department of Conservation and Land Management, Department of Environment, Western Australian Planning Commission and local government.

ENVIRONMENTAL APPROVAL PROCESS

Any environmental assessment will be dependent on provision of adequate data to allow a decision to be made. A key issue for assessment will be the potential cumulative impact that the development will have on the environment.

Cumulative impact assessment needs to consider the total impact from multiple developments at a particular site and along the coast generally There is a well-recognised need for more information collected and stored in a form (e.g. geographic information system) which assists sound environmental and planning decisions.

All development proposals should be referred under Part IV of the *Environmental Protection Act 1986* to the Environmental Protection Authority.

Policy

P.34 All development proposals should be referred to the EPA and be subject to environmental impact assessment.

Guideline

- G.31 Proponents preferably should provide a high level of information to the EPA upfront or as part of the assessment, at the time of referral. The remainder should be provided as part of any environmental review document, should a formal assessment by the EPA be required. This information should include:
 - a. a detailed description of the development proposal including site and landscape appraisal, ultimate development scenario, project design, access arrangements, construction, management and operation;
 - b. a detailed description of the existing, physical, biological, landscape and cultural environment, which should go

beyond desktop studies to include detailed field investigations of flora, fauna (terrestrial, marine and subterranean, declared rare and priority species, biodiversity, geology and geomorphology, hydrology, ecological processes and systems, landscape, drainage, flooding and Aboriginal cultural heritage significance;

- c. an assessment of construction, visual, indirect, ongoing, off-site and cumulative impacts of the development proposal, and its supporting infrastructure;
- d. an assessment of alternatives and justification of the development proposal selected;
- e. information which demonstrates, with a high degree of scientific confidence, that anticipated environmental impacts can be managed;
- f. a commitment to and description of an environmental management system which integrates the construction and operation of the development proposal with environmental management criteria and objectives, and demonstrates progressive improvement; and
- g. a monitoring program and contingency plans in case environmental criteria or objectives are not met.

PLANNING APPROVAL PROCESS

At a State and regional level, the *State Planning Strategy*, the draft Carnarvon-Ningaloo Coast Regional Strategy and various statements of planning policy provide the basis for future planning. Statutory planning control at a local level is achieved through local government town planning schemes (TPS), and subdivision and development controls.

Policies

- P.35 Development of tourism sites should proceed in accordance with the relevant planning approval processes consistent with the *State Planning Strategy*, the draft Carnarvon-Ningaloo Coast Regional Strategy, and relevant town planning scheme.
- P.36 Where a tourism site is likely to accommodate a number of development proposals or where expansion is likely, a structure plan detailing stages of development should be prepared to provide for integrated and logical development.

CONSERVATION ESTATE APPROVAL PROCESS

The majority of the Carnarvon-Ningaloo Coast is Crown land vested (or jointly vested) in the CCWA and MPRA or leased for pastoral purposes. Developments on Crown land vested in the CCWA or MPRA are managed by DCLM and subject to the relevant management plan approved by the relevant authority (CCWA or MPRA) and Environment Minister. All development proposals within these managed crown reserves should be in accordance with an approved management plan and most developments will require approval from the CCWA or MPRA and the Environment Minister.

Policy

P.37 All development proposals within the conservation estate should be in accordance with the approved management plan for that area.