

Jurabi and Bundegi Coastal Parks, and Muiron Islands

Management Plan

1999–2009



MANAGEMENT PLAN NO 43



Shire of Exmouth



Department of Conservation
and Land Management



National Parks and Nature
Conservation Authority

MANAGEMENT PLAN

Jurabi and Bundegi Coastal Parks, and Muiron Islands

1999-2009

Shire of Exmouth and the
Department of Conservation and Land Management
for the
National Parks and Nature Conservation Authority
Perth, Western Australia, 1999

PREFACE

This management plan is a 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 jointly vested. With regard to the Muiron Islands, which are jointly vested 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*.

Reserves in the vicinity of the Cape Range Peninsula - Cape Range National Park, Ningaloo Marine Park, Jurabi and Bundegi Coastal Parks and the Muiron Islands - are currently 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.

NOMENCLATURE

Inclusion of a name on the maps or in the text of this plan does not necessarily imply its approval by the relevant nomenclature authority.

ACKNOWLEDGEMENTS

This management plan was prepared by members of a Shire of Exmouth/CALM sub-committee comprising:

Cr L. A. Williams	C. Muller (CALM)
Cr L. Horak	D. Myers (CALM)
Cr D. Richards	N. Scott (CALM)

The late Cr F. E. Keenan (Deputy Shire President) was formerly a member of the committee.

The support of the Shire of Exmouth staff is acknowledged. The sub-committee was assisted by Chris Portlock and Tania Jackson from CALM's Management Plans Section advising on plan format, and Rod Properjohn from CALM's Information Management Branch with respect to map preparation. The help of other CALM staff who attended meetings or contributed to the plan is also acknowledged.

KEY STRATEGIES

Nature reserves are managed for wildlife and landscape conservation, scientific study and preservation of features of archaeological, historic or scientific interest. The key strategies for the Jurabi and Bundegi Coastal Parks and Muiron Islands Management Plan are listed below.

TENURE AND BOUNDARIES

- Continue efforts to have the coastal portion of Location 44 added to Jurabi and Bundegi Coastal Parks. This includes land between the Prohibited Area fence and low water mark but excludes the area extending 400 metres on either side of the Navy pier.

GEOLOGY AND LANDSCAPE

- Locate and design recreation sites and access between sites to minimise their impact.

FLORA AND FAUNA

- Provide opportunities for visitors to increase their knowledge and appreciation of the area's flora and fauna.
- Guide or restrict public access and wildlife interaction where necessary so that conservation values are protected.
- Promote the importance of the conservation values of marine and terrestrial fauna particularly with regard to turtle activities within the Jurabi area.

CULTURAL RESOURCES

- Establish a management committee with equal representation from CALM and the Exmouth Shire to facilitate ongoing management and to discuss matters of cultural interest and interpretation and field study activities and programs.

ACCESS

- Restrict vehicle access to authorised roads and tracks and revegetate unnecessary roads or tracks.

SIGNS AND DAY-USE FACILITIES

- Require that approval for the construction of any structures or facilities is obtained from the Shire of Exmouth and CALM and from the NPNCA in the case of Muiron Islands.

CAMPING

- Prohibit camping in Bundegi Coastal Park.
- Prohibit camping in the Jurabi Coastal Park except in designated areas.
- Permit informal camping in the designated areas for a maximum of three nights, subject to annual review.
- Permit camping in the recreation zone on the Muiron Islands with the written approval of the Shire of Exmouth and CALM, with appropriate conditions to protect the environment.

DOMESTIC ANIMALS

- Inform visitors why dogs are permitted, except in specified coastal areas and the Muiron Islands.

OPEN FIRES

- Prohibit the use of open fires on the Muiron Islands.

RECREATIONAL RIDING

- Require all commercial horse or camel operations to be conducted through a commercial license with strict hygiene conditions.

INFORMATION, INTERPRETATION AND EDUCATION

- Integrate interpretation and education programs with those for Cape Range National Park

and Ningaloo Marine Park and liaise closely with groups such as tourism agencies, schools and museums.

- Promote the development of a turtle interpretation centre within the Jurabi Coastal Park.

FUNDING AND MANAGEMENT

- Integrate management and investigate cooperative means of implementing and enforcing management plan strategies.

EDUCATION AND REVIEW

- Monitor the implementation of this plan through the Management Committee and through the standard monitoring procedures adopted by the NPNCA.

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INTRODUCTION

1. BACKGROUND

Jurabi Coastal Park (Reserve 40729, 1287.4ha) lies on the western side of the Cape Range peninsula, and west of the Yardie Creek Road extending from the northern boundary of the Cape Range National Park north to the Commonwealth land (Lyndon Location 44, Defence Purposes).

Bundegi Coastal Park (Reserve 40728, 462.1ha) lies on the east side of Cape Range Peninsula and east of Murat Road between areas of Commonwealth land (Lyndon Location 43 and 44, Defence Purposes).

The Muiron Islands Reserve (Reserve 31775, 988ha), consists of two islands located approximately sixteen kilometres north east of Point Murat.

Jurabi and Bundegi Coastal Parks are jointly vested in the Shire of Exmouth and Department of Conservation and Land Management. The Muiron Islands are vested in the NPNCA and the Shire of Exmouth (see Map 1). Although the vestings differ, these reserves are all jointly managed CALM and the Shire of Exmouth.

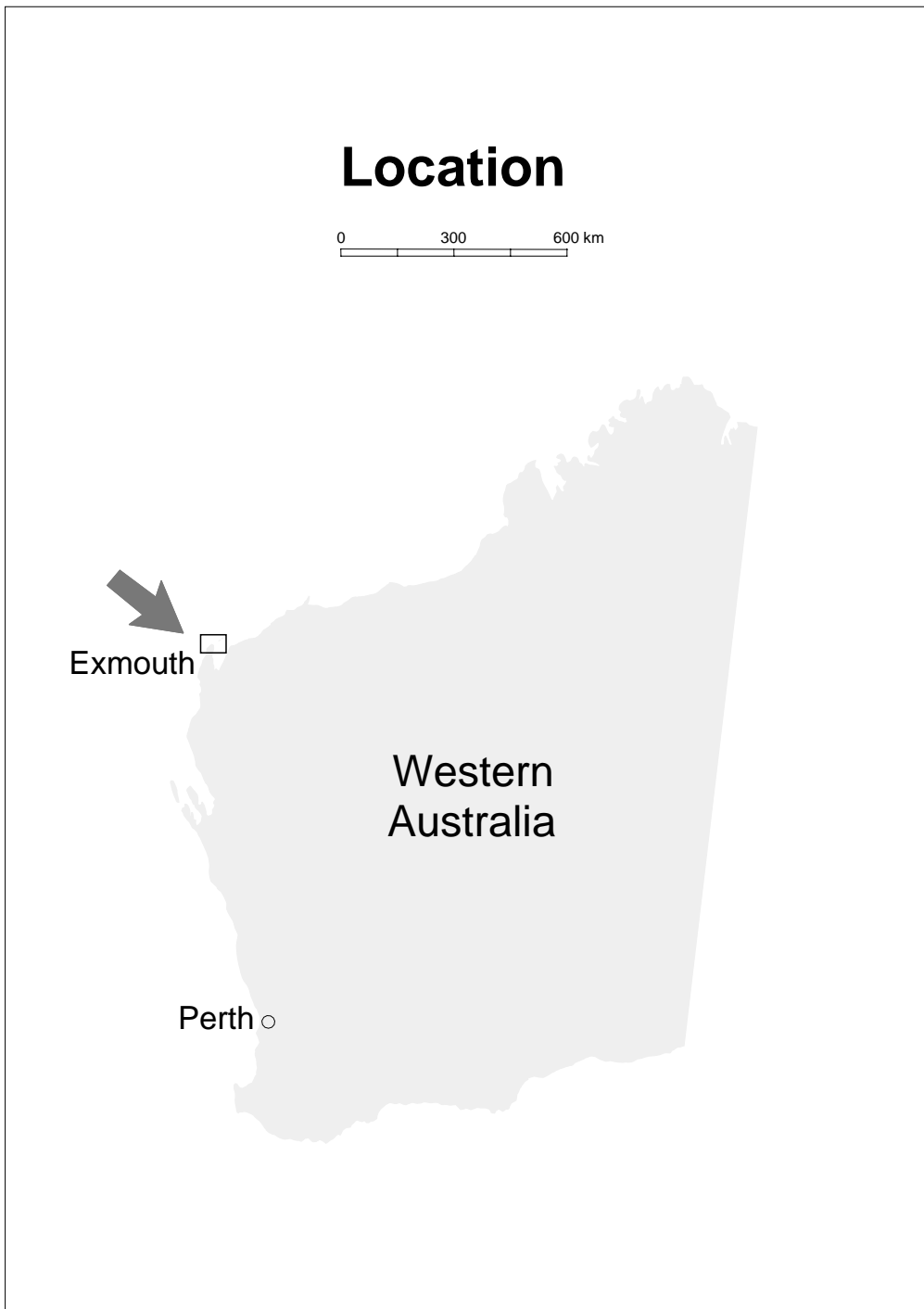
Nineteen public submissions were received during the public comment period of the draft management plan. All comments were given careful consideration and incorporated into this plan where appropriate (see Analysis of Public Submissions). The main issues arising from public submissions included the impact of visitation pressure on the area (especially important coastal areas and turtle nesting sites), unauthorised vehicle access throughout the nature reserves and the need to upgrade the Jurabi and Bundegi Coastal Parks to Class A reserves and the Muiron Islands to a Class A nature reserve.

2. PUBLIC PARTICIPATION IN THE DRAFT PLAN

Community Input

- Public submissions were invited through State and local newspapers during the Draft Plan's preparation.
- Interested individuals and groups discussed their concerns with the Management Committee.
- Local and State government officers were consulted.
- The Draft Plan was released for a 2 month period and public submissions invited.

Jurabi and Bundegi Coastal Parks and Muiron Islands



PRINCIPAL MANAGEMENT DIRECTIONS

3. MANAGEMENT ARRANGEMENTS

It is recommended that a management committee for the reserves be established comprised initially of three representatives of the Shire of Exmouth and three representatives of CALM. The committee will meet every three months with the chair alternating between the two parties each meeting. Decisions will be taken by vote of representatives present with acceptance by a simple majority. In the event of a tied situation occurring, the chairman will have a casting vote in addition to his deliberate vote. Variations on these procedures may be made with mutual agreement of both CALM and the Shire of Exmouth.

Proposals for development should be considered by this committee. Any proposed leasing of land will have to meet with approval from both the Shire of Exmouth and CALM (and the NPNCA in the case of the Muiron Islands). Any revenue generated from the leasing of land or any other commercial concessions will be used for the maintenance and development of facilities in the reserve system as determined by the management committee in accordance with the objectives of the management plan.

The reserves will be jointly managed by both Shire of Exmouth and CALM personnel. CALM staff will be appointed honorary Shire Rangers so they can enforce by-laws in these reserves. It will also be necessary to empower both groups of personnel to levy agreed fiscal penalties for breaches of rules within management area boundaries.

4. MANAGEMENT POLICIES AND GOALS

This management plan in its final form will be a statutory document under the CALM Act where vesting is partly or wholly with the National Parks and Nature Conservation Authority. CALM will be further guided by policies and protection powers under the Wildlife Conservation Act 1950.

Management goals for these reserves are:

Conservation

Conserve biological, physical, cultural and landscape values.

Recreation

Facilitate public enjoyment of natural and cultural values in a manner compatible with conservation and other goals.

Community Relations

Promote awareness, appreciation and understanding of natural and cultural values in conjunction with interested agencies and organisations and facilitate liaison with the community.

Commercial Uses

Ensure that commercial uses are controlled and managed in a manner that minimises impact on other values.

Knowledge

Seek a better understanding of the natural and cultural environment and the impacts of management activities.

Goals represent the 'long-term desirable situation' while more specific objectives are designed to achieve these goals.

Objectives, background and strategies are set for each of the following sections of this management document

5. ZONING

The objective is to develop and implement a zoning system on which protection of the area's conservation values and development of recreation and compatible uses can be based.

A zoning system will be implemented to minimise conflicts between uses, provide environmental protection, and guide management.

Two zones are proposed (see Map 2):

1. Recreation
2. Special Conservation

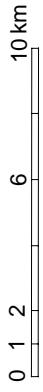
In the recreation zone motorised and pedestrian access will be permitted in defined areas linking recreational sites and facilities. Parking areas and facilities may be provided.

In the special conservation zone access and use will be strictly controlled or may be prohibited altogether.

STRATEGIES

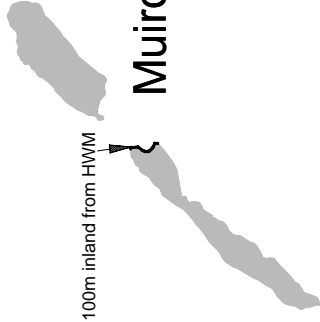
- 1. Introduce a zoning scheme to manage the reserves.**
 - 2. Review the zoning scheme if more information on conservation values and possible impacts becomes available.**
-

Zoning



Extends 100m inland from HWM

Muiron Islands

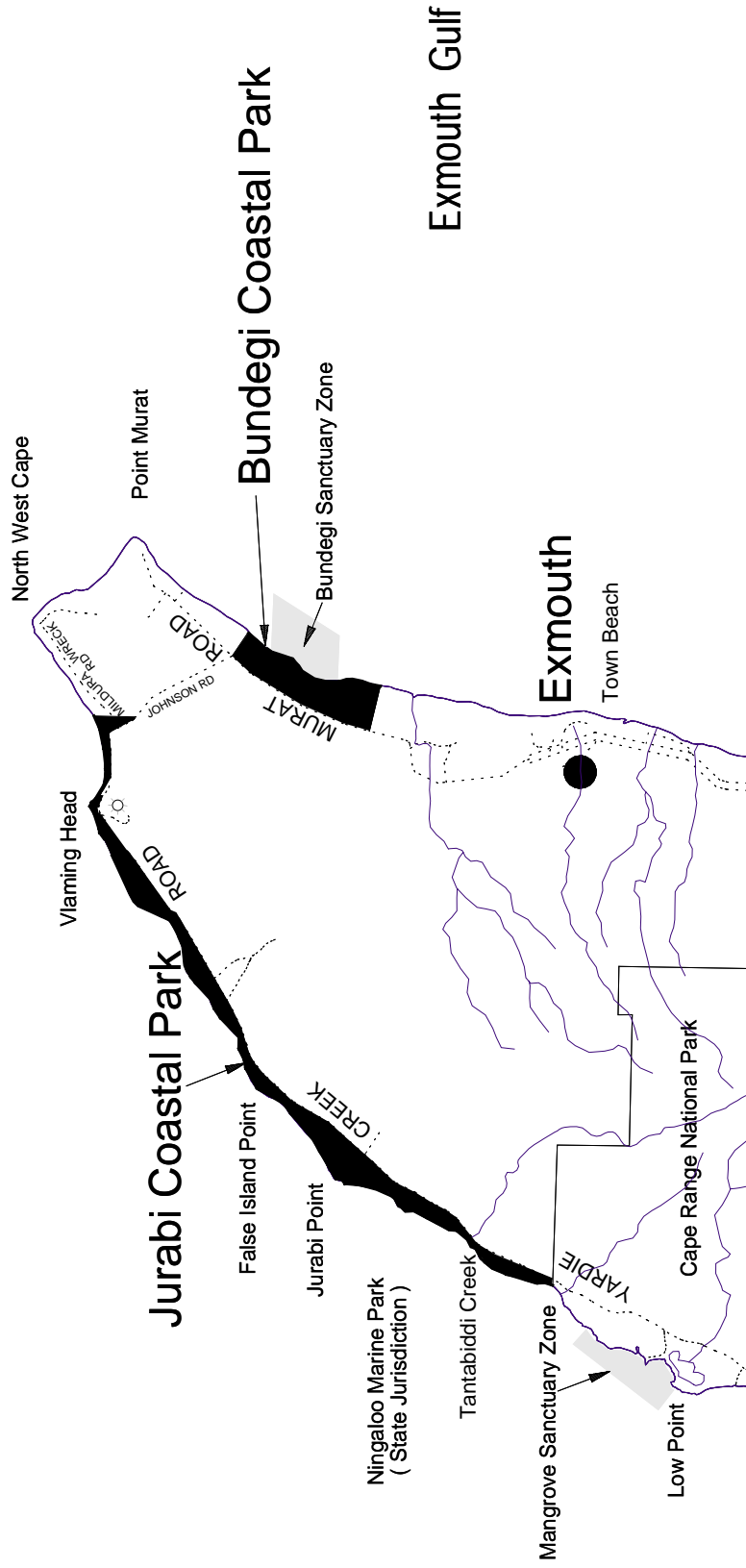


Ningaloo Marine Park
(Commonwealth Jurisdiction)

Ningaloo Marine Park
(State Jurisdiction)

Recreation Zone

Special Conservation Zone



Exmouth Gulf

6. CULTURAL RESOURCES

The objective is to protect and conserve the area's cultural heritage and cultural resources.

There are a number of sites in the area, but none known on the reserves.

Of the number of shipwrecks along the coastline of the Ningaloo Reef area only one is located adjacent to the study area. The iron steamship "*Mildura*" was wrecked off the North West Cape in 1902. This wreck is a tourist attraction and visible from either the shore or the ocean.

The "*Fairy Queen*" is a smaller wreck located near the Navy pier, not visible from above water level and is frequently covered with sand.

Whilst there are no recorded Aboriginal or archaeological sites within these reserves, evidence of aboriginal occupation and usage of the nearby coastal plain has been recorded in 5 separate sites. This is not necessarily a complete list of all sites as the area has not been subject to a comprehensive survey.

The sites identified vary greatly in content and significance from ethnographic sites with ceremonial or mythological importance to archaeological sites with structures or scatters of articles and shell materials.

Bunburi Cave is a tourist attraction and contains Aboriginal engravings and a semi permanent pool of fresh water. The site also contains stone artefacts and shell material and is considered by the Aboriginal Affairs Department to most likely contain a significant archaeological deposit.

The Aboriginal Affairs Department also advises that a number of rock shelters exist in the vicinity of Vlamingh Head Lighthouse.

Any development project proposed for the study area must undertake a survey of the proposed development area to identify Aboriginal sites. Such a study should be undertaken prior to consideration of development plans.

STRATEGIES

1. **Establish a management committee with equal representation from CALM and the Exmouth Shire to facilitate ongoing management and to discuss matters of cultural interest interpretation, and field study activities and programs.**
2. **Liase with local Aboriginal people and require that a survey to identify Aboriginal sites is undertaken prior to consideration of any development plans.**

7. MINING AND PETROLEUM

The objective is to protect the natural and cultural values of these reserves from any adverse impacts arising from exploration and resource extraction.

Should interest in mineral or petroleum resource potential occur, proposals will be subject to environmental assessment procedures in accordance with relevant legislation and Government policy.

STRATEGIES

1. **In accordance with Government policy, require proponent companies to carry out a comprehensive assessment of biological values, mineral and petroleum prospectivity and potential risk to conservation and recreation values in regard to the proposal.**
 2. **Maintain liaison between, the mineral and petroleum industries, the Department of Minerals and Energy, the Department of Environmental Protection, the Shire of Exmouth and CALM to ensure that adequate conditions are set and followed to minimise any potential detrimental effects that might be caused to the reserves as a result of any mineral or petroleum exploration or production.**
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8. FIRE MANAGEMENT

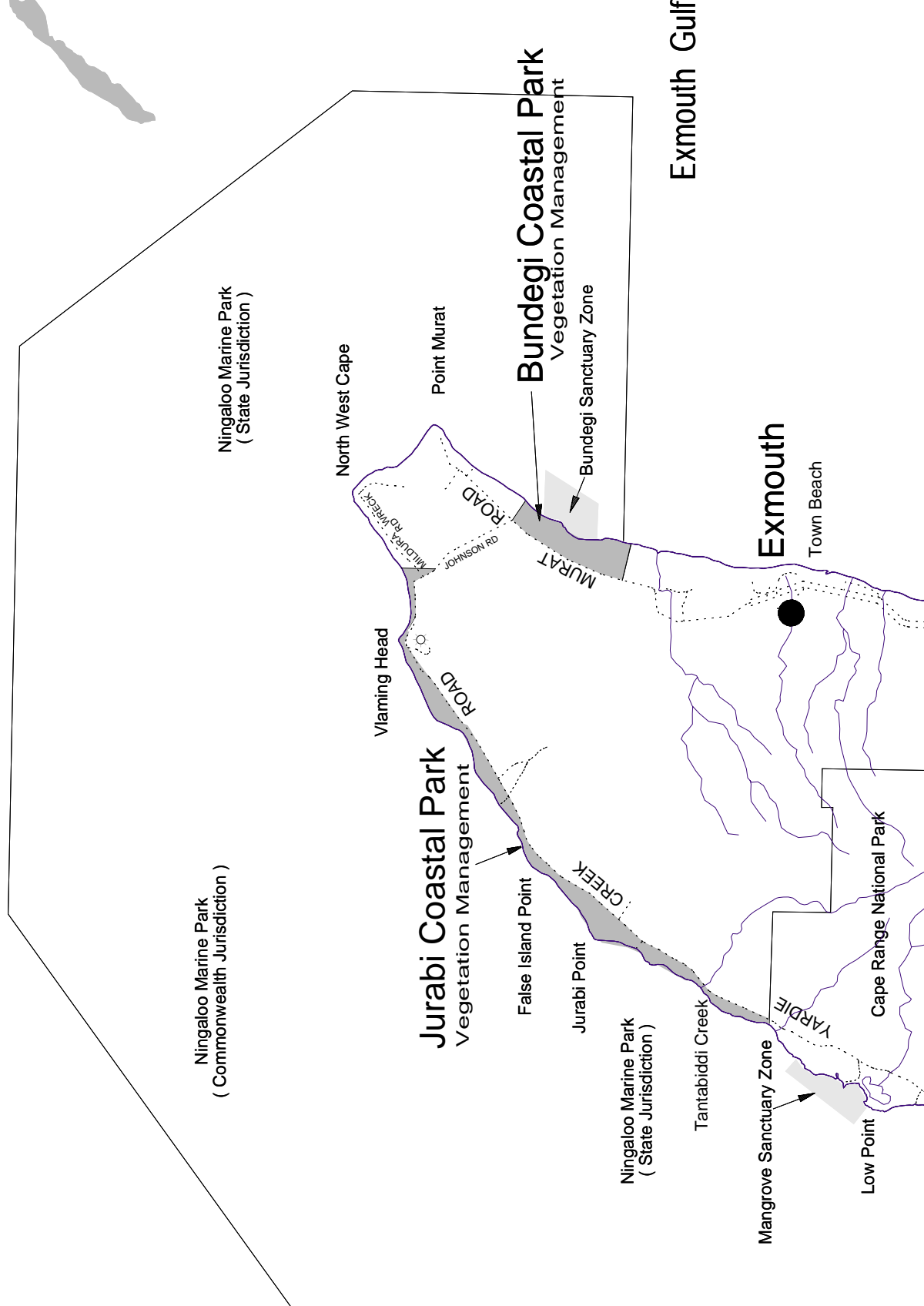
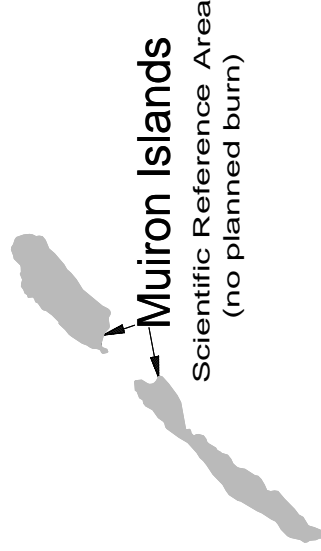
The objective is to protect people, property and conservation values in and near the reserves.

Values at risk include infrastructure such as facilities and visitors to the area as well as plants and animals and their habitat. Any fire management program must maintain high species diversity and protect people and property (see Map 3).

STRATEGIES

- 1. Use prescribed burning to reduce fuels where required to protect people, property and conservation values from wildfires.**
 - 2. Use fire where necessary to regenerate key species for conservation.**
 - 3. Ensure any burning carried out is in accord with a written prescription approved by the CALM District Manager.**
-

Fire Management



JURABI AND BUNDEGI COASTAL PARKS CONSERVATION AND RECREATION

9. TENURE AND BOUNDARIES

The objective is to ensure that the values of the Reserves are protected by security of tenure and their gazetted purpose.

The Jurabi (reserve 40729) and Bundegi (reserve 40728) Coastal Parks are jointly vested in the Shire of Exmouth and the Executive Director of Conservation and Land Management as reserves with purpose of Recreation and Coastal Management.

Jurabi Coastal Park extends to the high water mark, where it adjoins the Ningaloo Marine Park. Inland it is bounded by Yardie Creek Road, adjoined predominantly by vacant Crown land with the following exceptions:

- on the south-east boundary an area is held under lease for tourism purposes (Yardie Homestead).
- At Vlamingh Head there is a node of freehold properties containing a caravan park and an area of land recently released by the Exmouth Shire Council for development of tourist facilities.
- The Vlamingh Head Lighthouse area is vested in the Shire of Exmouth.
- Reserve 31637 has been cancelled and included in the Jurabi Coastal Park. Two private leases were previously held in the Tantabiddi area from the Shire of Exmouth and the Executive Director of the Department of Conservation and Land Management. Both of the leases have now expired. Proposals for leases will be considered by the managing bodies in accordance with the purpose of the parks. A lease will only be granted following a public advertising and expressions of interest process.

Bundegi Coastal Park is bounded on the west by Murat Road, and extends in the east to high water mark. Most of the seaward boundary adjoins Ningaloo Marine Park, which extends to the southern extremity of the Bundegi Reef.

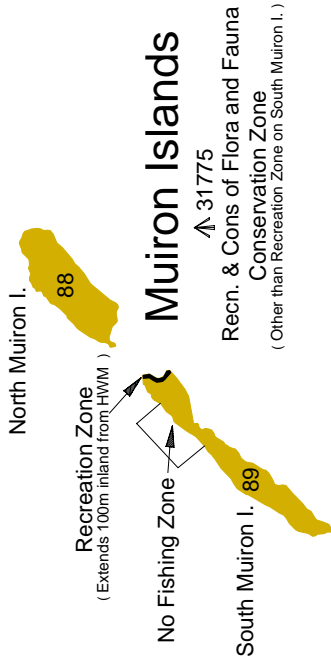
Proposed Addition to Coastal Parks

It is proposed to add to the reserve system an area of coastal foreshore between Jurabi and Bundegi Coastal Parks. This is within Lyndon Location 44, currently Commonwealth land. The Shire of Exmouth and CALM will continue negotiations with the Department of Defence which manages Location 44. Public access along this coastal strip is generally allowed except for a fenced prohibited inland area and an area near Point Murat 400 metres either side of a Navy wharf facility (see Map 4).

STRATEGIES

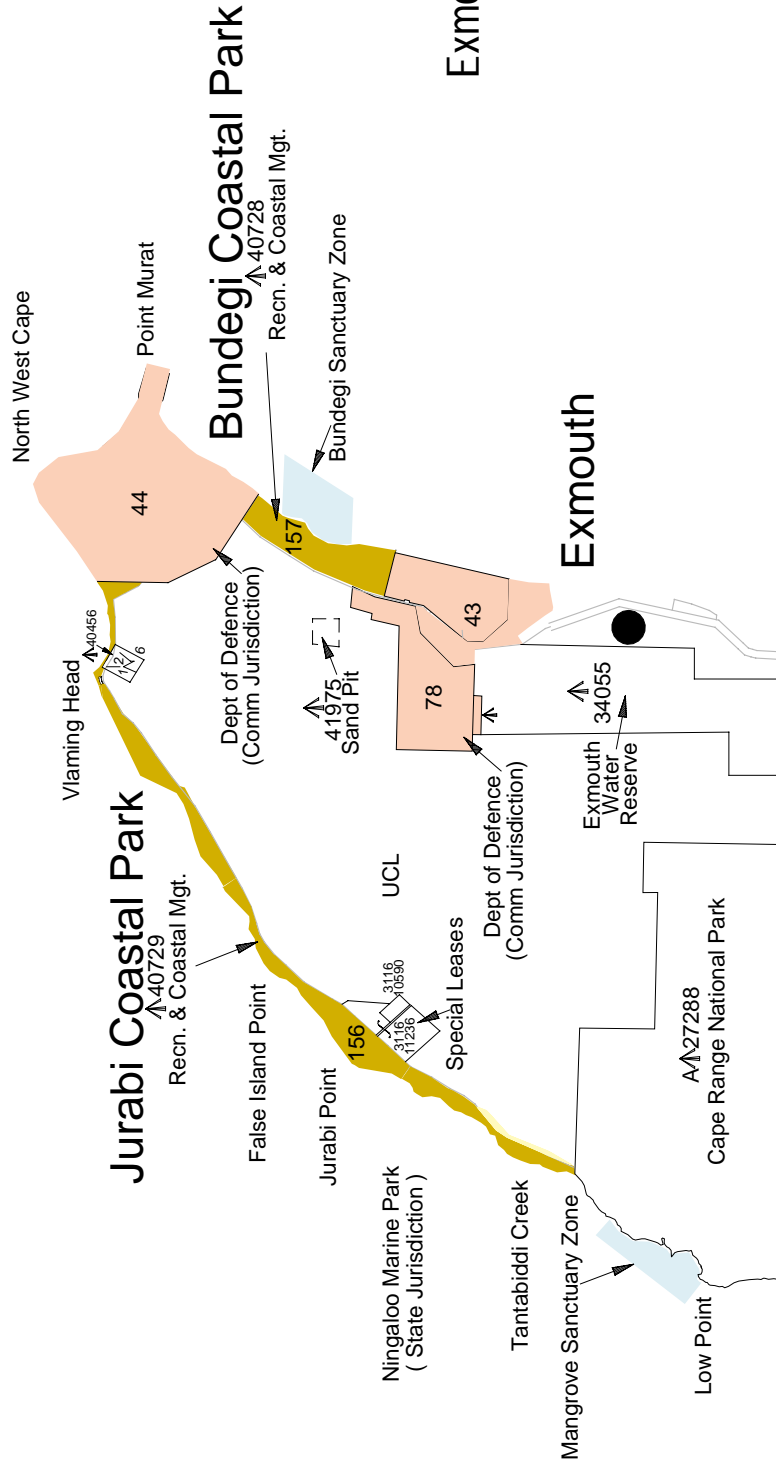
- 1. Continue efforts to have the coastal portion of Location 44 added to Jurabi and Bundegi Coastal Parks. This includes land between the Prohibited Area fence and low water mark but excludes the area extending 400 metres on either side of the Navy pier.**
 - 2. Recommend upgrading the Jurabi and Bundegi Coastal Parks to Class A reserves in recognition of their conservation values.**
 - 3. Consider leases consistent with the purpose of the reserve. Any proposals for leases will be publicly advertised.**
-

Tenure



Ningaloo Marine Park
(Commonwealth Jurisdiction)

Ningaloo Marine Park
(State Jurisdiction)



Rivoli Islands

10. GEOLOGY AND LANDSCAPE

The objective is to protect and conserve geological features and landscape values.

Most of the Jurabi Coast from Tantabiddi to Vlamingh Head has a relatively narrow fringe of Holocene sandy sediments which comprise one or two major dune ridges and the active beach systems. As a result of water circulation, large cusped forelands have developed immediately north of Tantabiddi, at Jurabi Point and Babjarrimannos.

In some cases, such as Jurabi Point, the original system of dune ridges have been destroyed by recent dune instability and the development of large blow-outs. This has resulted in mobile sand sheets burying the northern extensions of the eroded ridge forms. Reasons for the instability are not immediately apparent and should be the subject of further and more detailed study. The current policy of limiting access paths to the coast through the dunes to only a few paths should be retained until the more sensitive areas can be determined and excluded.

The northern margin of the peninsula, from Vlamingh Head to the North West Cape, consists of a large Holocene dune ridge with a braid in its central section. The ridge merges with the cusped foreland that has its apex at Point Murat. Both these areas are unstable. Active blow-outs have developed in the northern dune ridge. Parabolic dunes and a very large blow-out are notable features of the cusped foreland, particularly in the vicinity of Bundegi.

The fore-dune morphology of Point Murat and shoreline movements in the vicinity of the boat ramp at Bundegi indicate that there is considerable movement of sediment between the northern and southern flanks of the foreland. It is sufficient to account for dune instability in the area and this means that boat launching facilities at Bundegi require considerable and continuing maintenance by the Exmouth Shire Council.

STRATEGIES

1. Identify geological and landscape resources vulnerable to environmental damage.

2. Locate and design recreation sites and access between sites to minimise their impact.

11. FLORA AND FAUNA

The objective is to protect and conserve flora and fauna with emphasis on species and communities of special value or significance.

With the exception of avifauna, there has been no systematic survey of flora or fauna in the Jurabi and Bundegi Coastal Parks.

Vegetation is mostly a shrub steppe, dominated by acacias and stunted eucalypts with a lower storey of small shrubs and spinifex. The spinifex grasslands are extremely important to wildlife, particularly on the coastal plain where there is a mixed association with the introduced buffel grass. The peninsula is a zone of biogeographical overlap, containing species from temperate, arid and tropical provinces. The importance of the region cannot be over stated.

Samphire flats in Location 44 (portion of a proposed addition to Jurabi Coastal Park) are subject to tidal influences. These marshes are of considerable significance to migratory birds and waders.

Two unique species of subterranean fish and shrimp have been identified on North West Cape and are gazetted threatened fauna under the Wildlife Conservation Act. Prior to the commencement of any activity/work with potential to impact on the karst, an examination must be undertaken to determine the presence of troglobitic fauna and potential impacts on their population and habitat.

The Jurabi Coast is a prime site for turtle and seabird rookeries. CALM will be responsible for recommending any protection requirements in those areas most susceptible to human disturbance.

All turtles have conservation significance and are protected. Loggerhead and leatherback turtles have been declared threatened species under the Wildlife Conservation Act. Firm policies relating to the degree of interaction between humans and animals need to be established and rigorously maintained. The possibility of

establishing an educational facility within the Jurabi coastal area to complement the tourism attractions of viewing turtle nesting/hatching should be seriously considered. To promote public education and to help development of tourism, it is proposed a research and education facility to study turtle behaviour be constructed in a suitable site between the dunes in Jurabi Coastal Park.

STRATEGIES

- 1. Identify and protect the habitats and communities of significant flora and fauna species and associations.**
- 2. Minimise adverse impact on flora and fauna from management actions, such as development of facilities or visitor activities.**
- 3. Provide opportunities for visitors to increase their knowledge and appreciation of the area's flora and fauna.**
- 4. Guide or restrict public access and wildlife interaction where necessary so that conservation values are protected.**
- 5. Promote the importance of the conservation values of marine and terrestrial fauna particularly with regard to turtle activities within the Jurabi area.**

12. WEEDS AND FERAL ANIMALS

The objective is to minimise the impact of weeds and feral animals on the conservation values of these reserves.

The spread of weeds can be minimised through controlling access in and out of affected areas and by adopting hygiene measures during operations within the reserve system. Control measures should be taken in association with property owners adjacent to reserves.

To control feral animals, baiting methods which reduce the risk of bait take by non target species will be used. Aerial baiting will be restricted to areas behind the coastal fore-dune and controlled baiting stations may be used on or near beaches. Feral

animals that prey on turtle nests need to be controlled and an extension of CALM's 1080 poisoning program should be instituted as soon as practicable. As dogs are permitted in the area it is essential that any baiting program is accompanied by extensive public advertising and warning signs in the area to be baited.

Wandering stock have created tracks through fragile dune systems and have increased the potential for erosion. Straying stock can also constitute a severe traffic hazard, especially early and late in the day. To minimise this potential, stock must be excluded from the Coastal Parks. Unrestricted stock grazing on the two parcels of vacant crown land east of Yardie Creek Road should not be permitted.

STRATEGIES

- 1. Monitor the incidence of weeds and feral animals and if necessary prepare and implement a control program.**
- 2. Liaise and coordinate weed and feral animal control programs with neighbouring areas.**
- 3. Remove exotic animals (including horses) from the coastal parks.**
- 4. Monitor the impact of control programs.**

13. ACCESS

The objective is to provide for access that does not adversely impact on conservation or other values.

In recent times the Shire of Exmouth have closed some 22 access trails to the coast within the Jurabi Coastal Park. These trails were replaced by nine prepared access ways of formed gravel and associated car parks at their western terminations. Several informal tracks remain and will require closure. Trails caused by straying stock will require revegetation subsequent to the closure of the region to these animals.

Launching of boats will only be permitted in designated areas. Methods of implementing charges to recover costs associated with boat launching from users will be investigated

and implemented if practicable and equitable.

Proposed Addition to the Park

If the coastal strip of land from the Yardie Creek Road - Mildura Wreck Road intersection to Point Murat is included in the Coastal Parks there will be a requirement for the construction of at least 3 more access roads. The proposed addition is dependent on negotiations between the Department of Defence, the Shire of Exmouth and CALM. The location of additional access roads will require careful planning because of the unstable nature of some of this land. Terrestrial access to the coast will be by gazetted access ways which will be clearly signposted. No vehicular traffic will be permitted off authorised access ways, except with the written permission of CALM and the Shire of Exmouth.

STRATEGIES

- 1. Restrict vehicle access to authorised roads and tracks and revegetate unnecessary roads or tracks.**
- 2. Prepare detailed plans and specifications for all new access roads, tracks and parking areas to a high standard in accordance with accepted design principles.**
- 3. Investigate and implement if practical an equitable system of charging for the use of boat launching facilities.**
- 4. Maintain tracks to a standard suitable for visitor use and management requirements.**

commercial signs require formal approval by the reserves management committee, prior to erection. The defined areas will be clearly signposted. Toilets have been constructed at sites as deemed necessary by the Committee (see Map 5). The Shire is responsible for placing suitable receptacles for the collection of rubbish in the gazetted parking areas and for the regular servicing of them. Fish offal should be disposed of at approved fish cleaning stations or buried at a minimum depth of 300mm. Any structures or day-use facilities will require prior approval from the Shire of Exmouth CALM.

STRATEGIES

- 1. Design and develop day use sites and environmentally sensitive facilities to a high standard in accordance with accepted design principles.**
 - 2. Encourage disposal of fish offal at approved fish cleaning stations or burial at a minimum depth of 300mm.**
 - 3. Require that approval for the construction of any structures or facilities is obtained from the Shire of Exmouth and CALM.**
-

14. SIGNS AND DAY-USE FACILITIES

The objective is to enhance recreational and other reserve values through providing signs and day-use facilities.

All signs will bear the insignia of both the Department of Conservation and Land Management and the Shire of Exmouth and will conform to the design used in Cape Range National Park. Signs are to be erected requesting the public to take rubbish home with them for disposal. All

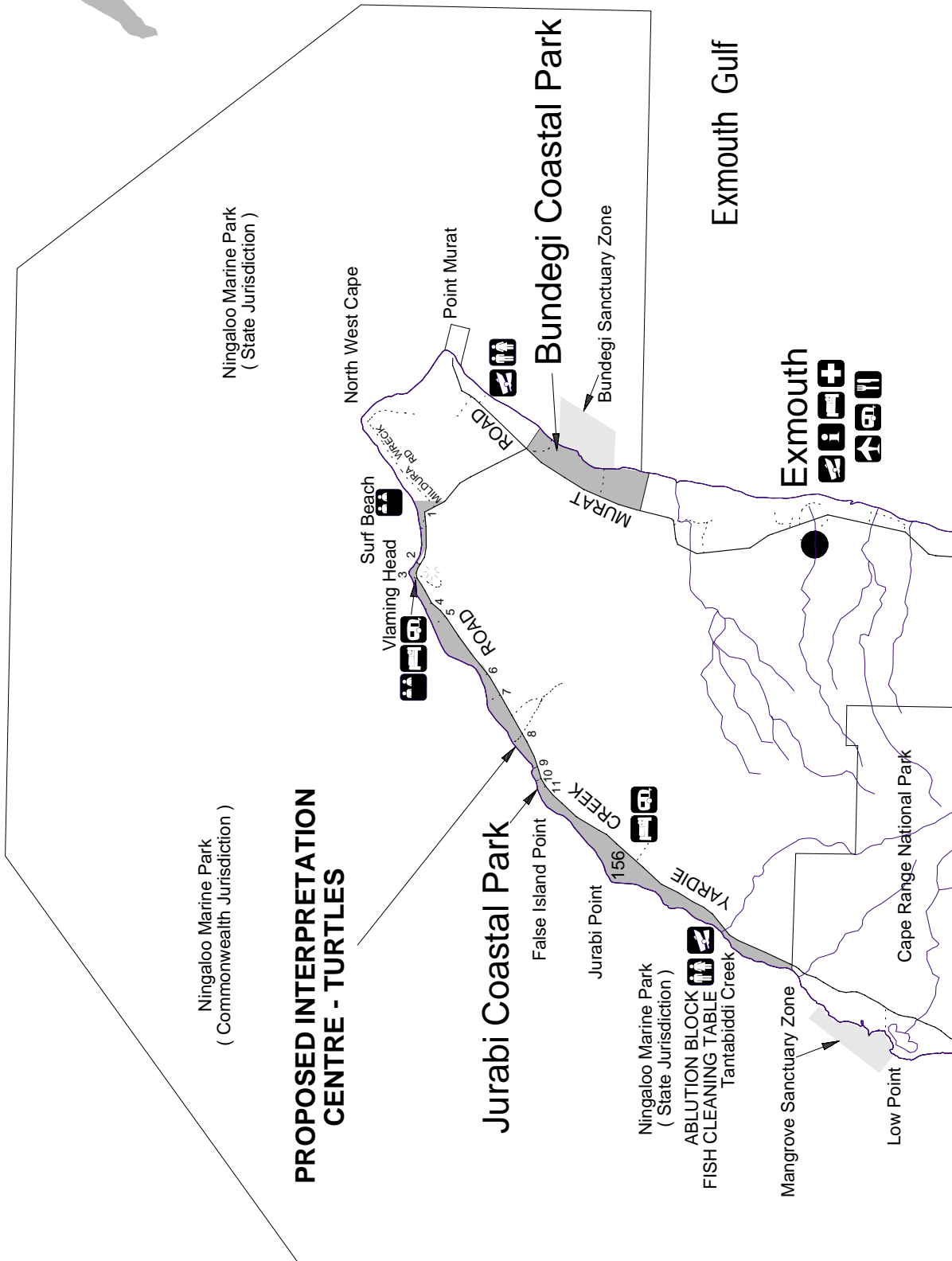
Access and Facilities



Muiron Islands

- SEALED ROAD
- - - UNSEALED ROAD
- MEDICAL CARE
- INFORMATION CENTRE
- ACCOMMODATION
- MEALS
- CARAVAN PARK
- LANDING GROUND
- BOAT RAMP
- PUBLIC TOILETS
- SINGLE PUBLIC TOILET
- DISUSED LIGHTHOUSE

JURABI COASTAL PARK DESIGNATED ACCESS ROADS	
1	UNNAMED
2	UNNAMED
3	HUNTER
4	MAURITIUS
5	JACOBSZ
6	JANTSZ
7	WOBRI
8	FIVE MILE
9	TRIAL
10	BROOKE
11	BAUDIN



PROPOSED INTERPRETATION CENTRE - TURTLES

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15. CAMPING

The objective is to minimise impacts from visitor use through management of camping.

In the past some camping has occurred in the carparks and on the beaches of Jurabi Coastal Park. However, there are no facilities to support this activity. Continued use for camping and associated activities may degrade the surrounds and camping will conflict with use by day visitors during the main visitor season. Therefore, informal camping is limited to designated areas between the 1st November and the 30th April inclusive and is subject to a maximum stay of three nights. The impact of informal camping (within the designated areas) on the conservation values of the reserves will be closely monitored by the managing bodies. The capacity of these areas to sustain this activity will be reviewed annually.

STRATEGIES

1. **Prohibit camping in Bundegi Coastal Park.**
2. **Prohibit camping in Jurabi Coastal Park except in the designated areas.**
3. **Permit informal camping in the designated areas for a maximum of three nights, subject to annual review (see Map 5).**
4. **Monitor the impact of informal camping and caravans on the coastal parks and review annually.**
5. **Permit overnight stays on the beach for fishing in designated areas.**

16. OPEN FIRES

The objective is to minimise impact on Park values through restricting the use of open fires to designated areas.

Campfires are occasionally used for recreational activities in the coastal parks. Coastal areas are fragile, and the scavenging for wood in these areas can lead to serious degradation. Unrestricted use of campfires increases the risk of wildfires occurring.

STRATEGIES

1. **Permit the use of open fires in the coastal parks only in designated areas, and only if firewood from outside the coastal area is used.**
2. **Prohibit the use of local wood for campfires.**

17. DOMESTIC ANIMALS

The objective is to protect conservation values and minimise user conflict through management of domestic animals in the reserves.

Jurabi area provides the only opportunity for Exmouth residents and visitors to take pets to beaches on the west side of the cape. Domestic animals such as dogs and cats can disturb wildlife and visitors and introduce disease and weeds. The smell and presence of domestic animals can also impede native fauna activity. Turtle and bird rookeries in particular may be vulnerable during the nesting season.

Pets are susceptible to baits used to control feral animals such as foxes and cats. Pet owners must be made aware that baits will be laid in the area from time to time and that it is their responsibility to keep pets under control. The Shire of Exmouth and CALM will not assume liability for any pets that may inadvertently take poison during baiting periods.

STRATEGIES

1. **Permit dogs in the coastal parks, except in designated areas.**
2. **Inform visitors why dogs are permitted, except in specified coastal areas.**
3. **Provide adequate signs to ensure visitors with pets can identify areas where baits have been laid.**

18. RECREATIONAL RIDING

The objective is to minimise the impact of recreational riding activities on the environment or on other visitors through restricting this activity to designated trails only.

The potential for horse and camel riding tours in the Jurabi Coastal Park is recognised. The impacts from such activities need to be managed.

STRATEGIES

- 1. Permit riding in the coastal parks (including the possibility of commercial horse or camel rides) on designated trails only.**
- 2. Monitor the impact of riding and modify or restrict use if the activity appears environmentally unacceptable or in conflict with other uses.**
- 3. Require all commercial horse or camel operations to be conducted through a commercial license with strict hygiene conditions.**

19. SHOOTING AND CARRYING FIREARMS

The objective is to protect people and conservation values through restricting the use of firearms in the reserve system.

Use of firearms has the potential to threaten life and property. Firearms may be required for destruction of feral or injured animals.

STRATEGY

- 1. Prohibit the unauthorised use of firearms in the reserves.**
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MUIRON ISLANDS CONSERVATION AND RECREATION

20. TENURE AND BOUNDARIES

The objective is to ensure that the values of the nature Reserve are protected by security of tenure and gazetted purpose.

The Muiron Islands (Reserve 31775) are jointly vested in the National Parks and Nature Conservation Authority (NPNCA) and the Shire of Exmouth as a nature reserve with a purpose of Recreation and Conservation of Flora and Fauna.

STRATEGY

1. **Recommend upgrading the Muiron Islands to Class A nature reserve for greater security of tenure in recognition of their conservation values.**

21. FLORA AND FAUNA

The objective is to protect and conserve flora and fauna with emphasis on species and communities of special value or significance.

Flora is similar to that found on the mainland of North West Cape. Limited plant collections have revealed several species that had not been recorded on the mainland. Preliminary studies into turtle behaviour in the area initiated by CALM indicate major rookeries are located on North and South Muiron Islands.

STRATEGIES

1. **Identify and protect the habitats and communities of significant flora and fauna species and associations.**
2. **Minimise adverse impact on flora and fauna from management actions or visitor activities.**
3. **Provide opportunities for visitors to increase their knowledge and appreciation of the area's flora and fauna.**

4. **Guide or restrict public access and wildlife interaction where necessary so that conservation values are protected.**

5. **Promote the importance of the conservation values of marine and terrestrial fauna.**

22. WEEDS AND FERAL ANIMALS

The objective is to minimise the impact of weeds and feral animals on the conservation values of these reserves.

The spread of weeds can be minimised through controlling access in and out of affected areas and by adopting hygiene measures during operations within the reserve system.

There are no feral animals on this reserve. If control is required in the future, baiting methods which reduce the risk of bait take by non target species will be used.

STRATEGIES

1. **Monitor the incidence of weeds and feral animals and if necessary prepare and implement a control program.**
2. **Liaise and coordinate weed and feral animal control programs with neighbouring areas.**
3. **Monitor the impact of control programs.**

23. ACCESS

The objective is to provide for access that does not adversely impact on conservation or other values.

Public access to the islands should be limited to defined areas. Such areas will be determined to balance environmental protection and sustainable recreational use. Special protection is required for mutton bird and turtle rookeries.

STRATEGY

1. **Maintain access to a standard suitable for visitor use and management requirements while being sensitive to conservation and other needs.**

24. SIGNS AND DAY-USE FACILITIES

The objective is to enhance recreational and other reserve values through providing signs and day-use facilities.

All signs will bear the insignia of both the Department of Conservation and Land Management and the Shire of Exmouth and will conform to the design used in Cape Range National Park. Signs are to be erected requesting the public to take rubbish home with them for disposal. The defined areas will be clearly signposted.

Any structures or day-use facilities will require prior approval from the Shire of Exmouth and the NPNCA.

STRATEGIES

1. **Design any day use sites to have regard for aesthetic and conservation values.**
2. **Require that approval for the construction of any structures or facilities is obtained from the Shire of Exmouth and from the NPNCA and that they conform to a high standard in accordance with accepted design principles.**

25. CAMPING

The objective is to minimise impacts from visitor use through management of camping.

Limited camping in designated areas on the Muiron Islands has occurred in the past with the written approval of the Shire of Exmouth and CALM. To protect the environment it will be necessary to limit group size and apply seasonal restrictions.

STRATEGY

1. **Permit camping in the recreation zone on the Muiron Islands with the written approval of the Shire of Exmouth and CALM, with appropriate conditions to protect the environment.**

26. OPEN FIRES

The objective is to minimise impact on Park values through the use of open fires.

Because of the barrier provided by the surrounding water, islands provide important ecological refuges and are extremely valuable for nature conservation. Because of their isolation, fire suppression is rarely feasible, and any fires occurring have the potential to impact on the entire reserve. To reduce the risk of accidental wildfires, campfires have not been permitted on these islands in the past.

STRATEGY

1. **Prohibit the use of open fires on the Muiron Islands.**

27. DOMESTIC ANIMALS

The objective is to protect conservation values and minimise user conflict through management of domestic animals in the reserves.

Domestic animals such as dogs and cats can disturb wildlife and visitors and introduce disease and weeds. The smell and presence of domestic animals can also impede native fauna activity. Turtle and bird rookeries in particular may be vulnerable during the nesting season.

STRATEGY

1. **Inform visitors why domestic animals are prohibited on the Muiron Islands, although they are permitted in specified coastal areas.**
- ## 28. SHOOTING AND CARRYING FIREARMS

The objective is to protect people and conservation values through restricting the use of firearms in the reserve system.

Use of firearms has the potential to threaten life and property. Firearms may be required for destruction of feral or injured animals.

STRATEGY

- 1. Prohibit the unauthorised use of firearms in the reserves.**
-

COMMUNITY RELATIONS

29. INFORMATION, INTERPRETATION AND EDUCATION

The objective is to increase awareness, appreciation and understanding of the reserve values and encourage responsible use of the reserves.

Information, interpretation and education are important to enhance visitor experience and to increase the general level of awareness, appreciation and understanding of the cultural and natural conservation values of the areas. Information usually provides details of facilities, activities and regulations, while interpretation explains cultural and natural features. Education provides detailed materials and programs designed to facilitate learning. Groups targeted for education could include school groups or community groups engaging in nature-based educational activities in the reserves. Tourism agencies, schools and museums are an important source for information and involvement in interpretive programs.

The establishment of an educational facility such as a turtle interpretive centre within the Jurabi coastal area to complement the tourism attractions of viewing turtle nesting/hatching should be seriously considered.

STRATEGIES

- 1. Develop a range of interpretive education programs that highlight natural features (including flora and fauna), cultural heritage and management issues.**
- 2. Integrate interpretation and education programs with those for Cape Range National Park and Ningaloo Marine Park and liaise closely with groups such as tourism agencies, schools and museums.**
- 3. Promote the development of a turtle interpretation centre within the Jurabi Coastal Park.**

30. COMMUNITY INVOLVEMENT

The objective is to develop, encourage and facilitate liaison with the community and their involvement in Park Management.

Interest groups and individuals in the community can play important roles in helping to manage conservation reserves and in facilitating the general public awareness of these areas. This increased public awareness encourages appropriate behaviour, therefore minimising activities that damage the area, and thus reducing management costs.

STRATEGIES

- 1. Maintain and foster close communications and active involvement of local individuals and groups.**
 - 2. Encourage community involvement in activities such as weed control, rehabilitation and education programs.**
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COMMERCIAL USES

31. COMMERCIAL CONCESSIONS

The objective is to maintain reserve values while encouraging commercial concessions to assist in the provision of quality visitor services.

Construction of commercial facilities and licensing of operations will be restricted to those servicing recreational, ecotourism, or conservation activities. Commercial operators will need to abide by strict operational procedures to ensure minimal impact on the values of the parks. A fee will be levied for all commercial operations carried out in the reserves.

Any developments, including roads, carparks and camping areas, must be sited on well represented and environmentally sustainable land systems. Potential impacts shall be assessed and minimised.

Proposals for development within the reserves should be considered by the management committee and their recommendation then submitted to the Shire of Exmouth and CALM. Leasing of land or facilities within any of the three sites under consideration will have to meet with the same approval. A special strategy for the granting and administration of leases will be developed. The majority of revenue generated from such leasing or any other means, will be used for the maintenance and development of facilities in these reserves.

STRATEGIES

1. **Consider approving commercial concessions that are consistent with the objectives of this Plan and that provide a service or facility that would otherwise not be able to be provided.**
2. **Include a lease or license agreement as part of all approved commercial operations.**
3. **Review all commercial concession operations periodically and modify**

lease or license arrangements as necessary.

4. **Ensure that the majority of revenue generated through leases or licenses is used for agreed works within the reserve system.**

5. **Prohibit facilities on the Muiron Islands.**
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32. RESEARCH AND MONITORING

The objective is to increase knowledge and understanding of flora, fauna and natural processes within the management areas.

Scientific information from research and monitoring is the basis for appropriate management as well as for information, interpretation and education programs and displays.

STRATEGIES

- 1. Liaise with research officers involved with projects such as the Western Australian Marine Turtle Project and refine management through the utilisation of research results.**
 - 2. Encourage volunteers, educational institutions and other organisations and individuals to participate in nature conservation research projects.**
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PLAN IMPLEMENTATION

33. FUNDING AND MANAGEMENT

The objective is to implement this plan through an adequate provision of staff and resources as well as through any other appropriate alternative means.

Implementing this plan will require an initial injection of funds for recreational and interpretive facility site planning, design and development. Alternative sources of funding such as external funding from grants will also be actively sought.

Each party will bear the operating costs of their own staff involved in the management of these reserves.

Costs associated with proposed developments by the management agencies and attendant financial arrangements will need to be agreed to before works are undertaken.

A majority of the revenue obtained from activities on the reserves is to be held in trust by the Shire of Exmouth in a Reserve Account, to be used only for agreed works within the Parks.

STRATEGIES

1. **Actively seek CALM and Shire of Exmouth resources as well as funding from external sources for implementing strategies of this plan.**
2. **Integrate management and investigate cooperative means of implementing and enforcing management plan strategies.**

34. EVALUATION AND REVIEW

The objective is to assess the effectiveness of the management plan through periodically monitoring the progress made in implementation and to review the document as required.

Implementation should be reviewed periodically by the management committee.

A standard monitoring procedure such as that used by the NPNCA for conservation parks and national parks would be appropriate. The duration of the management plan will be for a maximum of 10 years.

In the light of new information revision can occur at any time. If the revision process indicates a need for changes to the plan, either the Shire of Exmouth or CALM can initiate amendments prior to the expiry period.

STRATEGIES

1. **Monitor the implementation of this plan through the Management Committee and through the standard monitoring procedures adopted by the NPNCA.**
 2. **Review the plan if new information, particularly from research and monitoring shows that a major change in the direction of the plan is required.**
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REFERENCES

- Department of Conservation and Environment (1993). Coastal Management Plan Kalbarri Townsite.
- Department of Conservation and Land Management (1987). Cape Range National Park. Management Plan 1987-1997.
- Department of Conservation and Land Management (1989). Ningaloo Marine Park. Management Plan 1989-1999.
- Department of Planning and Urban Development (1992). Exmouth Coastal Strategy.
- Gray & Lewis and Partners (1995). Draft Shire of Exmouth Town Planning Scheme No. 3.
- Hesp, P. A. and Morrissey, J. G. (1984). A Resource Survey of the Coastal Lands from Vlamingh Head to Tantabiddi Well West Cape Region. Department of Conservation and Environment, Perth, Western Australia.
- Osborne, S. (1995). Preliminary Summary of Turtle Tourism Monitoring of Mainland NW Cape Rookery Beaches. Department of Conservation and Land Management.
- Siragusa, N. (1993). Report on the Bundegi Boat Ramp, Exmouth. Department of Marine and Harbours.