

Dampier Archipelago Nature Reserves

Summary of Public Submissions



MANAGEMENT PLAN No 18



Department of Conservation
and Land Management

DAMPIER ARCHIPELAGO NATURE RESERVES

SUMMARY OF PUBLIC SUBMISSIONS

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Allan Padgett

Management Plan No. 18

Department of Conservation and Land Management

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INTRODUCTION

This document summarises submissions to the draft management plan (DMP) for Dampier Archipelago Nature Reserves. Comments have been detailed to the section of the DMP to which they refer.

The Dampier Archipelago Nature Reserves DMP was released for public comment on 10 August 1989, by the Minister. The plan was available for comment for a period of 3 months to 3 November 1989. All submissions have been summarised and changes have been made to the plan where appropriate.

Input from the public, conservation groups, industry, various organisations and Government Departments was invited during the compilation of the DMP, which managed to resolve many issues before its release.

The DMP was distributed to State Government Departments, tertiary institutions, conservation groups, recreation groups, industrial users of the archipelago and representative industry groups, local authorities, libraries and numerous individuals. Copies of the plan were available for perusal at the Roebourne Shire Library in Karratha, and available for purchase from CALM State Operations HQ at Como, and Karratha Regional Office.

After the release of the plan, advertisements were placed in local and State Newspapers advising that the DMP was available for comment.

The Management Plan for Dampier Archipelago Nature Reserves was approved by the Hon. Minister for the Environment on 6 June 1990.

ANALYSIS OF PUBLIC SUBMISSIONS

Methods Of Analysis

The public submissions to the Dampier Archipelago Nature Reserves Draft Management Plan were reviewed in three stages:

- i) Public submissions were summarised to allow analysis (this document).
- ii) The submissions were assessed using a set of criteria:
 1. Changes were made if the submissions:
 - a) provided additional information on the physical, biological, social, economic or cultural resources of direct relevance to management;
 - b) indicated that a change had been made in Government legislation, management commitment, legislation or management policy;
 - c) provided additional information on affected user groups;
 - d) proposed the inclusion of additional strategies for a particular concern that would help to achieve the management objective(s); or
 - e) referred to a lack of clarity in the existing strategies.The prescriptions given in the DMP were then reviewed.
 2. Changes were not made if:
 - a) there was clear support for the draft proposal;
 - b) revision was not feasible (generally because the points contradicted existing legislation, government or department policy);
 - c) points made were already in the plan or already considered; or
 - d) submissions indicated strongly opposing views, with the existing prescriptions providing the only 'middle ground'.The criteria used to change or not change the draft plan are included within the discussion of issues, where appropriate.
- iii) The DMP was reviewed and amended where necessary. Numerous minor editorial changes referred to in the submissions have also been made.

All submissions received were substantial, with their number and origin as follows:

Number and Origin of Submissions

	NUMBER	PERCENT
CALM	1	4
Community Organisation	2	8
Conservation Group	2	8
Government (Local)	1	4
Government (State)	10	40
Individuals	4	16
Petroleum Industry	3	12
Tourist Industry	<u>2</u>	<u>8</u>
TOTAL	25	100

Appendix 1 lists all submissions to the Dampier Archipelago Nature Reserves, Draft Management Plan, June 1989.

General Comments

A high proportion of submissions to the Dampier Archipelago Nature Reserves Draft Management Plan commended the report with comments such as:

- . 'We consider that the plan in general is a well researched and presented document ... it endeavours to give all parties interested in the Archipelago a fair go'
- . 'I do congratulate your department and especially Keith Morris for the very detailed research that has gone into the draft for the preservation of this beautiful area of Western Australia...'
- . '...the research done and presented...is of excellent quality...'
- . 'The draft plan is welcomed as a very positive initiative in moving towards effective and indeed essential management of the Dampier Archipelago'
- . (We are) pleased that a draft management plan has been prepared for the nature reserves...Resource development in the region is leading to increasing pressure on the

Archipelago predominantly through recreation and it is important that such pressure is managed properly’.

Some respondents provided qualified support to the draft plan in expressing general concerns about management of the proposed National Park:

- . ‘I am pleased to see that islands in the Dampier Archipelago are to be brought under CALM’s jurisdiction and that a plan for their management has been formulated. To all intents and purposes it appears to have been designed for effective management. However, given the size of the area and the ease of accessibility by boat, the monitoring of public access to Special Conservation Zones, Aboriginal sites and historic sites would not be as easy as expected’
- . ‘This management plan appears to have as its primary focus the change of status of the islands from Nature (and Recreation) Reserves to National Park, and the consequent management needed because of this...I am concerned that, although many aspects of the plan thoroughly cover the perceived problems, the problem of purely human impact is likely to endanger the environment under “conservation”, therefore reducing the perceived attractions that lead to the demand for access.’
- . ‘(We have) previously made comment on the variety of formats used by CALM when presenting management plans for various reserves. There seems to be no standard format and in some plans, such as this one, it is difficult to see how all the management strategies are integrated’

Reference was made to a perceived lack of attention devoted within the plan to industrial users:

..

- . ‘(We are) concerned that the plan makes only brief and general reference to industry development as a legitimate land use of the islands of the Dampier Archipelago...(they) are particularly important for the control of shipping safety, communications and continuity of supply from existing petroleum projects. The CALM management strategies for those islands should reflect the industry’s present and future development requirements’

On the other hand, various respondents argued that insufficient attention was paid to conservation issues:

- . ‘The interactions of both the fauna and the human visitors with the marine environment requires the creation of an integrated terrestrial **and** marine park’

- . 'The plan provides only a broad outline of the biota of the Dampier Archipelago and general management plans for it. The report contains very little baseline data specific to the islands'

- . 'The marine and littoral feeding grounds of species which nest on the islands are threatened by current, and possible future, industrial trends. These include dredging, turbidity caused by ships entering and leaving Mermaid Sound, possible oil and fuel spills from ships and barges, the introduction of dinoflagellates to the marine environment from the ballast water of visiting ships, toxic antifouling agents and waste products'

- . 'Your plan addresses only the management of the land mass and does not address the surrounding waters - it is no good having a well managed island group in the middle of a marine desert. Conservation should be given to the total Archipelago land and sea if the unique environment is to be maintained'

Table 1 is a summary of the major changes made in response to the public submissions.

TABLE 1 SUMMARY OF MAJOR CHANGES TO THE DAMPIER ARCHIPELAGO DMP IN RESPONSE TO PUBLIC SUBMISSIONS

ISSUE	RELEVANT SECTION OF DMP & SPS	RELEVANT SECTION OF FINAL PLAN	DEGREE OF REVISION	SUMMARY OF CHANGES MADE	REASON(S) FOR REVISION	RELEVANT ASSESSMENT CRITERIA
Conservation and recreation reserves	Preface	Preface	Modification	Timeline for inclusion of islands reserved for conservation and recreation into national park brought forward.	Need to incorporate recreation reserves within life of plan.	d
Burrup Peninsula	1.2.5	1.2.5	Addition	Inclusion of northern Burrup Peninsula into planning for national park.	To enhance protection of natural and cultural values of the peninsula, and to better protect adjacent islands.	d
Geology	1.4.2	1.4.2	Modification, Addition	Significant substitution including map of archipelago geology.	More recent and appropriate information.	a, c
Limestone deposits	2.4.2.a	2.4.2a	Modification	Legendre Island noted as possible strategic source of limestone deposits.	Emphasis required.	a, c
Radio positioning base stations	2.4.2.b	2.4.2.b	Addition, Change	1. Selection and use of facilities governed by new guidelines. 2. Proper function of permanent navigation aids.	1. Recent availability of guidelines. 2. Previous information incorrect.	b a
Causeway: Legendre Island - Burrup Peninsula	2.5	2.6	Modification	Route for proposed causeway refer to natural and cultural values of islands and peninsula.	Presence in particular of numerous sites on Burrup and adjacent islands of ethnographic and archaeological significance.	a

ISSUE	RELEVANT SECTION OF DMP & SPS	RELEVANT SECTION OF FINAL PLAN	DEGREE OF REVISION	SUMMARY OF CHANGES MADE	REASON(S) FOR REVISION	RELEVANT ASSESSMENT CRITERIA
Oil Spills	---	2.8.7	Addition	Possible effects of oil spill mentioned and responsible authorities listed.	Policy for potential oil spill required in plan.	a
Fire Protection	5.1	5.1	Modification	Section re-written to better match objectives with strategies.	Clarifies meaning.	d, e
Exploration, Mining, industrial activity	5.4.3.1	5.4	Modification	Plans referred to EPA and appropriate level of assessment sought.	Corrects presumption that an ERMP necessary.	e
Aquaculture	---	5.5	Addition	New section on aquacultural prospects.	To recognise need for mgt of pearl oyster operations.	d
Marine Ecosystem	5.6.1.2 5.6.3	5.8 Obj 2 5.8 Strat 3	Addition Addition	Include surrounding waters. Research into marine life and aquaculture.	Clarifies future strategies To better integrate mgt of marine and terrestrial ecosystems.	d d
	5.6.3	5.8 Strat 12	Addition	Biological survey of islands not currently reserved for conservation of flora and fauna.	To promote inclusion of these islands into national park.	d
Marine Pollution	---	5.7	Addition	New section on marine pollution.	Indicates CALM's advisory capacity in event of oil spill or other contamination.	c, d
Camping	7.1.3.C	7.1.3.C	Modification	Inland camping limit of 100m on specified islands.	Allows more flexible recreational use.	c

ISSUE	RELEVANT SECTION OF DMP & SPS	RELEVANT SECTION OF FINAL PLAN	DEGREE OF REVISION	SUMMARY OF CHANGES MADE	REASON(S) FOR REVISION	RELEVANT ASSESSMENT CRITERIA
Zoning	Fig 3	Fig 4	Modification	<ol style="list-style-type: none"> 1. Reduction in recreation zone of Dolphin and Enderby Islands. 2. Conservation zone added to Conzinc Island. 3. Recreation zone added to Rosemary Island (Chookie Bay). 	Greater flexibility for management of conservation and recreation resources.	c
Commercial Concessions	---	7.4	Addition	Objectives, rationale and management strategies added.	To recognise mgt needs with expanding visitation.	a, c
Management Priorities	---	8.0	Addition	Priorities (high, medium, low) assigned to mgt strategies.	Enables ready identification of mgt priorities.	d
Advisory Committee	8.0	9.0	Addition	Guide to prospective establishment of an advisory committee.	To promote broader participation in park mgt.	d
Low impact industrial development	---	Appendix I	Addition	Guidelines concerning survey stations.	To assist with mgt of low impact industrial proposals.	d
Island-specific fauna lists	---	Appendices II - VI	Addition	Lists of island - specific fauna including birds, terrestrial mammals, marine mammals, reptiles and amphibians.	Baseline data specific to islands clarifies conservation strategies.	d

ISSUES

PART A. THE DAMPIER ARCHIPELAGO RESOURCE

1.0 STUDY AREA

Three submissions noted that 3 of the islands listed in Table 1, “Status of Islands in the Dampier Archipelago”, viz. Egret, Tozer and Wilcox Islands, are not identified in Figure 2, “Land Status of Islands in the Dampier Archipelago”. These omissions, it is argued, make it difficult to decide upon the suitability of the draft plan to manage them.

Further, it is stated that islands not included under the draft plan, including East and West Lewis Islands, and that part of Malus Island vested for Conservation and Recreation, are often referred to and thus create some confusion.

Egret, Tozer and Wilcox Islands have been identified on the relevant maps (Figs. 2 and 4) within the plan. Islands not included within the current planning process are referred to in order that a more complete picture of the archipelago emerge. This is significant given the commitment within the final plan to the incorporation of reserves currently committed to conservation and recreation, and to the possible inclusion of vacant crown land including the northern Burrup Peninsula, into a more integrated plan involving both marine and terrestrial resources of the Dampier Archipelago, within the 10 year life of this plan.

1.2 LAND STATUS

It was noted by one respondent that no reference is made under Land Status to the several Protected Area and National Estate areas, and requested they be included to generate a complete land status picture.

Reference has been made within the plan to the inclusion of Dampier Archipelago on the Register of the National Estate.

1.2.2 Recreation Reserves

One submission argued that increasing population pressures on the archipelago make it desirable to include management of the conservation and recreation reserves in the current

planning exercise, and that a clear resolve to instigate a management plan on recreation reserves be made with a target date set to achieve this.

Refer Section 1.0.

1.2.3 Leases Under the Land Act 1933

One respondent urged that the exotic vegetation - palms and tamarisk - associated with the special lease on Rosemary Island should be removed, and that plans to remove introduced species planted on Recreation Reserves be prepared in anticipation of National Park status.

The palms and tamarisk planted within the special lease on Rosemary Island cannot be removed within the term of the current lease since no reference is made in the lease to exotic vegetation.

The final plan has been amended to allow leaseholders on recreation reserves to grow endemic species only around their shacks. The presence of introduced species planted on these reserves will be addressed during the life of this plan (refer 1.0).

1.2.5 Scope of the Management Plan

It was requested in one submission that the plan consider management issues related to vacant Crown land on the Burrup Peninsula.

Refer Section 1.0.

1.4.2 Geology

The substitution for a significant part of this section was assessed as appropriate and included within the final plan, as was the enclosed geological map (Figure 3).

2.0 HISTORY AND LAND USE

2.1 ABORIGINAL OCCUPATION

One respondent provided evidence which suggested that Aboriginal occupation of the

archipelago occurred around 18,000 years ago, when the islands were rocky hills on a coastal plain.

The timing of Aboriginal occupation of the Dampier Archipelago of approximately 18 000 years ago is accepted.

2.3 LAND-USE 1860-1960

One respondent requested that urgent attention be given to establishing conservation strategies for the former whaling station on Malus Island, and for the ruins of the pastoral settlement on West Lewis Island.

Malus and West Lewis Islands are reserved for the purposes of conservation and recreation and thus fall outside the scope of this management plan. However conservation strategies for items of historical interest will be addressed as part of the intention to include such islands in a broader marine park (refer 1.0).

2.4.2. Mining and Industrial Use

With the possibility of a steel industry developing in the future, the high quality limestone deposits on Legendre Island are suggested as a strategic resource by one respondent, who notes also that while the potential demand for limesand is not known, it too should be regarded as a strategic resource.

Two respondents noted that submissions to, and approval by Government to use radio positioning base stations in the Dampier Archipelago are directed through the Department of Land Administration, and not through CALM. Further, the purpose of the navigational aides installed on Angel and Gidley Islands is not to directly control shipping movements, but rather to indicate the position of the submarine gas trunkline.

The limestone deposits on Legendre Island have been acknowledged in the plan as a possible strategic resource.

The selection and use of sites for radio positioning base stations will be referenced to controls expressed in the document on low impact industrial use of the islands, which will appear as an appendix to the final plan.

The plan accepts that the purpose of the navigational aids on Angel and Gidley Islands is to indicate the position of the submarine gas trunkline.

2.6 POSSIBLE FUTURE LAND-USES

One submission forecast the possibility of the granting of up to 3 leases for shellfish farming (pearl culture) within 5 years.

With reference to the possible causeway linking Legendre Island with the Burrup Peninsula, one respondent urged that no service causeway or corridor be constructed due to the especially high concentration of Aboriginal sites located there, in particular the northern part of the peninsula, and on Dolphin Island.

It was urged by one respondent that the various corridor alternatives for a proposed Legendre Islands - Burrup Peninsula link be referred to in the final plan.

Another submission noted that the exploration permit designation "WA 192-P" for Rosemary, Enderby and Goodwyn Islands covers only Water and Submerged Lands, and that all islands in a petroleum permit are designated by an EP number.

This appeared as Section 2.5 in the Draft Management Plan. A new section has been written (2.5 Aquaculture) to accommodate current and prospective leases for pearl culture in Dampier Archipelago.

In the event of Legendre Island being utilised as a deep water port there would, as foreshadowed in the draft plan, be a need for a service corridor linking the port to the mainland. Any plans for such construction would be guided by reference to cultural (and natural) values of the northern Burrup Peninsula and of the nature reserves. Since the prospect of such access is currently conceptual only, it is felt that including corridor alternatives in the final plan would be misleading.

The exploration permit designation for Rosemary, Enderby and Goodwyn Islands of "WA 192-P" is recognised as pertaining to water and submerged lands and is thus retained within the plan.

2.8 IMPLICATIONS FOR MANAGEMENT

A diverse array of opinions characterise the public response to management implications concerning history and land-use. Of 6 submissions, 2 reject the proposed change of purpose of nature reserves to national park to allow for the recreational use of the islands. One makes specific objection to the incorporation of recreation reserves into the national park at the expiry of this plan, unless use of the islands is maintained as at present and lessees of island dwellings (shacks) are given improved land tenure.

One respondent requested that the nature reserves be incorporated into the national park immediately, that no mining occur, and that satellite alternatives to current navigation and radio positioning functions be investigated.

Two submissions comment that while it is implied that the full significance of Aboriginal sites on the Burrup Peninsula is known, this is currently not the case and that large tracts remain unsurveyed or have only experienced minor reconnaissance traverses.

One respondent requested that interpretation signs be provided at historic sites denoting early European exploration, and that continual monitoring of these sites occur to deter vandalism and theft.

As proposed in the draft plan, the recommendation that the purpose of the nature reserves be changed to national park was designed to both protect the natural and cultural values of the archipelago, and to allow for recreational use of the islands. This recommendation will be reserved intact in order to recognise the legitimate claims for recreational use of the islands by Pilbara residents and visitors. The use of appropriate zoning of the nature reserves will ensure the continued protection and integrity of the island communities.

Questions relating to tenure of island dwellings on the recreation reserves will be addressed within the life of this plan in tandem with the prospect of these reserves being incorporated into the national park.

It is appreciated that immediate incorporation of the nature reserves into the national park is desirable, but the processes of public participation in management planning, and the need for Ministerial approval of the final plan impose constraints on practical immediacy.

With respect to mining in national parks, the recent Government policy Mining and the

Environment. Balancing the Scales provides that any proposal to mine requires the consent of both Houses of Parliament.

The present and forecast use of the nature reserves for navigation and radio positioning functions is deemed satisfactory provided that guidelines are adhered to.

It is acknowledged in the plan that a complete picture of Aboriginal sites on the Burrup Peninsula is not available.

It is intended that interpretation signs be erected where appropriate to denote early European exploration, but with the dispersed nature of the islands monitoring could only be regular and not continuous.

3.0 BIOLOGICAL RESOURCES

3.1 FLORA

One respondent urged that CALM develop a means of protecting seagrass areas, which form an integral part of the habitat and feeding grounds of dugongs and sea turtles.

The protection of seagrass areas will be considered as a part of the anticipated marine park to be researched and proposed within the life of this plan.

3.4 FAUNA

A submission urging greater attention to island-specific baseline data made the following points:

- detailed species lists are required for each island to enable an assessment of the significance of various assemblages and their conservation value in a regional context;
- seabirds breeding island data is essential if management is to be integrated with those islands holding important colonies elsewhere;
- where islands hold the only known Pilbara population, eg *Egernia pilbarensis* on Rosemary Island, their conservation value is enhanced;
- recent assessments by CALM indicate that the Mangrove Kingfisher is not rare and endangered, and thus is unlikely to become rare in the Pilbara.

Another submission noted that several species mentioned under **3.5.2 Undisturbed Vegetation/Habitat** should be included under **3.4.2 Faunal Composition**, and also that species of marine mammal other than listed have apparently been observed in the archipelago, eg *Pseudorca crassidens*. It was suggested that a comment on the likelihood of other species using the area be made, and that anecdotal evidence be accepted. This respondent queries whether there is published data to substantiate Agriculture Protection Board claims that at the doses used, 1080 is not lethal to the native fauna of the Dampier Archipelago.

One respondent recommends that “coral protected areas” be established and clearly marked by buoys, and that together with mooring buoys in heavy use areas, the possibility of damaging coral by activities such as dragging anchor chains would be reduced.

With respect to island-specific baseline data, detailed species lists are being prepared for each nature reserve to appear within the final plan as an appendix.

While the Mangrove Kingfisher was gazetted in 1988 as fauna which is likely to become extinct or is rare, it is accepted that more recent assessments show its range to be broader than previously known, and its previous status is being revoked. The final plan acknowledges this change.

Mammal lists for both nature reserves and waters of the archipelago appear as appendices to the final plan. It is not intended that this plan for the nature reserves encompass details on marine mammal species; rather, this important need will be met by the projected incorporation of the marine environment into an integrated management plan for the Dampier Archipelago.

Similarly, the establishment of coral protected areas is best covered by reference to the total archipelago. Two papers relating to the effect of 1080 (sodium fluoroacetate) on fauna native to the nature reserves have been added to the list of references in the final plan (King 1989; King et al., 1989).

3.6 IMPLICATIONS FOR MANAGEMENT

With reference to shell collecting, one respondent suggested that the collection of “dead shells” be allowed.

One submission recommended a ban on spear fishing in areas worthy of high protected status, and a total ban throughout the archipelago on SCUBA spear fishing.

The issue of spear fishing falls outside the scope of this plan and will be considered within proposals for a marine park to be assessed at a later stage within the life of this plan.

Similarly, the collection of shells - living or dead - while remaining prohibited in the intertidal zone of the nature reserves, will be addressed within the scope of management planning for a marine park.

PART B PLAN FOR MANAGEMENT

4.0 MANAGEMENT OBJECTIVES

While commending the General and Specific Management Objectives under 4.1 and 4.2 to preserve Aboriginal sites, one submission disagrees with the concept of changing the status of Nature Reserves to National Park to **allow** for recreational use. It is argued that a number of areas need to be preserved in perpetuity and not be open to recreation.

Two respondents state that a change of purpose from nature reserves to national parks is preemptive of a government review on the status of B and C class conservation reserves and therefore not acceptable. It is contended that such a recommendation automatically upgrades the status to "A" class without engaging in the appropriate assessment process which reviews economic and industrial requirements as well as conservation aspects. Further, it is urged that the results of the Bailey Inquiry into Petroleum Exploration and Development in Nature Reserves and National Parks be included in management strategies for the islands of the archipelago.

It is stated that both short term (eg. radio positioning base stations) and long term (eg. lime sand mining, service corridors) industrial needs must be recognised and that reclassification of purpose must not preempt or exclude this plan.

One submission argued that the management plan state the priorities given to the preparation of plans for the remainder of the study area - outside nature reserves - and that given the intimate correlation between the health of the marine environment and the protection of marine species, some discussion of possible integrated management of the Dampier

Archipelago system is recommended. This holistic view would necessarily involve co-operation with appropriate authorities to ensure management compatible with the objectives of this plan, and it is suggested that the management plan address ways to promote interaction with such agencies, including the Department of Land Administration, Dampier Port Authority, Department of Marine and Harbours, Fisheries Department, Mines Department, Environmental Protection Authority and the Department of Transport.

The management plan for Dampier Archipelago nature reserves acknowledges the need to provide for appropriate recreational opportunities whilst simultaneously protecting conservation values (refer 2.8).

The recommendation that the purpose of the nature reserves of the Dampier Archipelago be changed to National Park has to be presented to the Minister for approval. Further, Parliament needs to approve of the change of purpose before actions proposed within this plan and requiring National Park status are able to proceed. At this time the outcomes of both the Inquiry into Petroleum Exploration and Development in National Parks and Nature Reserves (Bailey), and of the review of B and C class nature reserves, will be known and appropriate account taken of them if necessary. It is important to note that a change of a reserve's purpose from Conservation of Flora and Fauna to National Park does not affect the reserve's class under the Land Act (ie. A, B or C).

The plan recognises both short and long term industrial needs of the archipelago. A set of guidelines for low impact industrial use of the islands prepared by CALM in consultation with the Department of Resources Development and industrial users will guide future development. As outlined above (refer 2.8) priority is being given within the term of this plan to the establishment of a marine park to link aquatic and terrestrial components of Dampier Archipelago into one management structure. Consideration is also being given to the formation of an advisory committee to assist with management of the national park, with membership drawn from various user/interest groups, government bodies, and CALM, and appointed by the Minister.

5.0 MANAGEMENT FOR CONSERVATION OF FLORA, FAUNA AND THE LANDSCAPE

A concern was expressed in one submission that while strategies within this section address the public and industrial users of the islands, with particular reference to quarantine control

and rubbish disposal, no details are provided as to how CALM might actually manage these aspects, and no reference is made to procedures ensuring compliance by CALM personnel.

The operations of CALM with respect to quarantine control and rubbish disposal are determined by CALM at the regional level. Compliance with regulations by CALM staff is no different from that applying to the rest of the community.

5.1 FIRE PROTECTION

The 7 submissions addressing this section concentrated their concerns on fire management. While one submission provided unqualified approval of all fire-related strategies, another made the following points in rejecting much of these:

- . a total fire exclusion policy will not contribute to the management objective of maintaining a full complement of native species sustained by natural ecological processes, but this could be achieved through an active program of linear burning to help restrict wildfire spread and to increase diversity of seral stages
- . the basis of protection should be on pre-suppression planning/works to restrict the potential spread of fires on large islands, or to at least ensure a wide range of fire intensities in similar vegetation types
- . strategy 3 is “superficial” and should be deleted
- . objection to strategy 4 if intention is to construct cleared firebreaks without using firebreaks or control lines
- . the statement that frequent wildfires are a major contributor to degradation of native vegetation needs qualification.

Other respondents commented variously that:

- . the use of gas appliances should be strongly recommended, but fires should be allowed in fire places with a cleared area of one metre radius
- . account should be taken of the possible exfoliation of boulders and the consequent damage to Aboriginal rock art

- . care should be taken to ensure no damage to engraved boulders occurs
- . pre-European Aboriginal fire regimes should be researched and implemented where appropriate into management practices
- . the Dampier Port Authority control tower referred to in strategy 5 was relocated from East Intercourse Island to the Burrup Peninsula and has been operational since 1 March 1989.

The section on fire protection in the plan has been revised to better integrate objectives with management strategies.

The plan will maintain the prohibition on the use of open campfires on the nature reserves due to the potential for escape of fire, the extremely limited supply of firewood on the islands, and the Department's limited ability to suppress a wildfire.

Where possible appropriate action will be taken in the event of a wildfire to prevent or reduce damage to Aboriginal art and engravings. Research into pre-European Aboriginal fire regimes will be encouraged.

The location of the Dampier Port Authority control tower has been amended in the plan to specify Burrup Peninsula.

5.2 CONTROL OF INTRODUCED PLANTS

One submission noted that various matters expressed in the draft plan are not as detailed nor as extensive as conditions placed on private companies concerning the same matters, and used the following omissions to exemplify this:

- . quarantine procedures
- . method for eradication of Buffel Grass, *Cenchrus ciliaris* on Rosemary Island
- . recognition of the use of Buffel Grass as a binding and stabilising agent, and implications of its eradication from areas it is currently stabilising.

It was recommended by one respondent that measures to eradicate Prickly Pear on East and West Lewis Islands should not rely entirely on biological control, which will, it is maintained, at best contain and possibly reduce the infestations.

The use of exotic species in erosion control on Rosemary Island is not compatible with the conservation objectives of nature reserves. The plan acknowledges that since Buffel Grass is difficult to eradicate, attention will focus on the need to control its spread.

The eradication of Prickly Pear on East and West Lewis Islands might require control measures other than those currently applied. The plan has been amended to reflect this.

5.3 CONTROL OF INTRODUCED ANIMALS

Of 3 submissions to this section, one supports the plan in its intention to maintain feral cats and foxes at a minimum and to ban pet access to the islands. It is noted that the predation of sea turtle eggs by feral animals should be minimised if this policy is effective. One submission noted a willingness to assist with fox and cat control on Legendre Island, while another respondent was willing to assist with feral animal and vermin control programs on the Burrup Peninsula.

5.4 CONTROL OF ACCESS FOR MINING AND INDUSTRIAL PURPOSES

A total of 8 submissions to this section emphasizes the significance of the control of access for mining and industrial purposes in the management plan.

One respondent strongly opposes the possible road connection between Legendre Island and the Burrup Peninsula (refer earlier comments **2.5 Possible Future Land Uses**), and advises that site inspections prior to the erection of small scale temporary facilities must comply with the Aboriginal Heritage Act 1972.

One submission urges that no mining (limestone, limesand) nor exploration (hydrocarbons) proceed within the National Park, since such activities would seriously compromise effective conservation of the area. Further, it is argued that a service corridor linking Legendre Island and the Burrup Peninsula is not congruent with the specific management objective under 4.2.b "to conserve the physical landscape". It is also claimed that the improved access for introduced species would have a detrimental effect on indigenous flora and fauna. Thus port development on Legendre Island is opposed unless the facility could be developed without seriously impacting on the National Park.

A third respondent notes the absence of planning within the draft plan for a possible deep-water port on Legendre Island, and suggests that research be initiated into a comparison of

the Legendre plus causeway system versus the present shipping facilities, with reference to impacts on the park. It is proposed that the impact of causeways could be serious because of:

- . changes to tidal flow
- . increased penetration of feral animals and weeds
- . accidents involving spills or fire.

Another submission urged that Legendre Island be controlled by CALM to ensure preservation of significant turtle breeding areas on the island.

Of the remaining 4 submissions, a strong concern was voiced by one respondent that the draft management plan appears inconsistent and biased in its reference to and acceptance of industrial activity as a legitimate land use of the islands. Further, an in principle objection was made to management strategies proposed in this section which, it is alleged, go beyond the authority of CALM and the CALM Act, in particular Strategy 1 under **5.4.3 Management Strategies** in the draft plan. This objection is supported by another respondent who argues that whilst it is appropriate for CALM to refer proposals for exploration, mining or industrial activity on the islands subject to this plan, to the EPA, it is the function of the EPA to determine the level of assessment required. That is, it should not be presumed that an ERMP will be necessary, since the most likely industrial uses are the temporary establishment or reactivation of survey control stations.

It was further noted that medium to long term access to the islands of the Dampier Archipelago was essential to ensure the safety of personnel and ships, and the protection and maintenance of the integrity of the submarine trunkline conveying natural gas and condensate, and that such access be available at short notice. Since helicopter servicing is an integral part of offshore operations, it was foreshadowed that access to any island of the archipelago be available in the event of an emergency forced landing.

With reference to Strategy 2, it was requested that joint site inspections for the erection of small scale temporary facilities be restricted to those immediate areas which such structures impact upon, and not assume the mantle of a broader environmental survey.

Another respondent proposed 3 further amendments:

- . under **5.4, Rationale**, delete "It is also possible that the islands will be subject to petroleum exploration activities in the future", since the islands consist of early Proterozoic and Archaean rocks and therefore do not possess hydrocarbon potential.

- add **Figure 3 Geology** (map attached) to **Section 1.4.2 Geology** and change the current Figure 3 to **Figure 4 Management Zonings for the Nature Reserves in the Dampier Archipelago**.
- add the following 4 titles to **References**:
 - Biggs, E R (1976a). Dampier - Eaglehawk Island - Rosemary Urban Geology, 1:50 000 scale Urban Geology Series. Western Australia Geological Survey Map 2256 IV, 2156 I, 2257 III.
 - Biggs, E R (1976b). Nickol Bay - Legendre Urban Geology, 1:50 000 scale Urban Geology Series. Western Australia Geological Survey Map, 2256 I - 2257 II
 - Kriewaldt, M (1964). Dampier and Barrow Island, Western Australia. 1:250 000 Geological Survey, Explanatory Notes, SF/50-2 and SF/50-1.
 - Ryan, G R (1966). Roebourne, Western Australia. 1:250 000 Geological Series. Western Australia Geological Survey, Explanatory Notes, SF/50-3.

The proposed access link between Legendre Island and Burrup Peninsula is conceptual in nature and could proceed only if conditions relating to the protection of cultural and natural values were satisfied.

This latter qualification applies also to the erection of small scale temporary facilities, which will be further guided by reference to the document concerning low impact industrial use of the islands (appendix to final plan).

Industrial use of the islands is considered in the Dampier Archipelago Nature Reserves draft plan only to the extent that it is likely to impinge upon the statutory purpose of the land. CALM believes that the management plan gives proper regard to the exercise of due processes and existing rights in relation to industrial activity within the archipelago.

With reference to proposals for exploration, mining or industrial activity being referred to the EPA, it is agreed that an ERMP should not be presumed and the plan is being altered to reflect this.

The use of the archipelago by industry especially with reference to the safety of personnel and ships, and the protection and maintenance of gas and condensate conduits, will be subject to the joint guidelines developed by CALM, the Department of Regional Development and the petroleum industry (refer Appendix I, final plan).

The reference to future petroleum exploration activities on the nature reserves was deleted since it is accepted that the early Proterozoic and Archaean rocks comprising the islands do not possess hydrocarbon potential.

A new section, 5.5 Aquaculture , has been included in the plan at this point.

5.6 HABITAT DEGRADATION AND REHABILITATION

Of the 4 submissions to this section, 2 queried the feasibility of Strategy 6 concerning rubbish removal from the islands, one respondent stating that bins/rubbish disposal sites are needed on the islands, and the other stating concern about the monitoring and removal of rubbish, particularly that washed up on the beaches.

One submission suggested that chalet style accommodation be provided at Norbill Bay with a limit of 15 buildings catering for up to 60 visitors, and that appropriate jetty/pontoon facilities be constructed.

Another respondent queried why the track to the airstrip on Rosemary Island need be kept open if the airstrip is no longer used.

With respect to rubbish removal from the islands, it is considered that the most effective policy is maintenance of the current practice of "take-out, bring-in". The provision of bins or rubbish disposal sites is not compatible with management objectives for nature reserves. Rather, it is preferable to educate archipelago users of the shared benefits resulting from a no-disposal policy.

With reference to chalet-style accommodation on the islands, it is expected that as the tourism industry expands, any demand for accommodation of the type suggested would be met by private interests on the Pilbara mainland coast. With appropriate commercial concessions enabling visits to the islands, visitor demand for access to the nature reserves can be satisfied while preserving intact the unique natural and cultural properties of the archipelago.

The track to the airstrip on Rosemary Island is being kept open to facilitate management access to rehabilitation operations proceeding there.

A new section, 5.7 Marine Pollution, will appear in the plan at this point.

5.8 RESEARCH AND MONITORING

A total of 8 submissions commented on research needs, with the majority urging that research proceed into the marine environment to complement that done for the islands, with the aim of achieving an integrated plan for the archipelago.

Additions have been made to the plan to indicate the significance of research into the marine environment to the prospective establishment of a marine park protecting both terrestrial and aquatic components of Dampier Archipelago.

6.0 MANAGEMENT OF ABORIGINAL AND HISTORIC SITES

One respondent commented, in reference to the Western Australian Museum being encouraged to undertake surveys of Aboriginal sites and objects on the islands, that the type of encouragement required is fiscal. This submission also noted that the apparent very high density of Aboriginal sites would make monitoring very difficult.

Another respondent noted that since many Aboriginal sites (eg. stratified deposits, burials, and engravings) are quite vulnerable and individually unique, then visitation should not simply be monitored but controlled.

It is recognised that the high density of Aboriginal sites and objects on the islands would make monitoring difficult. The plan has been amended to include the prospect of control of visitation to such sites if necessary.

7.0 MANAGEMENT FOR PUBLIC USE

7.1 MANAGEMENT ZONINGS

Of the 12 submissions to the draft plan concerning management zonings, approximately two-thirds supported the proposed zonings of the nature reserves as stated or suggested additional protection.

3 respondents argued that the fauna and flora values of the archipelago would be best protected by declaring the whole archipelago as a National Park, thus integrating marine and

terrestrial components.

Particular issues raised by various respondents included:

- . the recreation zones are too extensive to be “consistent with the proper maintenance and restoration of the natural environment” and should be reduced to one-third or less of each island’s perimeter. This would foster regeneration and more readily enable comparative studies between camping and non-camping zones
- . a concern with adjacent and contrasting zones on Malus Island, which might endanger viability of non-aerial populations by restricting interbreeding. It is suggested that Recreation Zone status be changed to Conservation Zone
- . on Goodwyn Island, the Recreation Zone should be changed to Conservation Zone to provide maximum protection for breeding birds, especially since the breeding season coincides with the peak recreation season
- . West Lewis, East Lewis and Legendre Islands, and the mudflats supporting migratory waders in Nickol Bay, be zoned as nature reserves
- . areas identified as important for nesting should be closed for that period
- . a much greater proportion of the coastlines of Dolphin, Angel, Gidley and Enderby Islands should be re-designated as Conservation Zones, with some sections becoming Special Conservation Zones
- . the non-allocation of management zoning to Burrup Peninsula, Legendre, West Intercourse, West Lewis and East Lewis Islands needs firmer explanation, especially since West and East Lewis Islands are shown as Recreation Reserves in **Figure 2 Land Status of Islands in the Dampier Archipelago**
- . under Management Strategy (a) p59 of the draft plan there is reference to invoking a Special Conservation Zone on advice from the W.A. Museum where Aboriginal sites of significance are known to exist. It is suggested that immediate consultation occur to designate areas based on already known concentrations of significant sites
- . specific information is requested to explain why many of the smaller islands are designated Special Conservation Zone

- . a concern that mangrove areas might be receiving management rather than protection, since the coastlines of those islands where mangals are best represented - Enderby, Dolphin and Gidley Islands - are zoned as Recreation Zones
- . some - if not all - of known turtle nesting beaches need to be zoned as Special Conservation Zones to avoid daytime visitor access. It is suggested that if some only receive such protection, then comparative research should proceed to enable better informed future management
- . the whole of Hauy Island should be zoned as Special Conservation Zone in order to avoid boundary effects emerging from the recreation zone
- . the section of Burrup Peninsula north of Withnell Bay should be included within the management plan to control vehicular access to Searipple Passage and the possible migration of exotic flora propagules to Dolphin, Angel and Gidley Islands.

Various objections were made to the proposed management zonings by approximately one-third of the submissions to this section, including:

- . if existing management rules were adhered to and/or effectively policed there would, it is argued, be no need to change the status of the nature reserves to national park. A concern is expressed that the proposed change in status of the islands might eventually lead to total public exclusion. This same respondent suggests the implementation of a local volunteer ranger scheme to report on illegal or irresponsible behaviour
- . since the majority of the perimeters of the large islands - Dolphin, Angel, Gidley Islands, and Collier Rocks - are inaccessible due to rocky outfall, cliffs and reefs, it is recommended that camping be restricted to Norbill Bay on Rosemary Island, and to various specified beaches on Collier Rocks and Enderby Island, and in Flying Foam Passage. It is urged that facilities to encourage camping be provided at these beaches, and furthermore that use of beaches on islands designated as Recreation Reserves be encouraged.
- . Conzinc Island should be classified as Recreation Zone rather than Special Conservation Zone to enable small craft access from Withnell Bay, and to provide all craft with shelter during periods of strong east winds

- . it is asserted that the total area classified as Recreation Zone and thus available for camping is too large to be effectively managed. A suggestion is made that a certain number of sites be defined for camping, and that toilet and rubbish facilities be provided
- . the restriction to 50 metres inland for day access and camping on the beach areas of Angel, Gidley and Dolphin Islands, and Collier Rocks is described as inadequate and impractical. It is stated that greater access is required in many areas and it is requested that the “arbitrary” figure of 50 metres be reassessed
- . some areas on the islands - excluding recreation islands - should be set aside for future development “without the necessary red tape which would be required if it was all National Park”. It was suggested that development similar to that on Thevenard Island off Onslow proceed on Rosemary Island from the western end of Norbill Bay to the northern end of Chookie Bay.

The recreational zoning on Angel, Dolphin, Gidley and Enderby Islands, and on Collier Rocks, represents extensive areas of coastline which in a practical sense disallow mooring and camping due to the presence of rockfall, cliffs and dense mangrove communities. However the zoning allows a more extensive choice of camping sites and thus reduces visitor pressure by being distributed over a greater number of beaches.

Where contrasting zones appear on the one island, particularly when a special conservation zone is adjacent to a recreation zone - refer Goodwyn and Hawy Islands - the management of the natural and/or cultural values at the boundary between these zones is made more complex. Nevertheless it is intended that appropriate signs on the islands and availability of brochures on the mainland highlighting the significance of the restricted zone especially, should be sufficient to enable protection of the islands' unique values while simultaneously allowing controlled access to beaches and campsites of high recreational value.

As expressed in the preface to the plan, the change of purpose of the nature reserves to national park is to allow for the recreational use of the islands, an activity with a relatively recent history but of great local significance given the attraction of offshore islands to mainland Pilbara inhabitants and visitors.

Areas forming part of the Dampier Archipelago or adjacent mainland but not vested as nature reserves for the purposes of conservation of flora and fauna are not considered by this management plan. This includes, for example, the Burrup Peninsula, Legendre Island, West

and East Lewis Islands, and part of Malus Island.

It is intended within the life of this plan (10 years) that islands presently reserved for conservation and recreation will be incorporated into the national park. Together with the waters of the archipelago and the northern portion of Burrup Peninsula, it is expected that an integrated marine park will emerge, to provide maximum conservation of the unique biota of the archipelago whilst allowing appropriate recreational opportunities.

Many of the smaller islands designated as Special Conservation Zones, for example, Kendrew, Lady Nora, and Keast Islands, have received this zoning in order to protect important sea-bird nesting sites.

The development of visitor facilities on the nature reserves is not congruent with management aims for the archipelago. Such facilities tend to concentrate visitor pressure, and lead to despoliation and crowding of the natural environment. Similarly, the provision of tourism infrastructure on the nature reserves is not consistent with the objectives of the management plan.

It is recognised by the planning team that a portion of Conzinc Island should be made available to day visitors departing in small craft from Withnell Bay, and the plan has been altered to accommodate this.

The recreational zone has been extended on Angel, Gidley and Dolphin Islands, and on Collier Rocks, to allow camping on appropriately zoned beach areas up to 100m inland.

7.2 GUIDELINES FOR PUBLIC USE

A number of submissions commented on the strategies concerning public use of the islands. One respondent noted that the problem of human waste disposal is not referred to and suggested that chemical toilets be required for campers and boaters with disposal facilities provided at launching ramps. The concerns are that increased nutrient can be detrimental to some terrestrial endemic plants, and that eutrophication might occur in sheltered marine environments.

This respondent also noted that while dogs, cats or any other domestic animal are not allowed onto reserves, it would be difficult to police this, and suggested that either it be an offence to carry such on a boat, or, that patrol times of rangers be extended.

One submission urged that penalties for breaches of management strategies be included in the final plan, and queried whether the restrictions on shell collection applied to dead shells collected by children, and to oysters and cockles collected for personal consumption.

It was suggested by one respondent that CALM staffing needs to be increased to ensure effective control of the National Park.

While concerns re the detrimental effects on terrestrial and aquatic vegetation resulting from human waste are appreciated it is believed that the current and anticipated levels of visitor usage are not high enough to have a deleterious effect on biota. However this aspect of public use will be considered further during the life of the plan as a part of proposals to establish a marine park.

Most visitors to the islands are well aware of the no-pets policy, and observation of visitor behaviour suggests that the current level of management is sufficient in ensuring that dogs and cats especially, but also other domestic fauna, do not have the opportunity to establish on the nature reserves.

It is not CALM policy to include penalties for breaches of management strategies within management plans. Such information is available from regional offices if this is desired.

As previously mentioned (refer 3.6) the collection of all shells in the intertidal zone of the nature reserves is prohibited. This issue will be addressed further within the planning for a comprehensive Dampier Archipelago marine park.

7.3 INTERPRETATION

The single submission to this section requested that visits to turtle nesting beaches be permitted only under the direct supervision of highly trained staff authorised by CALM.

It is intended that visits - in the interests of nature conservation - to accessible fauna such as turtle nesting sites would be permitted but only under supervision and with appropriate timing.

A new section, 7.4 Commercial Concessions, will appear in the final plan at this point.

A new section, 8.0 PARK PROGRAMS, in the final plan will summarise management strategies and provide a priority classification.

9.0 PLAN IMPLEMENTATION AND REVISION

Three respondents to this section emphasised the importance of continuing a dialogue with the public, and especially urged that any changes contemplated proceed via exhaustive consultation with the community.

It was requested that CALM research a mechanism for resolving conflict between user groups such as industry, recreation, conservation and education.

The following points made by respondents are not directly referenced to particular strategies of the Draft Management Plan, but are included to prompt discussion:

- . no commercial development should be allowed within the national park
- . commercial fishing should be tightly controlled (effect on catch and populations as industry expands) or banned (damage to coral reefs)
- . the zoning displayed in **Figure 3 Management Zonings for the Nature Reserves in the Dampier Archipelago** is confusing for public users. It is asked how single national park status would remove this alleged confusion
- . reader access would be facilitated if the management objectives were summarised and collated.

CALM considers that public participation in management planning is a very high priority. It is recognised that continuing dialogue with the public is important in ensuring that management strategies are appropriate, and thus consultation is encouraged throughout the processes of preparation and implementation of management plans.

The plan has been amended to include the possibility that an advisory committee could be established to assist with management of the nature reserves - and other proposals for conservation reserves - with membership deriving from and reflecting a broad range of community and other interests.

There is no plan to allow commercial development within the national park, although the establishment of tourism infrastructure on the adjacent mainland might lead to applications for various concessions. Those consistent with the purpose of reservation and preservation of the archipelago may be approved if proposals fulfill the guidelines of the CALM recreation policy and are acceptable to the NPNCA and Minister.

Commercial fishing occurring in the waters of Dampier Archipelago is outside the scope of

this management plan for nature reserves, but will be considered in the planning for a marine park, expected during the life of this plan.

*It is suggested that amendments made to Figure 3 especially of the DMP make the management zonings within the proposed national park easy to interpret and to apply. This information will appear in the final plan as **FIGURE 4 MANAGEMENT ZONINGS FOR THE NATURE RESERVES IN THE DAMPIER ARCHIPELAGO.***

*To promote reader access, management objectives have been collated and prioritized, and will appear in the plan as a new section (**Section 8 PARK PROGRAMS**).*

APPENDIX 1

Submissions to the Dampier Archipelago Nature Reserves Draft Management Plan.

CALM

R Sneeuwjagt

COMMUNITY ORGANISATION

Dampier Archipelago Recreational

Dwellers Association

King Bay Game Fishing Club

CONSERVATION GROUP

Greenpeace Australia

Wetlands Conservation Society

GOVERNMENT (Local)

Shire of Roebourne

GOVERNMENT (State)

Agriculture Protection Board of WA

Bush Fires Board

Department of Mines

Department of Planning and Urban Development

Department of Resources Development

Environmental Protection Authority

Fisheries Department

Water Authority of WA

Western Australian Museum

Western Australian Tourism Commission

INDIVIDUALS

H G Baird

W F Davenport

R G Forster

D F James

MINING INDUSTRY

Australian Petroleum Exploration Association

West Australian Petroleum

Woodside Offshore Petroleum

TOURIST INDUSTRY

Pilbara Regional Tourist Association

Yabirara Walking Tours