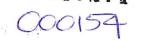
DEFARTMENT OF CONSERVATION

8. LAND MANAGEMENT
WESTERN AUSTRALIA



# THE TAMALA - CARRARANG RECREATION AND TOURISM PLAN

# Shark Bay World Heritage Area

A report for the Department of Conservation and Land Management, Western Australia

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# Tamala - Carrarang Recreation and Tourism Plan

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# **Executive Summary**

The Shark Bay World Heritage Area has unique attractions, spectacular scenery, excellent fishing, a peaceful atmosphere and a pleasant winter environment but it is set in a harsh fragile environment which will rapidly deteriorate without excellent management. Shark Bay is attracting increasing numbers of visitors who are causing pressures on the environment.

This study concentrates on a small but important part of the Shark Bay World Heritage Area, the Tamala-Carrarang Coast south of Useless Loop (Map 1). The coastline features rocky limestone headlands and shores interspersed with sandy beaches and shallow bays. The coast is often backed by high sand dunes which are very sensitive to disturbance and wind erosion as is the low shrub vegetation which is characteristic of this harsh environment. This area is under pastoral lease with the 40 metres above high water mark being Shark Bay Marine Reserve. The coast has been a traditional camping and fishing area for many years under the control of the pastoral station leasees with peak usage in the winter school holidays by approximately 230 people.

The purpose of this study has been to document the areas physical features, the current use and impacts and the expectations of the wider community with the purpose of achieving an agreed vision and long term plan to guide sustainable tourism and recreation usage of the area. The study found, despite good control of visitor entry, that camping sites and their surrounding environments are deteriorating but fortunately, with improved management and rehabilitation, the area can recover and continue to provide remote recreation experiences.

This study considered:

• the high sensitivity of the study area to disturbance;

• the range of recreation opportunities in the Shark Bay region;

• the Department of Conservation and Land Management's (CALM) policy for providing a range of recreation opportunities and to reduce pressure on attractions such as Monkey Mia;

the opinion of a wide range of stakeholders; and

• the anticipated increasing tourism pressure on the area over the next twenty years.

The study found that there was consensus for a vision to guide future use of the area, the vision being: To provide a diversity of quality low key recreation and tourism opportunities along the Tamala-Carrarang Coast which do not jeopardize the fragile environment and which maintain the remote visitor experience.

To achieve this vision the study identified 17 zones, each with different physical characteristics and visitor use experiences. Zones provide the opportunity for:

remote experiences without vehicular access;

natural settings with vehicular access where solitude can be anticipated;

• semi-natural and semi-developed settings with greater likelihood of visitor interaction; and

developed opportunities at station homesteads.

The study considered low energy low key built forms that blend with the environment were appropriate on a limited range of sites and would broaden appeal beyond traditional camping use.

Management of the area will be critical to long term sustainability of recreation use in such a fragile environment. Recreation use should continue to be controlled by the pastoral lessees, preferably under a formal agreement and with support from CALM. Pastoral lessees need to earn sufficient income from camping fees to maintain the area to a high standard. It is recognised that camping fees alone, under current use levels, are unlikely to provide sufficient incentive for pastoralists to undertake the rehabilitation works required to rectify past damage and to put in place the concepts for sustainable use recommended in this Plan. It is therefore recommended that external funding be secured to restore the area and to put in place the necessary positive educational, interpretative materials and site use controls. Developments such as low key accommodation should be funded by the pastoral leesees and be subject to Shire and Pastoral Board approvals. It is also recommended that the study area be regularly monitored by analyzing site usage, visitor compliance, site deterioration and site settings.

The Tamala-Carrarang Coast provides a unique remote recreational setting which, with good management, will be highly valued in the future as development of other areas continues. This remote setting complements the range of more intensive developments throughout the region. This recreational opportunity should be maintained in the long term.

It is anticipated that the Tamala-Carrarang coast will come under increasing pressure in the future with improved road access. This plan is designed to be a living document, to guide actions to rehabilitate and control use to maintain the high natural values so that future decisions are not compromised. It is anticipated that the plan will be reviewed in five years and be subject to a major review in ten years.

# Introduction and Background

The purpose of this project is to achieve an agreed vision and long term plan to guide the development and management of recreation and tourism facilities along the Tamala-Carrarang Coast in the Shark Bay World Heritage Area as shown in Figure 1.

Shark Bay's unique attractions, spectacular scenery, excellent fishing, peaceful atmosphere and pleasant winter climate, make it a popular tourist attraction. There are increasing numbers of visitors to the Shark Bay area<sup>1</sup> due to World Heritage status, the sealing of the road from the Northwest Coastal Highway to Denham, the development of Nanga Resort and dolphin watching at Monkey Mia and increased marketing of the sites attractions by the local industry and the WA Tourism Commission.

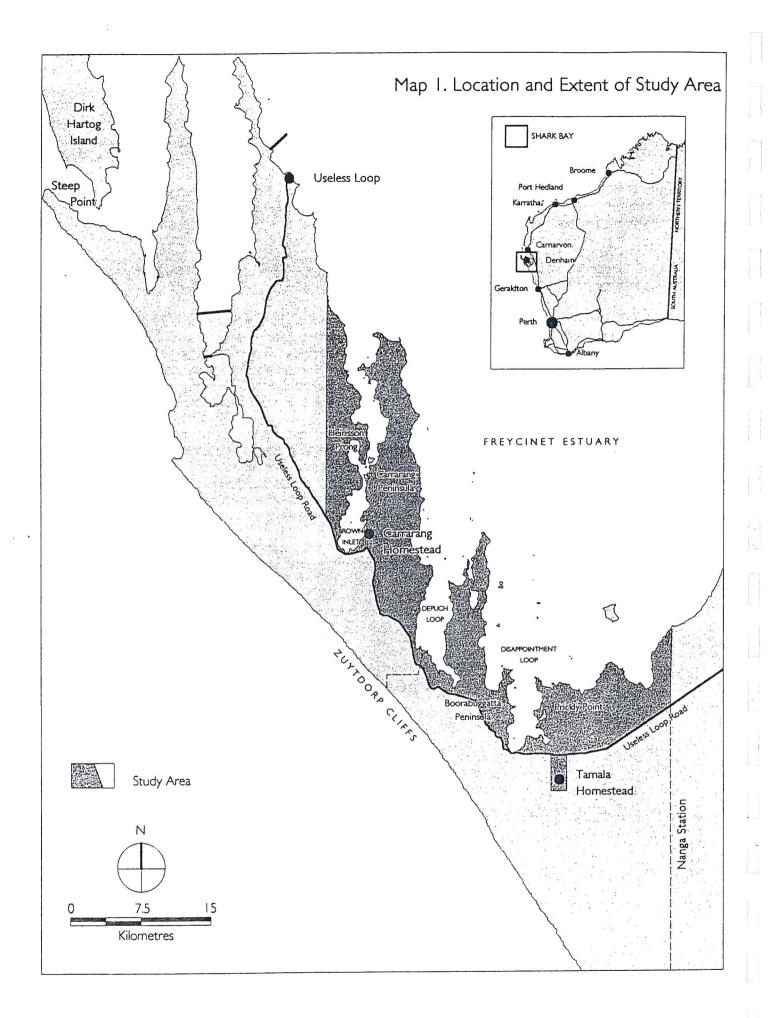
The Tamala-Carrarang Coast has been used for camping and fishing since the 1960's. It is currently used for semi-remote camping, with access by four wheel drive vehicles and in some areas by two wheel drive vehicles. Current usage is a maximum of 200 people on Tamala and 30 people on Carrarang during the peak winter school holiday season. Access is controlled by Tamala and Carrarang Station staff. The majority of the land is pastoral lease with a 40 metre strip of Vacant Crown Land above high water mark which is to be incorporated into the Shark Bay Marine Park. Camping is on attractive secluded beaches. Motivations for visitation are fishing and the remote location. Many campers have a long history of use of the area. For most it is an annual visit of one to two weeks, while some campers stay for up to three months over the winter period. The condition of the unsealed Useless Loop Road from the turnoff on the Denham Hamelin Road is a current disincentive to increasing visitation to the area.

The vegetation adjacent to the shoreline is, for the most part, Acacia (bowgada) scrub with Melaleuca thicket adjacent to some beaches. Camping is concentrated on the Edel Land System, typified by undulating sandy plains with major low dunes, limestone rises and saline flats. Limestone outcrops, wave cut platforms and narrow sandy crescent beaches are features of the coast with steep sand dunes bordering some beaches. The waters are generally calm and shallow, often with poor boat access on low tides.

The vegetation and sandy soils are very sensitive to disturbance. The current level of camping is resulting in degradation of the coastal beach sites through removal of vegetation to create camping sites, uncontrolled vehicular traffic, removal of vegetation for firewood, rubbish dumping and toileting.

The Tamala - Carrarang coast is an important, largely undeveloped resource which is subject to increasing pressure and degradation from recreational use. This recreation and tourism plan will be an important step towards effective conservation and will provide the foundation for long term sustainability of tourism and other uses in the area which impact on the coast.

<sup>&</sup>lt;sup>1</sup> Anecdotal evidence from stakeholders involved in the study suggests that tourist numbers are increasing in the Shark Bay area. This evidence is supported by statistical evidence supplied by the Gascoyne office of the WA Tourism Commission.



# 2. Approach to the Study

This study has been designed to allow a thorough evaluation of the physical attributes of the study area and identification of the issues, opportunities and constraints. As well, a public consultation process was conducted in order to work towards achieving ownership by all stakeholders of a realistic vision and achievable objectives.

# Stage 1: Site analysis

The approach to this study involved the application of principles from the Recreation Opportunity Spectrum (ROS).<sup>2</sup> The ROS is a concept aimed at providing a diverse range of recreation opportunities satisfying the variety of activities, settings and experiences people seek. For the purpose of this study a site setting is a combination of environmental, social and managerial conditions that give value to a place.

The first stage in assessment of Tamala-Carrarang campsites was the identification of significant environmental, cultural, visual, tourism and recreational values. The purpose of this assessment was to identify where recreation activities were consistent with, and did not detract from the values of the site.

The second stage was the assessment of each site considering factors that define a site's recreation opportunity setting. These factors (access, site modification, social interaction, recreation experiences, self reliance and visitor management) give an indication of the site's management levels and was valuable in identifying areas of deficiency where additional management input was required.

The third stage was to access the levels of visitor impacts and the sites sensitivity. Environmental, cultural, visual and social indicators were analysed with an overall assessment summarising the extent of impacts and sensitivity.

The three stage process allowed the team to identify groups of sites which had similar values, features, impacts and sensitivities. These groups of sites then formed management zones based on the appropriate settings required to protect the environment and provide for a diversity of recreation opportunities.

# Stage 2: Public consultation

The project aims to achieve an agreed vision for the future recreation and tourism use of the study area. The process to achieve an agreed vision was through a public consultation process (refer Appendix 1, participants and summary) which involved:

Working closely with the Project Steering Group;

Personal consultation with individuals and interest groups. The consultation
process involved an explanation of the background to the project, an opportunity
for participants to discuss key issues in a structured discussion and a summary of
findings of the project at that time;

Telephone interviews with representatives of key government departments and

community groups in a similar format to the personal interviews;

Development of the draft report incorporating the key issues;
Distribution of the draft report (48 copies) to key stakeholders for comment and feedback. The draft report is also being made available in Denham and advertised in the press for wider public input; and

Incorporation of feedback from the draft report into the final report in consultation

with the Steering Group.

<sup>&</sup>lt;sup>2</sup> The Recreation Opportunity Spectrum: A Framework for Planning, Management, and Research, Clark R.N. and Stankey G.H., 1979.

# Stage 3: Developing future use options

The issues raised in the site analysis and public consultation were summarised in two parts; external issues impacting on the study area and issues within the study area as detailed in this report under Section 2: Outcomes from the Site Analysis and Public Consultation.

The issues were then considered with the future use options raised in the public consultation process to develop a vision for the study area and strategies to achieve and maintain the vision. An important component of the strategies is the development of concept plans for typical sites and the treatments required to maintain the vision. The vision and strategies are detailed in Section 3: A Vision and Recreation and Tourism Strategy for the Tamala-Carrarang Coast below

The study then undertook a detailed analysis of each camping and day use site. The analysis enabled the designation of preferred settings for each site, from remote to developed, and the use type or management intent ranging from built accommodation to day use. The management actions required to maintain each site are also specified. The detailed analysis is presented in Section 4: Site Analysis and Recommendations for the Visitor Sites on the Tamala-Carrarang Coast.

# 3. Outcomes from the Site Analysis and Public Consultation

The site investigation and consultation process raised many issues in relation to current and future recreation and tourism use of the Tamala-Carrarang Coastline. This section of the report discusses the key external and project area based issues which will need to be covered by the recommended management policies.

### External issues

# Increasing tourism pressure

Shark Bay's unique attractions, spectacular scenery, excellent fishing, peaceful atmosphere and pleasant winter climate, make it a popular tourist attraction. There are increasing numbers of visitors to the Shark Bay area due to: promotion of the tourism values in the area; inclusion of the area on the World Heritage List; the sealing of the road from the Northwest Coastal Highway to Denham; the development of Nanga Resort and dolphin watching at Monkey Mia. As a result there is likely to be increasing visitation and interest in the Tamala-Carrarang Coastline.

The Government of Western Australia in its 1997 Shark Bay Regional Strategy recognizes that the potential for increased tourism is immense. There are current discussions regarding the sealing of the Useless Loop Road, development of improved harbour facilities and Main Roads identifies the Kalbarri-Tamala Road as a road development proposal requiring review in the Future Roads 2020 document.

Current use of the Tamala-Carrarang Coastline has been mostly by families and groups who have been coming regularly for many years often with fishing as a major attraction. There is anecdotal evidence that fishing stocks are now less plentiful and as a result use by fishermen is decreasing. However increasing knowledge of the area's attractions and further access improvement will place increasing pressure on the Tamala-Carrarang Coastline and offshore islands for recreation and tourism developments. It is anticipated that use may change from a fishing focus to demand for nature based recreation opportunities.

The Tamala-Carrarang Coastline is relatively undeveloped and in the fortunate position that plans now can guide future use. There is increasing demand for nature based tourism opportunities.

# A diversity of recreation opportunities in the region

It is Department of Conservation and Land Management's policy to provide for a broad spectrum of recreational opportunities<sup>3</sup>. In particular the Department is trying to let people know about natural values and the broad spectrum of nature based tourism opportunities in the World Heritage Area and to reduce Shark Bay's tourism dependence on Monkey Mia. A recreational and tourism plan for the Tamala-Carrarang Coast must take into account opportunities elsewhere in the region, the spectrum of recreation opportunities appropriate for the study area and the quest to maximise the opportunities for Denham to be the major commercial centre in the area.<sup>4</sup>

<sup>4</sup> Shark Bay Region Strategy.

<sup>&</sup>lt;sup>3</sup> Shark Bay Marine Reserves Management Plan.

In the region surrounding the study area there are a variety of recreation opportunities including resort style accommodation at Monkey Mia, motels and caravan parks in the urban setting of Denham, a variety of accommodation types on pastoral leases and concentrated motel, cabin and caravan park accommodation at Nanga Station. Steep Point provides camping opportunities in a concentrated environment but access is currently limited to four wheel drive vehicles. There are preliminary plans (not identified in the Roads 2020 document by Main Roads) for sealed access to Steep Point with provision for a full range of accommodation. The study area provides opportunities for remote, natural, and semi-developed nature based recreation.

The Tamala-Carrarang Coastline is currently relatively undeveloped and can supply natural and remote recreation opportunities in the long term if carefully managed. The study team feels that demand for tranquil settings in remote areas will be at a premium in the future. The Tamala-Carrarang Coast can complement the overall provision of opportunities by providing opportunities at the natural end of the spectrum.

# Economic implications

Tourism is playing a significant role in the economic development of the Shark Bay region. There is recognition that pastoralists need to diversify sources of income and that tourism ventures are a legitimate use. But tourism ventures must be able to attract sufficient revenue to maintain the natural resources which attract visitors.

There is some concern that developments in the Tamala-Carrarang area will be of little financial benefit in Denham as visitors would rarely visit the Denham townsite. It is true that current visitors to Tamala-Carrarang would rarely travel to Denham but that the goal of providing a diversity of recreation opportunities will increasingly attract a wider variety of visitors and enrich the region generally with consequential economic gains for Denham.

The special recreation opportunities provided at Tamala-Carrarang will increasingly attract this segment of the market seeking nature based experiences which will be of economic advantage to the stations and enrich the whole region economically.

### Fisheries management

The Shark Bay recreational fishery has been difficult to manage in the past due to a lack of resources to patrol remote areas. As a consequence there has been significant abuse of fishing regulations and anecdotal evidence that fishing stocks of preferred species have been significantly depleted. It is recognized that the conservation of fish stocks to enable sustainable recreational fishing opportunities will be important in providing a quality fishing experience.

A Regional Fishery Recreation Strategy is being developed for the Gascoyne Region by Fisheries Western Australia. The concept is to divide the fishery into different zones such as no fishing zones, catch and release zones and zones where fishing is allowed at different levels. This Strategy will not be available in time to allow consideration of the implications for the study area.

Fisheries Western Australia is not keen to see additional boat ramps constructed as this leads to an explosion in fishing activity and collapse of the local fishery. In addition, stations should not provide fishermen with freezer equipment as this encourages over fishing.

Tamala and Carrarang Stations are currently playing a role in fishing education and surveillance by providing visitors with information and a site management presence.

Sustaining the recreational fishery will be important for providing a diversity of recreation opportunities. The Recreation and Tourism Plan for the Tamala-Carrarang Coast needs to take into account the Regional Fishery Recreation Strategy when it is developed and this Strategy needs to acknowledge the valuable role that can be played by coastal pastoral stations in recreation fishing education and surveillance.

# Planning and control

The pastoral industry, including recreation and tourism on leasehold land, is governed by the Land Administration Act 1998, which was enacted on 30<sup>th</sup> March 1998. The current practice of station leaseholders controlling access and charging for camping will remain. The new Act will allow station leaseholders to undertake activities such as tourism, but grazing of stock must remain the predominant activity on the pastoral lease. Where a tourism industry is likely to become a major activity, a separate lease or land tenure arrangements will be required. Details of the new arrangements are available in Appendix 2.

The foreshore zone, 40 metres from high water level is Vacant Crown Land designated as part of the Shark Bay Marine Reserve and managed by CALM. A significant portion of the current camping is within the 40 metre zone with access through pastoral lease. It is envisaged that pastoral lessees will continue to manage the 40 metre zone but CALM will set the broad direction for management

Current camping on Tamala and Carrarang stations is a non conforming use under the Shire of Shark Bay Town Planning Scheme as it was a prior use before the adoption of the Scheme. The Planning Scheme is being revised and camping and recreational use on pastoral leases could be included as an allowable activity in the Table of Activities for pastoral leases. There is also the possibility of creating a Zone, such as the Tamala-Carrarang Coast, as a Special Site provided there was agreement as to the usage and management of the area. As the Town Planning Scheme is currently under review it may be an appropriate time to consider rezoning parts of the study area.

A Section 16A Agreement under the CALM Act between the pastoral lessees and CALM for the long term management of the areas for nature conservation and recreation is desirable. Such an agreement could allow existing uses to continue, modified to meet recreation and conservation objectives, and provide a stronger partnership between CALM and the lessees.

Camping is regulated under the Caravan Parks and Camping Ground Regulations 1997. Under these regulations a person may camp on land other than a caravan park or camping ground for up to three nights if they have the legal occupier's permission. Camping other than at a caravan park or camping ground for longer than three nights requires written approval from local government but camping will not be permitted for longer than three months without approval from the Minister.

Tourism and recreation usage at Tamala and Carrarang stations must conform with the requirements of the Land Administration Act 1998 (which is the Act governing the pastoral industry), the Shire of Shark Bay Town Planning Scheme and the Caravan Parks and Camping Ground Regulations 1997 and with direction being provided by CALM for the 40 metre strip of land above high water mark which is Shark Bay Marine Reserve. A Section 16A Agreement between CALM and the pastoral lessees for the leasehold land being used for recreation is desirable.

# Study area issues

## Site sensitivity

The Shark Bay coastline, consisting mainly of unconsolidated dunes, is a fragile natural environment<sup>5</sup>. Land Systems for the study area are shown on Map 2. The climate is semi arid, characterized by low rainfall and warm temperatures. The summer months are dry, hot and very windy while the winter climate is milder. Wind erosion, from the prevailing southerly winds, of exposed sand can be significant. The vegetation adjacent to the shoreline is, for the most part, *Acacia* (bowgada) scrub with *Melaleuca* thicket adjacent to some beaches.

The majority of camping occurs on the Edel Land System<sup>5</sup> which is characterized by undulating sandy plains, limestone rises and saline flats. Sand dunes, often steep, are features of the shoreline. This sandy environment with mixed shrublands is particularly sensitive to vegetation loss, particularly steeper dunes.

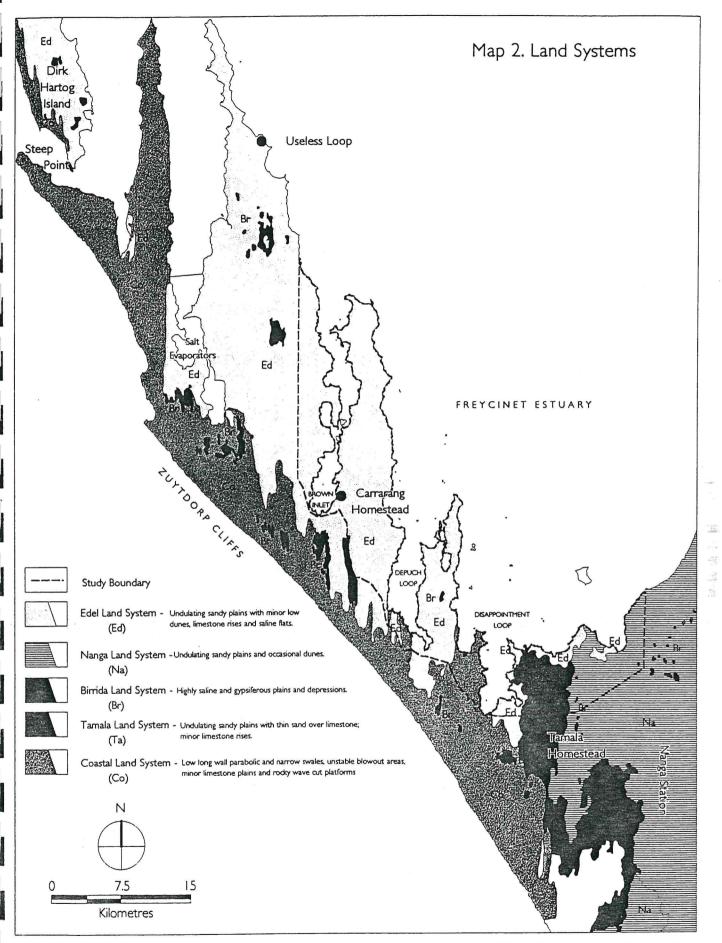
The Tamala Land System, with undulating sandy plains and plains with thin sand over limestone and minor limestone rises, is typical of much of Prickly Point on Tamala Station. The vegetation is mainly tall shrublands of various Acacias. This area is less prone to erosion than the Edel Land System and can sustain greater camping pressure.

Access to many areas crosses areas of Birrida Land System, which are highly saline and gypsiferous plains and depressions with low shrublands of saltbush and samphire. These can be wet after heavy rain and are degraded by proliferation of access tracks avoiding wet areas.

The marine environment with limestone shelf or sandy bottom appears to be stable and not sensitive to human impacts. Beaches are sensitive to degradation and four wheel drive access along beaches is common and has destroyed pioneer vegetation in many areas. The offshore islands are Nature Reserves, they are very fragile and considered to be highly sensitive to increasing visitation.

The Tamala-Carrarang Coastline and islands are sensitive areas in a harsh environment. Careful management of visitor use will be required to maintain the natural integrity of the area.

<sup>&</sup>lt;sup>5</sup> Western Australian Technical Bulletin No. 73. An inventory and condition survey of rangelands in the Carnarvon Basin, Western Australia.



Source: G.F. Spencer and W.J. O'Brien - Department of Land Surveys and A.L. Payne and P.J. Curry - Department of Agriculture 1980 - 1982.

## Visitor management

Access to recreation sites within both Carrarang and Tamala Stations is managed by station staff.

For Tamala, permission to camp at a particular beach is sought and a key and information about camping requirements such as rubbish removal is provided on arrival. Access is via locked gates. There are no maximum numbers set for camping sites but at busy times campers are referred to alternative sites.

For Carrarang, permission to camp at a particular beach is sought and access for the main camping area, Carrarang Peninsula, is via the homestead. Campers are asked to check in at the station on arrival when camping information is provided. Visitation is limited to one group per beach at any one time; there is no limitation on numbers in a group.

Both Carrarang and Tamala charge access fees to cover management obligations providing modest additional income to the stations.

Control of access and provision of basic camping information is believed to have been important in maintaining reasonable integrity of the camping areas on both stations to date. Visitors who transgress simple rules are not encouraged to revisit and control of numbers has been possible, particularly on Carrarang. Direct contact with station staff provides an ideal opportunity to provide educational material.

# Campsite impacts and constraints

The current level of management control and camping is resulting in adverse impacts on the natural environment. It is considered that most camping sites are deteriorating, new sites are being created in an ad hoc manner, and that further deterioration and proliferation of camping areas will occur without management action. The following are the key degrading factors:

### Campsite creation

Campsites have been and are still being created in an ad hoc fashion and are being progressively extended as each new use creates a little more impact. The extent of vegetation loss at campsites appears to be increasing.

### Dune erosion

Steep sand dunes occur adjacent to many beaches particularly on the eastern sides of the longer peninsulas. Vegetation is often sparse with significant areas of bare sand. People and vehicular access has degraded some dunes and it is considered that sand dune sensitivity is a significant limitation on levels of future use on many beaches due to the difficulty in controlling access. Some beaches are bordered by a high beach front dune. Vehicular access across these dunes to gain beach access is a serious potential cause of erosion.

### Feral animals and domestic stock

Grazing by rabbits appears to be having a significant impact on vegetation over most of Carrarang and Tamala stations. The impact on camping areas is that there is little groundcover vegetation and little evidence of vegetation recruitment. This predisposes the sites to further degradation by people. Grazing by domestic stock is significant on some sites, particularly on Carrarang Station, where camping sites are close to sheep watering points. Tamala Station now grazes cattle, not sheep, and there

appears to be less impact, but faeces and rubbing of Melaleuca thickets at beaches is unsightly and exacerbating vegetation decline.

Fox and cat baiting using 1080 poison occurs in a 200 square kilometer buffer zone to the south of Herrison Prong and incorporates a part of the study area within Carrarang Station. The purpose of the baiting is to reduce pressure by cats and foxes on the area of Herrison Prong which is protected from predator animals by a predator fence for the purpose of native animal reintroduction. 1080 poison readily kills domestic animals.

# Domestic animals

Campers are permitted to bring dogs to Tamala and Carrarang Stations provided they are kept under control and not permitted to interfere with other campers. Domestic animals are reported to be of concern on Nanga Station annoying other campers.

It is recognized that domestic animals are not permitted in National Parks and that stations can offer people this opportunity. It is also understood that domestic animals can impact on wildlife and enjoyment of a nature experience. It is considered by some people that domestic animals are undesirable in bushland recreation settings in World Heritage Areas and in Marine Parks.

Domestic cats have a predatory nature, impact on wildlife and have a propensity to escape.

### Weeds

It was difficult to determine during summer the extent of weed invasion and the relative effects of recreation compared with pastoral grazing on weed proliferation.

### Firewood

The use of firewood from camping sites and surroundings is impacting on vegetation cover and possibly on wildlife habitat. Being shrubland with low growth rates the area has a limited capacity to supply firewood and people appear to be travelling further for supplies. People are asked to bring firewood with them collected from elsewhere on the station or from further afield. It is clear that chainsaws are being used and evidence that live vegetation is felled for dry firewood the following year. Of most concern is the steady loss of *Melaleuca* thicket vegetation adjacent to beaches and lack of *Melaleuca* recruitment. The impact of firewood collection on habitat values is not known.

### Toileting

There are no toileting facilities at camping areas and people appear to be using shallow holes for this purpose. There is evidence of toileting at most campsites varying from various constructions to paper and excrement in evidence behind bushes. Toileting appears to be of significant concern at high density sites such as Tent Landing on Prickly Point.

### Litter

People are requested to remove the litter from the site as they depart. Both Tamala and Carrarang stations provide rubbish deposit points at or near their homesteads. This rubbish is then deposited in the station tips. No assessment of the condition of the station tips was made. Tamala Station have introduced a weekly patrol and collection of scattered litter. As a consequence there is now little evidence of litter on Tamala campsites. There is no regular litter collection on Carrarang station and while

the camping areas are relatively clean of current litter there is plenty of abandoned materials and materials left for future use such as ironing boards, toilets, drums, posts and barbecue facilities. In some places people have constructed structures for showering and barbecues which are unsightly.

# Fireplaces

There is generally a proliferation of collections of stones for fireplace circles (fire rings) at camping sites and particularly on popular beaches. People appear to have a need to create new locations for fireplaces and as a consequence the areas are degraded visually. It may be possible to restrict campfires to one fire per group or one fire per beach shared by a number of groups to reduce the visual impact and to restrict firewood use

# Water supply

Potable water is in very short supply on Carrarang and Tamala Stations with roof collection the only source. Bore and well water is available, suitable for stock and washing, but is not suitable for drinking. Campers are required to supply their own water except at one site on Tamala station where bore water has been piped to the camping area.

Water supply is a significant limitation on development in the area.

# Safety

Boat moorings, particularly steel posts, are left in the shallow waters. These are unsightly, poorly marked and a significant safety hazard with tidal movement covering old broken posts.

Many camping sites have partly rocky shorelines, often undercut, and with sharp edged limestone and shell based rock. These can be hazardous, particularly for children.

Camping has impacted adversely on the natural values of the Tamala-Carrarang Coast particularly through vehicular movement, campsite creation, dune erosion, firewood collection, toileting, litter, fireplaces and track proliferation. Limitations on camping developments include the sensitive nature of most sites, particularly in terms of vegetation loss and erosion and the lack of toileting facilities and water supply. Safety is an issue in some areas.

### Access

Access to the study area is via the unsealed Useless Loop Road.

Access within the study area is generally on unmade tracks that have been developed by use over time. Many tracks, particularly close to the two homesteads, are accessible by two wheel drive vehicles. Most tracks are difficult two wheel drive, suitable for use by people experienced in bush track driving, or four wheel drive.

Tracks are being extended as people explore in four wheel drive vehicles and after the first couple of uses a new track is established. As a consequence vehicle tracks are proliferating and the area of damaged vegetation extending. Vehicles are impacting on camping areas and fishing destinations as there are no defined parking bays. Vehicular use on beaches is disturbing recruiting vegetation and would adversely impact on visitor experience.

Tracks are generally in reasonable condition, some are partly overgrown, many appear to be deepening, some are subject to wind erosion, and proliferation occurs on Birrida Land System (Map 2) (low gypsum, salty flats) in wet conditions. There has been some maintenance of tracks on Boorabuggatta Peninsula and Prickly Point by Tamala Station.

Access within the study area is on unformed tracks that are generally at least four wheel drive standard. Track proliferation is occurring and tracks are wearing down particularly where exposed to wind erosion.

# 4. A Vision and Recreation and Tourism Strategy for the Tamala Carrarang Coast

### A vision

There is a range of visions possible for the future use of the Tamala-Carrarang Coast varying from significantly reducing current levels of use to considerable development of the area with resort style accommodation. This study has looked at the sensitivity of the study area, considered CALM policy on providing a range of recreation opportunities, the view that Denham should be the major commercial centre for the area and the opinion of a wide range of stakeholders.

The site sensitivity analysis suggests that most of the potential development sites are on the very sensitive Edel Land System with fragile vegetation and unstable sands. These sites are considered to be unsuitable for intensive development. The Tamala Land System has far greater capability for development as the soils are thin sand over limestone and are far more robust. This area on Tamala Station could be further developed but water supply, without expensive desalinization, is a constraint.

The stakeholder analysis strongly suggests maintaining the present style of remote camping opportunities. There are concerns however that this style of use will attract insufficient income to provide essential maintenance and that more intense development be considered for some sites in the future. More intense development will increase pressure on sensitive sites and not be in line with promoting Denham as the major commercial centre.

An alternative view has also been expressed. This view suggests closing the majority of current bush camping sites to overnight use, recreating a relative wilderness with targeted accommodation centres, for example, fully serviced caravan parks set in highly modified landscapes. This is the approach which has been taken at Nanga Station creating the Nanga Resort.

The study team have developed a vision and strategy for the Tamala-Carrarang Coast taking into account the above findings. The study team considers that:

- a range of recreation opportunities should be provided;
- the present style of recreation opportunities should be maintained (with modifications for site maintenance and variety);
- low key developments such as small numbers of caravans in largely natural environments may be appropriate on less sensitive sites;
- small numbers of low key built accommodation units set in a natural environment can be appropriate and have less impact than camping; and
- accommodation centres such as highly developed and fully serviced caravan parks in modified environments are inappropriate, due to lack of services and lack of areas suitable (access and site sensitivity limitations) for high numbers of day use visitors.
- total maximum visitor usage should not be increased, but use locations varied according to site sensitivity.
- the current booking system be maintained so that relevant information on campsites, etiquette, site availability, costs, facility requirements should be available to people prior to departure.

The study team feels that remote style nature based camping experiences will be at a premium in the future, will support high charges and such opportunities should be maintained.

The suggested vision for the Tamala-Carrarang Coast is:

To provide a diversity of quality low key<sup>6</sup> recreation and tourism opportunities in natural settings along the Tamala-Carrarang Coast which do not jeopardize the fragile environment and maintain the remote setting visitor experience.

# The strategy for tourism and recreation management along the Tamala Carrarang coast

The strategy for providing for tourism and recreation use along the Tamala-Carrarang Coast has been to divide the area into zones with each zone having common physical characteristics and visitor use experience. The broad intent for Tourism and Recreation Management settings is shown on Map 3. The criteria for zone selection and differentiation are as follows:

- The primary criteria for zone selection was site sensitivity which is the ability of the natural environment to sustain visitor use. Factors such as sand dune erosion, shallow tidal flats with soft substrates and non robust vegetation have been taken into account. It is considered that most sites, except some sites on Prickly Point, Tamala Station, are too sensitive to handle increased recreation use even with high management inputs
- The second criteria was to provide a range of visitor experience. The zones have been designed to provide experiences ranging from remote sites where there is no vehicle access, natural sites with vehicular access (but where solitude can be experienced) to sites with higher visitor densities to cater for people with more gregarious expectations. Control of use in each zone is by station management for road access but control of access from sea is not possible. The range of visitor experience settings are described below:

# 1. Remote

Environment is not modified for camping or recreation purposes. Formal camping sites do not exist, people can camp at informal sites of their choice, no vehicle access or walking tracks are provided and visitors will generally have no contact with other groups..

### 2. Natural

Sites have minor modifications for essential management purposes (eg informal site definition and campfire rings). Camping areas are undeveloped with minimal or no facilities. Vehicle access is not allowed with only rough walking tracks present. Interaction between visitor groups is very infrequent (usually only one group per site). Vehicle parking areas are located at the nearest semi-natural campsite.

<sup>&</sup>lt;sup>6</sup> Low key. In this report "low key" indicates that the natural area is maintained with minimal disturbance, with no introduction of exotic species and any structures must be designed to blend with the natural environment.

3. Semi-natural

Sites have minor modifications for essential management purposes (eg occasional management signage, informal site definition and campsite rings). Camping areas are undeveloped with minimal or no facilities. Access tracks are maintained to allow 4WD access. Interaction between visitor groups is infrequent (no more than two groups per site).

4. Semi-developed

Sites have facilities to service recreational use and protect the environment. Either camping facilities or low key built forms may be provided at appropriate sites. Access tracks are maintained to allow 4WD vehicles and limited 2WD access. Frequent contact with other visitors is accepted (up to five groups per site). Interpretive, managerial and directional signage may be present.

5. Developed

Includes built environments as well as recreation and accommodation nodes. Access tracks are maintained to allow 2WD access. Continuous human occupation and interaction is accepted. A high level of support services and facilities are provided. A high level of on-site control is present.

- The third criteria was ease of management and control of visitors. Sites distant from station infrastructure are considered inappropriate for higher levels of development and sites close to station infrastructure considered suitable for more intensive development with semi-natural and semi-developed settings. Stations themselves may be suitable for more intensive use under this criteria.
- Type of recreational use (or management intent defining the uses suitable for each site) has been considered as a fourth criteria. The factors considered were site sensitivity, current degree of degradation and the anticipated balance between demand for day use and camping. It has been considered that day use will be in low demand compared with demand for camping experiences. It is anticipated that there will be an increasing demand for low key accommodation. The types of use are described below:

1. Accommodation

Sites are managed to provide low-key built accommodation. Accommodation could range from demountable safari tents on hard floors to basic cabins designed to blend with the environment.

2. Camping

Depending on sensitivity, sites are managed to allow for camping and/or caravaning.

3. Day use

Sites are managed as day use areas only. No camping is allowed.

4. Rehabilitation

Sites are managed to restore previously disturbed areas to their former state. No visitor access is permitted.

## Zones

The following visitor management zones (refer Map 4) have been developed taking into account the above criteria. The zones are described ranging from those with least development opportunity to those with the greatest development opportunity.

- The eastern side of Heirisson Prong south of Useless Loop should a **remote** setting and generally not available for camping nor for use by the general public due to difficulty of access, difficulty of supervision and management and the sensitivity of the sites. Use should be restricted to day use in semi-natural settings at the four nominated sites in Zone 1 Map 4, for the local people at Useless Loop township. Permission to use the area must be gained through a controlling office either at the town or at Carrarang Station. The remainder of the area will provide remote settings with no vehicular access but access by boat and walking allowed with permission.
- The southern ends Freycinet Estuary, Brown Inlet, Depuch Loop and Disappointment Loop, Zones 2, 7, 11 and 17 Map 4, should provide **remote** settings due to site sensitivity (sand dunes and/or shallow coastal flats). Access by walking and boat is permitted with permission.
- The north east ends of the Carrarang and Boorabuggatta Peninsulas, Zones 5 and 9 Map 4, should provide natural settings due to the sensitivity of the sites (high sand dunes facing beaches) and remoteness for management. Vehicular access will not be provided but access will be permitted by walking provided permission is obtained or from the sea. Camping sites do not exist, visitors will have no or infrequent contact with other groups. Current access to the remote end of Boorabuggatta Peninsula should be phased out with vehicular access permitted only to current long term users while they have that requirement.
- Semi-natural settings, with undeveloped camping areas and four wheel drive access is provided on the western sides and eastern sides of Carrarang Peninsula and Boorabuggatta Peninsulas, Zones 4, 6, 8 and 10 Map 4. These are all sensitive sites and there is a limit of one group per site to protect the site's natural values and to provide the special experience of infrequent contact between visitors.
- Prickly Point and Baba Head on Tamala Station, Zones12, 13, 14, 15 and 16 Map 4, have less sensitive sites than other zones and are close to Tamala homestead for management purposes. It is anticipated that this area can provide for a greater level of use than other parts of the study area and provide the spectrum of camping where there is likely to be frequent contact between visitors. This area can provide both semi-natural and semi-developed settings with four wheel drive and limited two wheel drive access. Facilities such as toilets may be provided. Site use will vary from one to three groups per site depending on size and sensitivity but one site, Tent City, may be able to provide for up to twelve groups, caravans are permitted and toilets and non drinking water provided. Regular management presence is expected.

It is considered that low key, low energy, low water use, built forms, designed to blend with the environment, could be provided on Prickly Point. Low key buildings could cater for the non camper nature lover and will have less on site impact than a similar level of camping. Built form accommodation should not be mixed with camping at the same site due to the different nature of visitor expectation. Site selection for built accommodation should be based on an area's attractiveness to attract a higher paying visitor, the sensitivity of the site (built form suitable for more sensitive sites) and the ability of the site to accommodate

the building(s) unobtrusively. It is considered that built form accommodation should be well spaced to provide a remote feeling. A distance of 50 metres between units is recommended with the total number per beach limited by beach length. The more units per beach the lower the remote feeling will be and a maximum of three units per beach is suggested. It is anticipated that under the Land Administration Bill that the low key built form will meet the requirements of low key development rather than medium scale development where different lease arrangements would be required, provided the number of accommodation units is modest and restricted to a few sites only. There has been no assessment of the demand for this style of accommodation.

• The only environments considered suitable for **developed settings** are Tamala and Carrarang homestead sites with two wheel drive access, continuous human occupation and a high level of support services provided. It is suggested that built accommodation be in the character of the homesteads. These sites can offer facilities such as day tours and hire of equipment such as sea kayaks.

Caravan and camping facilities should not be provided at station homesteads because:

the existing pastoral heritage character of the area will change;
a high level of day use has not been designed on the peninsulas;

- the resultant day use would conflict with the natural and seminatural experiences provided;

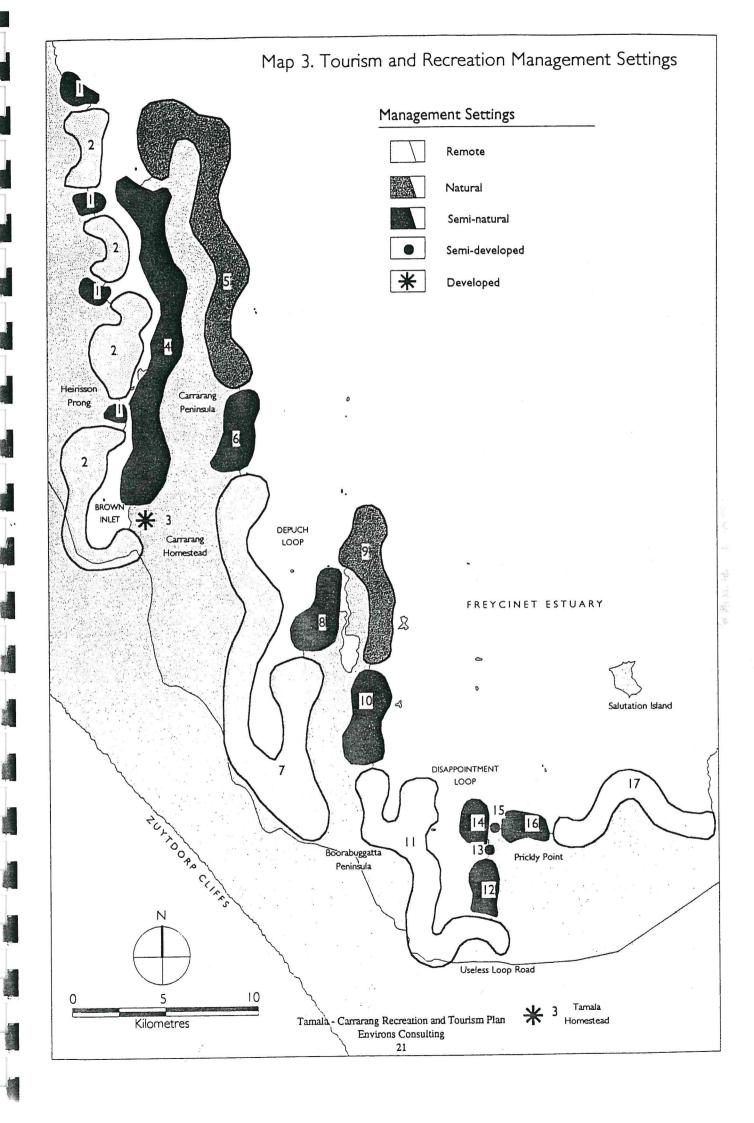
a different style of visitor would be attracted with greater service expectations;

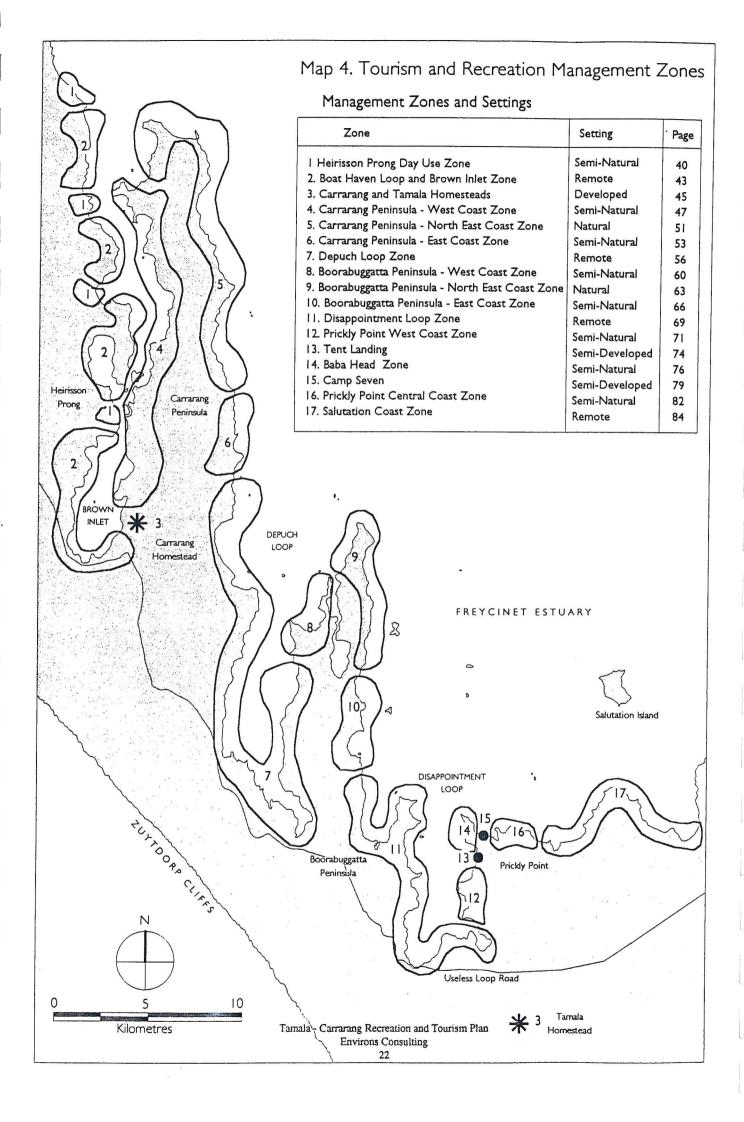
- higher levels of service would be difficult to supply; and

- higher levels of use in homestead environments would conflict with pastoral activities.

Detailed zone descriptions, individual site assessments and desired outcomes and future use for each zone are detailed in Section 5, Site Analysis and Recommendations for the Visitor Sites on the Tamala-Carrarang Coast and Maps 6-9 summarize the current site impacts, site sensitivity, the planned site settings and the management intent.

Informal names have been allocated to sites for purposes of identification. They are derived from common usage in the area and where sites were unnamed from local features. The informal names chosen are not necessarily intended to be the formal site names in the future.





## Management

It is envisaged that the lessees of Tamala and Carrarang Stations will continue to be responsible for day to day recreation management on station land and the 40 metre strip of Vacant Crown Land, which is incorporated into the Shark Bay Marine Park, in the long term. It is also understood that CALM will be involved in long term management decisions particularly for the 40 metre strip proposed as Marine Park. It is recommended that appropriate compliance with the Land Administration Act 1998 and the Caravan Parks and Camping Grounds Regulations 1997 be achieved. It is considered that the development recommended is Low Key under the requirements of the Land Administration Act and that the tourism use can be catered for under the existing grazing lease arrangements. Current usage can remain as a non conforming use under the Shire of Shark Bay Planning Scheme. It is however recommended that the Shire adopt the recreation usage envisaged in this Plan as an Allowable Activity or that a Special Site be created when the Planning Scheme is revised. It is also recommended that a Section 16A Agreement under the CALM Act or a Memorandum of Understanding (MOU) between the pastoral lessees and CALM would strengthen CALM's commitment and contribution to management of the area

There are precedents for management plans showing an understanding between all parties to be effective without statutory basis under a Town Planning Scheme or Section 16A Agreement under the CALM Act or a MOU. It is considered that formal agreements reduce difficulties in the long term, define responsibilities and may assist external funding applications.

It is envisaged that the recreation usage will provide sufficient income to the pastoral lessees to manage the recreation usage to a high standard and be an economically sustainable activity. The camping sites have however deteriorated over many years and considerable funding is required to bring the camping areas to a state where they can be managed sustainably in the long term. It is unlikely that current camping fees will be sufficient to justify the level of rehabilitation required. Therefore it is recommended that Coastwest/Coastcare funding be sought to rehabilitate the recreation areas to a state from which they can be managed to a high standard in the long term and to support the writing and production of educational and interpretative material. It is also recommended that CALM provide regular support in terms of site development planning, site management techniques and monthly visits in the tourist season to ensure high quality management.

### Control and education

Control of visitor numbers and education of visitors will be essential for maintenance of the natural values of the Tamala-Carrarang Coast. This coastline is in the fortunate position of having limited access points, visitor usage can be controlled and the current user groups accept a booking and payment system.

The booking system must ensure that campsite numbers are limited to the desired density for each site and that campers camp and use the designated camping locations within each site. Over booking will lead to campsite proliferation and area degradation.

The booking system and access requirements currently in place allow for the provision of positive educational material on the maintenance of the natural values of the area including fish resources. Educational materials appropriate for the area need to be designed and provided to each visiting group. They should be positive in nature to guide people how to "tread lightly" and have a minimal impact on the environment. A communication and interpretation plan is required for the study area.

## Site management

This Recreation and Tourism Plan provides actions for each site and generic concept plans and typical treatments. This work needs to be extended so that every site has a site development plan to guide development, maintenance and monitoring.

On site management presence needs to be provided at a level appropriate to site use to ensure campers are using sites appropriately, for example camp location, camp fire location and vehicular use. It is recommended that camping sites be patrolled regularly (once per week) during the tourist season but that the timing of patrols be unpredictable. Alternatively provision of camp hosts, such as in Cape Range National Park, who undertake visitor management as a service to the Station could be considered as a low cost option. Patrols by CALM rangers during the tourist season would provide valuable support to pastoral managers.

Appointment of station managers as Honorary CALM Officers would improve on site management powers and should be considered.

Rubbish removal should remain the responsibility of the camper, however, stations may supply a rubbish disposal service, and will need to provide regular rubbish patrols to maintain standards.

Removal of vegetation for *firewood* should not be permitted. Campers should supply their own firewood or the station could supply and charge for firewood (with an appropriate forest produce license from CALM).

Use of *vehicles* should be restricted to existing tracks and access at camping sites defined. Vehicles should not be permitted to drive on beaches for conservation, safety and to maintain site amenity. It is recognized that control of vehicular use is difficult particularly in shrubland country where barriers are ineffective. On Tamala-Carrarang control of vehicular use will be achievable because entry is controlled, "Tread Lightly" educational material can be supplied, visitors can anticipate some management presence and people caught breaking the camping guidelines can be asked to leave and/or declined entry in the future.

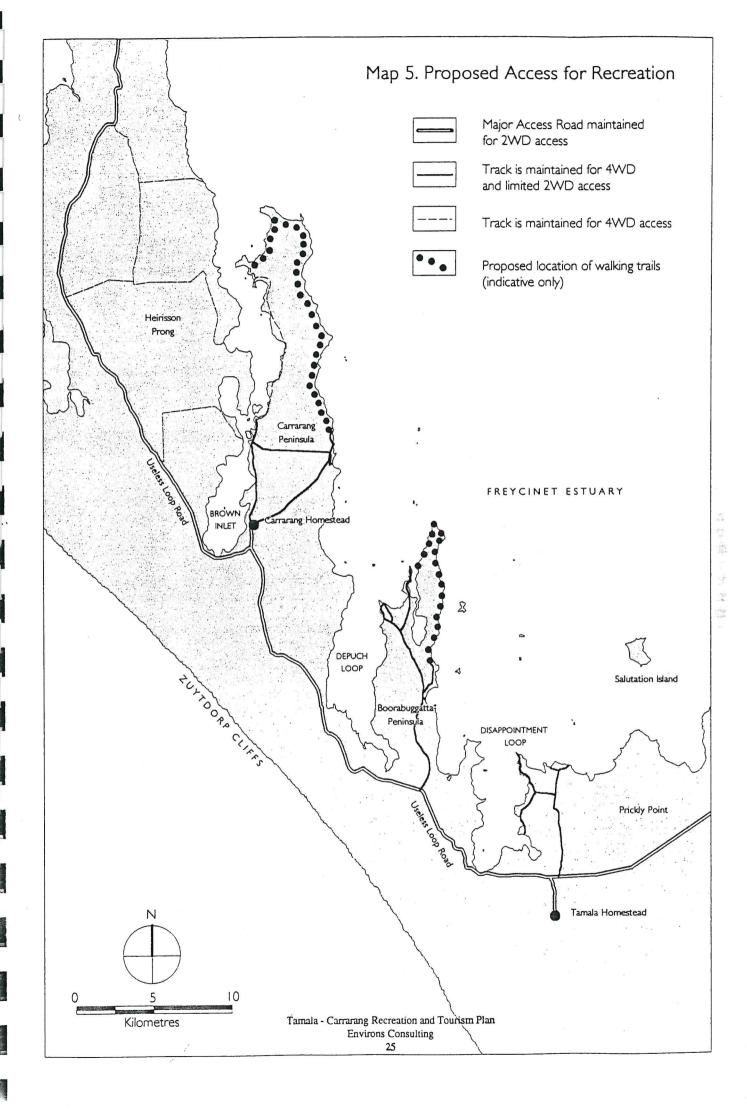
Tracks should be maintained to the standards indicated on Map 5. It is suggested that four wheel drive access is a sufficient standard. Four wheel drive access sends a signal of a degree of self sufficiency being required, indicates the remote style of camping experience to be expected and reduces the likelihood of management being asked to extract inexperienced drivers in two wheel drive vehicles.

Campsites require definition to reduce impacts on surrounding vegetation. Suggestions for site definition are provided under Concepts and Typical Treatments below.

Toilet facilities will be required at high use sites. It is recommended that toilets, designed and managed to CALM standards, be available for all sites where there are designated camp sites.

*Pets* should not be permitted as they are incompatible with wildlife conservation and station stock management.

Signage will be required to help visitors locate camping sites. Provision of a map to visitors should save on the need to supply signs for tracks. Educational information can be supplied in written form on visitor entry to save on site interpretative and educational signage.



### Rehabilitation

The natural environment in the study area is degraded by feral animals, station stock and people pressure. The major current impact on the vegetation is rabbits which appear to be severely limiting natural recruitment. Station stock, cattle, are not severely impacting the environment on Tamala save near water points but sheep grazing on Carrarang is impacting severely at some distance from water points. Rehabilitation programs will be ineffective without control of rabbits and relocation of water points so that grazing does not adversely impact on recreation sites.

Local experience indicates that natural regeneration is a successful rehabilitation technique provided niches are provided to collect seed and water by ripping or cultivation dependent on soil type and that grazing pressures are reduced. The strong winds tends to assure a good distribution of local seed material, some being introduced grassy species, so that seeding and planting are not required.

Rehabilitation is required where camping sites are defined and surrounding bare areas require treatment and where tracks are to be closed. In these cases the suggested treatment is to reduce access pressures by camp site definition and vehicle use control followed by scarification of bare areas. Temporary fencing to create stock exclusion areas, with access by cattle grid if required, and broad area baiting plus intensive local baiting for rabbits control will be required for priority areas.

# Monitoring

Monitoring will be required to determine whether the measures suggested through this plan are sufficient to maintain and improve the natural environment under the recommended levels of visitor pressure and management.

Monitoring can be achieved by:

- a periodic repetition of the setting assessment for each site to determine if the use and management are compatible with the desired setting, an assessment every five years is suggested.
- photo points to monitor changes in vegetation at selected sites. annual measurement by management is suggested.
- track depth monitoring at selected sites subject to deterioration. annual measurements are suggested.
- records of visitor compliance should be maintained.
- evaluation of visitor experience will indicate if the zones and camp sites are providing the expected visitor experiences. evaluation on a five yearly basis should correspond with the setting assessment and form the basis for a reevaluation of the recreation and tourism plan.
- maintenance of user records for each site will be essential for monitoring and adjusting site use. The stations require a simple system to facilitate this process.

## Plan review

It is the intent that this recreation and tourism plan will guide the management of the Tamala-Carrarang Coast in the long term. It is recognised however that circumstances will change and that it may be possible to vary the plan while still maintaining the sensitive environment and to cater for remote recreation experiences. The plan should be regarded as a living document and be subject to a major review in ten years and be subject to a minor review in five years corresponding with a reevaluation of visitor experiences, setting assessments and site condition.

# CAMPSITE CONCEPTS AND TYPICAL TREATMENTS

This study has designed concepts and typical treatments in the context of our vision for providing a diversity of quality low key recreation and tourism opportunities which do not jeopardise the fragile environment and maintain a remote setting visitor experience.

Typical campsite development treatments are proposed for a range of settings including natural settings, a concentrated camping environment and fixed accommodation. These treatments are designed to use local materials and to blend with the local landscape.

The major objective of these treatments is to conserve the area's natural assets and to provide passive recreation facilities within a sensitively managed landscape.

These typical treatments:

recognise the World Heritage significance of the area

- recognise the need for conservation of significant vegetation and wildlife habitats
- enhance the quality of the coastline environment from its current degraded state
- provide passive recreational opportunities in a variety of settings.

To translate the vision into action, our recommendations are presented on two levels. The first set of recommendations outline a range of management and maintenance options for each of the setting types, while the second set of recommendations are site specific, indicating typical treatments for four types of sites within the study area; two semi-natural (Type 1 and Type 2), and two semi-developed (Type 3 and Type 4), each with a site specific example.

# GENERAL RECOMMENDATIONS

Campsite Definition

Development of designated campsites should be undertaken to maintain the natural landscape integrity and enhance the remote camping experience. Sensitive integration of the campsite within the existing landscape is essential and may be achieved in the following ways:

protection and enhancement of existing desirable site features through sensitive site

rehabilitation of degraded areas

structures and built hard landscape elements should harmonise with the coastal environment in terms of scale, form, materials and colours

placement of campsites to maintain a sustainable buffer of native vegetation between the campsite and open beach sand.

Typical materials suitable for site definition:

- Red soil surface
- Crushed shell surface
- Local stone boulders to perimeter.

Access - Vehicular and Pedestrian

The existing road system should be rationalised to minimise the intrusion of vehicles as the coastal values are being adversely affected by uncontrolled vehicular movement. The location of tracks and paths should be determined by a number of factors, including land tenure, terrain and the location of vegetation. Tracks should be positioned behind campsites to discourage vehicle access onto the beach and to provide a maintenance edge between campsites and existing vegetation.

The following types of control barriers may be appropriate for use, depending on the level of control required:

- Local stone boulders
- Timber bollards
- Pastoral fencing.

Tracks should be maintained to a standard suitable to accommodate the proposed recreational use. Generally tracks are to remain as sand except in high use and difficult areas where they should be stabilized.

Materials suitable for stabilizing sand tracks include:

- Gypsum laid over track and watered in
- Compacted crushed limestone
- Locally sourced gravel
- Crushed shell

### **Facilities**

The management aims of the proposed low key facilities should be to:

- ensure that activities and developments do not compromise the natural landscape assets of the area.
- ensure that facility placement does not impact heavily upon the surrounding landscape, i.e. concentrated campsites near facilities.

### Toilet facilities:

Toileting facilities should be provided at each campsite.

High use areas - Composting toilets; product names 'Clivus Multrum', 'Rota-Loo',

'Nature's Loo' and 'Domus'. Low use areas -Long drop.

# Water

Water is a limited resource and is not suitable for human consumption.

Water can be piped into high use areas.

Water tanks can be attached to built forms, collecting rain water off cabin roofs for drinking. Visitors are generally expected to bring their own water for drinking and cooking.

#### Power

To retain a remote camping experience no provision is made for permanent power supply. Small generators provided by visitors may be used.

#### Fires

Fireplaces can be provided to discourage fires in unplanned locations. Firewood is to be sourced offsite.

Signage

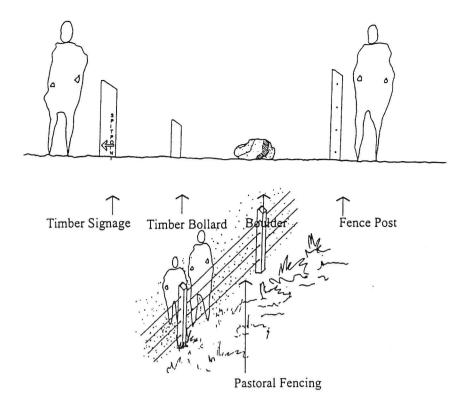
Signage is to be low-key and kept to a minimum, it may be used as a guide to site locations, identify campsites and provide directional information.

### Vegetation

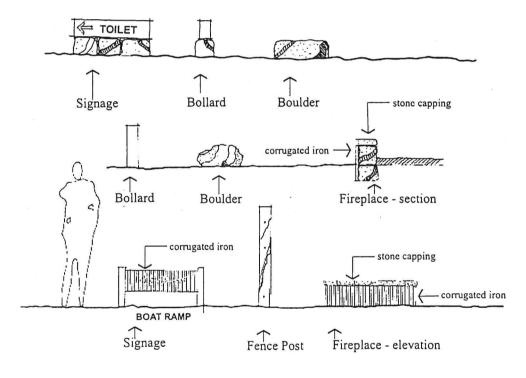
Management practices in vegetated areas should aim to:

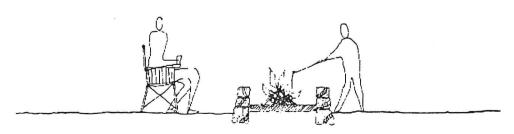
- protect and enhance areas of native vegetation
- establish a continuous buffer of vegetation along the beach front to protect the bay environment and provide a visual screen.

Management should be directed at conserving the existing vegetation and reinforcing it with revegetation. Management practices should include controlling rabbits, erosion, weeds, drainage and access. Some areas should be fenced to allow natural regeneration and revegetation should be undertaken using seed collected on site.



## LOW USE CAMPSITES





Fireplace - section

HIGH USE CAMPSITES

TYPICAL SCHEMATIC DESIGNS FOR: SIGNAGE, CONTROL BARRIERS & FIREPLACES

# SEMI NATURAL SITE - TYPE 1 SANDSPIT - Carrarang Station Zone 4

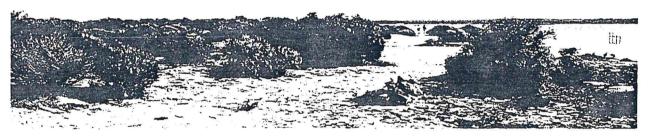
## **DESIGN PHILOSOPHY**

**DEFINITION** 

Semi-natural sites have minor modifications for essential management purposes (informal site definition, signage and fire places).

OBJECTIVE

The aim of planning for semi-natural sites is to assist with the management of the users to maintain the natural environment, and to provide an area which people can enjoy without harming its natural beauty and high environmental quality.



Sandspit - Carrarang Station

### SANDSPIT

A 'typical' example of a semi-natural campsite is Sandspit on Carrarang Station.

Sandspit is a long beach that currently offers a number of campsites both on the beach and foreshore. The vegetation is characterised by low shrubs and groundcovers. Its current usage is low and the location of the site is near to remote. The site is sensitive and access is limited to 4WD. This user experience is becoming scarce and through careful design can remain a resource of the future.

### SITE SPECIFIC RECOMMENDATIONS

## Tent Camp Site

- Semi remote camping experience.

- Campsites are designated on the beach for tent camping.
- Camping gear is carried into campsite.

## Vehicular Access

- Maintained 4WD tracks into the site.

- Tracks are set behind the beach for the following reasons:

Controls vehicular movement, discourages vehicular access onto the beach. Reduces vegetation disturbance as a turnaround area is provided. Parking bays set off track

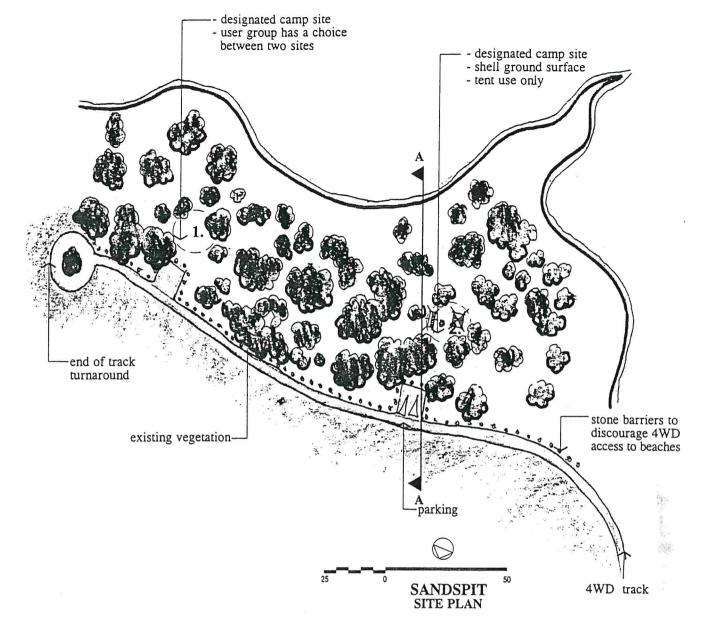
### **Facilities**

- Toilet structure housing long drop.

- Directional signs and site location signage.

- A constructed fireplace is provided at each campsite. Firewood to be obtained from off site.

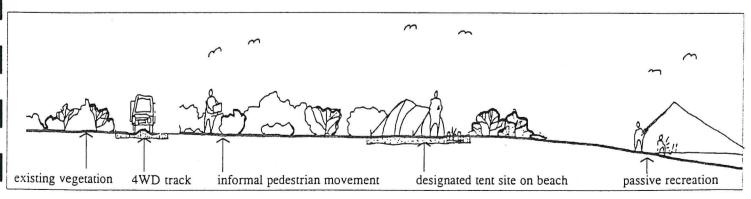
- Boat launching for small dinghies which can be carried to beach edge.



TVDF 1	CHIDELINES

## SITE SPECIFIC

ITEM	YES	NO	NOTES:	ITEM	NOTES:
Campsite Definition	1		1 - 3 designated campsites for 1 user group     Site suitable for tents only	Campsite Definition	Campsite surface to be different from surrounding ground plane Campsite defined with stone edge
Pedestrian Access		/	Informal	Vehicular Access	Maintained 4WD tracks
Vehicular Access			Sand tracks; 4WD only (roads off beach)	Toilets	Long drop
Toilets	1		Toilet facility	Fireplaces	Constructed of large site stone
Water		/		Signage	Routed timber post
Fireplaces	/		A defined fireplace per campsite		
Signage			Site location		:
Revegetation		/			
Boat Ramp		/	Beach launching ie. small dinghy		



SECTION A - A

# **SEMI NATURAL SITE - TYPE 2** NORTH EAST LANDING - Carrarang Station Zone 6 TEA TREE WEST - Tamala Station Zone 8

# **DESIGN PHILOSOPHY**

DEFINITION

Semi-natural sites have minor modifications for essential management purposes (eg. signage, informal site definition and fixed fire places).

**OBJECTIVE** 

The design aim is to assist management of the users to maintain the natural environment.



North East Landing - Carrarang Station



Tea Tree West - Tamala Station

NORTH EAST LANDING & TEA TREE WEST

Two sites, North East Landing (NEL) and Tea Tree West (TTW), were chosen as 'typical' for a semi natural campsite for 3 user groups. North East Landing is a long beach defined by two limestone headlands to the north and south with camping primarily occurring in the south. The site is sensitive, however due to the length of the beach this number of users can be accompdated through careful management. Tea Tree West forms the western part of Tea Tree Bay and is defined by a rock headland in the west and a rock outcrop in the east. Camping occurs on the sand beach, within the immediate foreshore and near headland which provides protection for campers from the prevailing winds. Vegetation is characterised by low shrubs, tea trees and groundcovers. TTW is considered a site of moderate sensitivity and therefore can accommodate a slight variation in campsite management, by applying the same principles as NEL.

#### SITE SPECIFIC RECOMMENDATIONS

Tent Camping

- 1 - 3 designated campsites.

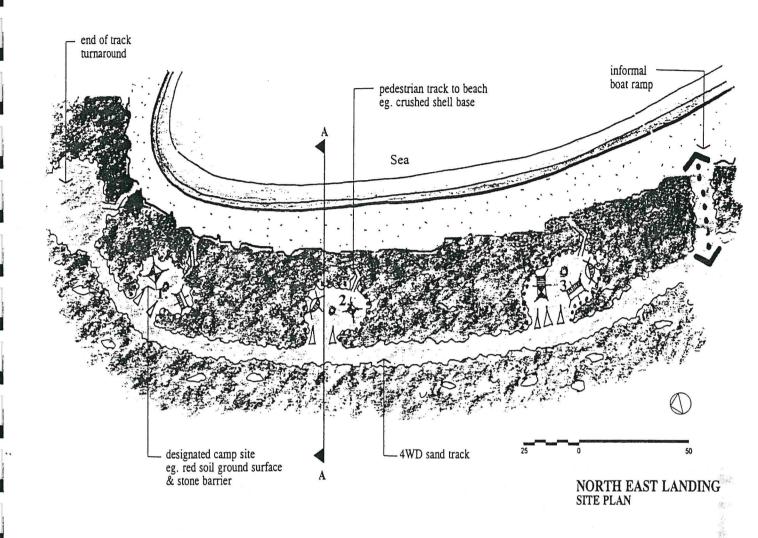
- Access is available by sand tracks considered difficult for 2WD.
   Clustered campsites at Tea Tree West with a common campfire built of site stone, whilst the linear arrangement of campsites on North East Landing requires a fireplace for each campsite.
- Campsites are defined with a compacted base of the local red soil, and an edging of site stones to discourage vehicular movement over vegetation and onto the beach.
- Track are maintained for 4WD access, therefore restricting use for campervans and caravans.
- Natural boat ramp location, vehicular movement only within this area of beach.

- No formalised paths

- A comprehensive information pamphlet shall guide users on issues such as:
  - sensitivity of the site

  - . temporary toilet facility
  - . litter removal
  - . vehicle movement.

Tamala - Carrarang Recreation and Tourism Plan Environs Consulting Pty Ltd

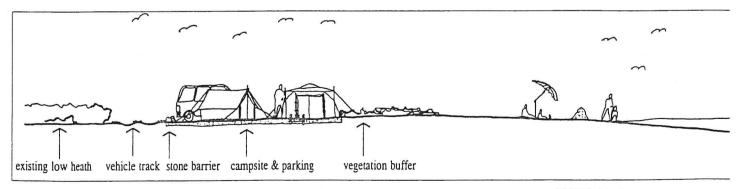


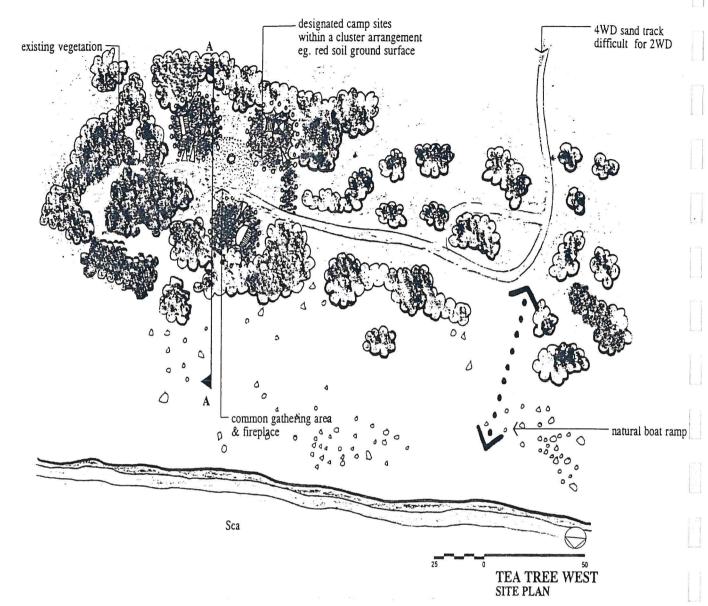
### **TYPE 2 - GUIDELINES**

ITEM	YES	NO	NOTES:
Campsite Definition	/		1-3 designated campsites Suitable for tents, campervans & caravans
Pedestrian Access	/		Defined path from campsite to beach edge
Vehicular Access	/		Sand tracks; 4WD & difficult 2WD usage
Toilets	1		Toilet facility
Water		/	
Fireplaces	/		Designated lireplace per campsite
Signage	/		Site location, directional signage & campsite number
Revegetation		/	
Boat Ramp	1		Natural, designated beach launching location

## SITE SPECIFIC

NOTES:
Campsite defined with red soil ground surface & stone barrier
Maintained 4WD tracks
One (1) long drop, per campsite
Constructed of large site stone
Timber posts & sign



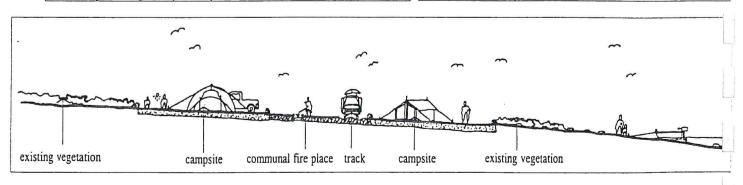


## **TYPE 2 - GUIDELINES**

ITEM	YES	NO	NOTES:				
Campsite Definition	/		1-3 designated campsites in a cluster for a large user groups suitable for tents & safari tents				
Pedestrian Access		/	Informal				
Vehicular Access	/		Sand tracks; 4WD & difficult 2WD usage				
Toilets	/		Toilet facility				
Water		1					
Fireplaces	/		Designated communal campfire				
Signage			Site location, directional signage & campsite number				
Revegetation		/					
Boat Ramp	/		Natural, designated beach launching location				

## SITE SPECIFIC

NOTES:
Campsite defined with red soil ground surface & stone barrier
Maintained 4WD tracks
One (1) long drop, per cluster of campsites
Constructed of large site stone, in a communal area
Timber posts & sign



SECTION A - A

# SEMI DEVELOPED SITE - TYPE 3 TENT LANDING - Tamala Station Zone 13

### **DESIGN PHILOSOPHY**

#### **DEFINITION**

Semi-developed sites have facilities to service recreational use and protect the environment. Tracks are maintained to allow 2WD access. Continuous human occupation and interaction is accepted. Support services and facilities are provided. Site monitoring and management is maintained.

#### **OBJECTIVE**

The design aim for this concept is to assist with the management of the users in a modified natural environment.



Tent Landing - Tamala Station

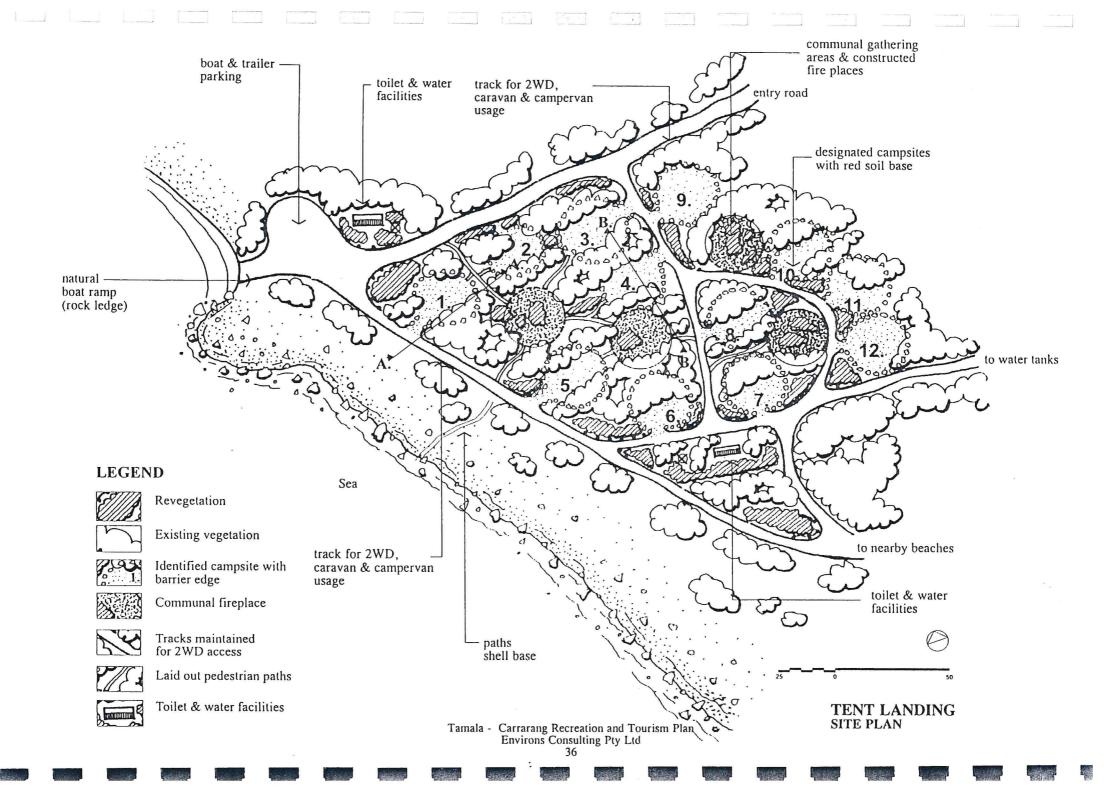
## TENT LANDING

Tent Landing was chosen as a 'typical' example for a semi-developed campground as it currently accommodates a large number of users and is considered a moderately sensitive site. The users attraction to this site appears to be its pleasant nature and high water level for boating, although there is no beach. Vegetation, which is characterised by coastal shrubs (wattles) and low groundcovers, is highly disturbed in areas due to camping. To achieve an equilibrium between a large number of users and the environment, site infrastructure and facilities are required.

## SITE SPECIFIC RECOMMENDATIONS

Tent, Caravan and Campervan Camping

- A large clustered arrangement of twelve (12) identified campsites. Each campsite provides space for manoeuvring and parking caravans and campervans. Ground surface shall be a compacted subgrade and top layer of local red soil.
- A common gathering site is provided for one (1) to three (3) campsites. This area shall have a constructed fireplace of site stone andmortar.
- Tracks are maintained for 2WD usage and entry of caravans. Within the campsite, roads are to be edged with 450mm high timber bollards to discourage movement over vegetation.
- Revegetation within the campground to be by encouraging natural regeneration.
- Supplied facilities shall include two points for water collection (washing only) and two toilet facilities (composting type for high usage).
- Formalised paths provide direction to facilities and sites of recreational use. These paths are to be a shell ground surface.
- Natural boat ramp location and adjoining turning space and trailer parking area.
- Simple signage shall display directional information, campground name and campsite numbers. This signage shall be sconstructed from materials suitable for this coastal location.
- A comprehensive information pamphlet shall guide users on issues such as:
  - . site sensitivity
  - . litter
  - . campground etiquette
  - . vehicle movement

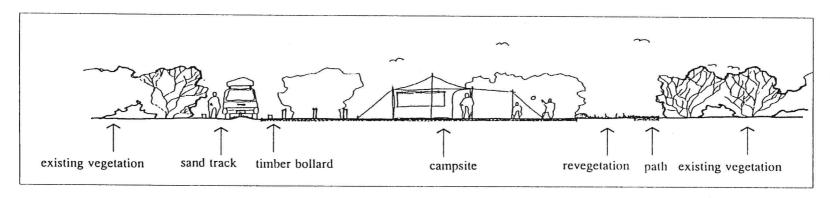


**TYPE 3 - GUIDELINES** 

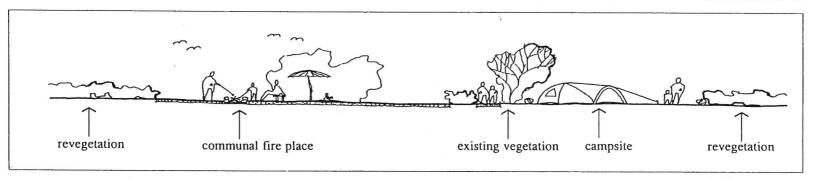
ITEM	YES	NO	NOTES:	
Campsite Definition	/		Designated campsites Suitable for tents, safari tents, caravans & campervans	
Pedestrian Access	/		Formalised paths	
Vehicular Access			Maintained sand tracks for 2WD access (heavy vehicular usage ic.caravans)	
Toilets	/		Toilet facilities	
Water	1		Piped in water points	
Fireplaces	1		Communal fireplace (fireplace constructed on site)	
Signage			Directional signage, site location & campsite numbers	
Revegetation	/		Revegetation to sparse areas surrounding campsites	
Boat Ramp	/		Natural, rock ledge designated boat launching ramp	

## SITE SPECIFIC - 12 campsites

ITEM	NOTES:
Campsite Definition	12 designated campsites, - red soil ground base & stone edge
Pedestrian Access	Formalised paths, compacted subgrade with crushed shell surface
Vehicular Access	Stabilized sand tracks, timber bollard edge
Toilets	2 x Toilet facilities, composting toilets
Water	2 x Piped in water points
Fireplaces	4 x Communal fire place, - fire place constructed of mortar & site stone
Signage	Permanent fixture, site stone and timber
	•



## SECTION A - A



SECTION B - B

TENT LANDING

Tamala - Carrarang Recreation and Tourism Plan Environs Consulting Pty Ltd

# **SEMI DEVELOPED SITE - TYPE 4**

# CAMP 7 - Tamala Station Zone 15

## **DESIGN PHILOSOPHY**

#### DEFINITION

Semi-developed sites have facilities to service recreational use and protect the environment. Access tracks are maintained to allow 2WD access. Continuous human occupation and interaction is accepted. Support services and facilities are provided, plus a presence of on site monitoring.

#### **OBJECTIVE**

The aim of planning for this area is to assist with management of users in this modified natural environment, in order to maintain an area which people can enjoy without harming its natural beauty and high environmental quality. A high priority is to protect the Tea Tree vegetation.



Camp 7 - Tamala Station

## CAMP 7

Camp 7 was chosen as a 'typical' example of a Semi-developed site for beach cabins and/or safari tents. The site lends itself to this type of low key development as the location is considered to be moderately sensitive. The existing stands of Tea Tree and natural terrain provide natural elements which the built form can blend with.

#### SITE SPECIFIC RECOMMENDATIONS

#### OPTION 1 - LOW KEY BUILT FORM

#### Cabin Accommodation

- The construction of beach cabins will attract visitors seeking a camping experience with a few more 'creature' comforts.
- Separate toilet, water and parking facilities for each cabin.
- This location is relatively flat and provides an ideal site for infirm and disabled (wheelchair) visitors to appreciate the outdoor environment.
- Privacy between cabins (cabins are sited 40 50m apart).
- Formalised paths to facilities.
- A comprehensive information pamphlet shall assist in educating the user group on issues such as:
  - . site sensitivity
  - . litter removal
  - . fire
  - . campsite etiquette.

## Cabin Design

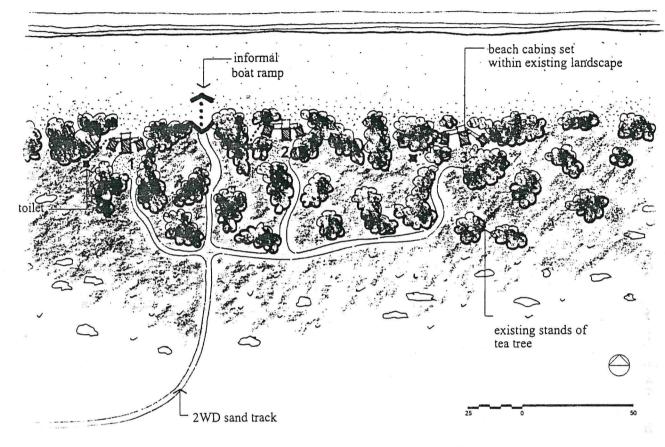
#### Externally:

- The built form is designed to blend with the landscape, and sit comfortably amongst the existing vegetation.
- -Additional attachment of sleeping cabins can accommodate a larger user group.
- Timber deck and framework enables cabins to sit above the ground, minimising impact on flora and fauna.
- Water tank attached to central cabin, collecting rain water off cabin roofs for drinking.
- Materials shall be light weight and coloured to blend with the coastal setting:

  - . corrugated iron, roofing and cladding colorbond and zincalume
    - weatherboards paint finish
    - structural timber and decking stain and paint Or grey weathered surface
    - . louvres
    - . washed beach pebbles and shells as ground surfaces.

## Internally:

- Cross ventilation to maximise breezes in winter.
- Flywires to all openings.
- Central eating/kitchen/meeting area with two external decks for communal activities.
- Separate bedrooms for user comfort.

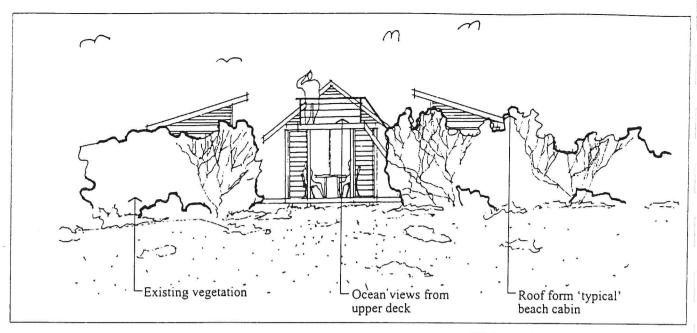


CAMP 7 SITE PLAN

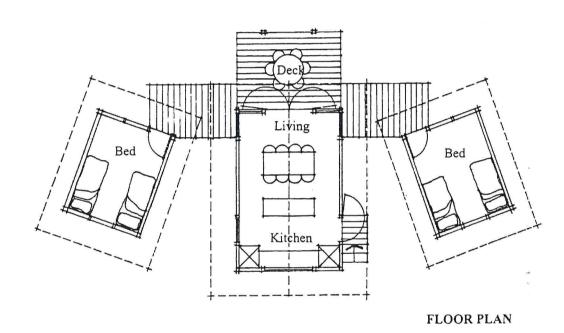
ITEM	YES	NO	NOTES:
Campsite Definition	,	110	(option: coach tours use of salari tents)
Pedestrian Access	1		Formalised paths
Vehicular Access			Maintained sand tracks for 2WD access
Toilets & Showers	1		External toilet & shower facility per cabin
Water	1		Piped in water points & water tank per cabin
Fireplaced	/		One (1) designated external fireplace per cabin
Signage			Directional signs, site location & cabin numbers
Revegetation	/		Revegetation to sparse areas surrounding cabins
Boat Ramp	/	Politica	Natural, designated beach launching location

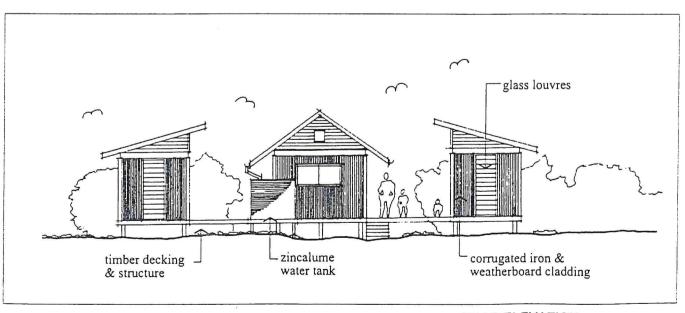
SITE SPECIFIC

ITEM	NOTES:	
Campsite Definition	Cabin locations (50m apart)	
Vehicular Access	Maintained 2WD tracks	
Toilets & Shower	Composting toilet, per cabin External shower fixture, per cabin	
Fireplaces	Constructed fireplace at each cabin	
Signage	Timber posts & sign	
Power	Generator power, gas lights	



FRONT ELEVATION





Tamala - Carrarang Recreation and Tourism Plan Environs Consulting Pty Ltd 40

#### **OPTION 2 - SAFARI TENTS**

#### Tent Accommodation

- Clustered tent arrangement provides a camping experience for a large user group, ie. 4WD tour group.
- Camp configuration can reduce visitor impact by limiting users to one location.
- Safari tent campgrounds can be erected for seasonal use, therefore not viewed as a permanent structure amongst the landscape.
- Formalised paths to facilities.
- A large community tent is the hub of the campsite.

- Safari tents are a low cost way for stations to provide accommodation for a different user group.

Seperate communal high use toilet facility.
A comprehensive information pamphlet shall assist in educating the user group on issues such as:

. site sensitivity

- . litter removal
- . fire
- . campsite etiquette.

## **TYPE 4 - GUIDELINES**

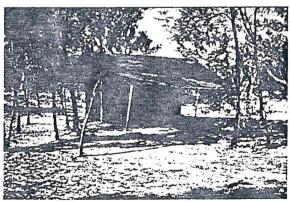
## SITE SPECIFIC

ITEM	YES	NO	NOTES:			
Campsite Definition	/		Safari tents   Communal tent			
Pedestrian Access	/		Formalised paths			
Vehicular Access	/		Maintained sand tracks for 2WD access			
Toilets & Showers	/		Communal toilet			
Water	/		Piped in water points			
Fireplaced	/		One (1) designated external fireplace			
Signage	/		Directional signs, site location & tent numbers			
Revegetation	/		Revegetation to sparse areas			
Boat Ramp	/		Natural, designated beach launching location			

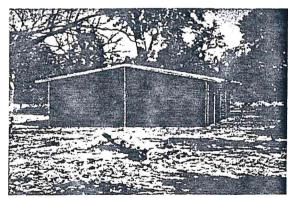
ITEM	NOTES:	
Campsite Definition	Safari tent locations	
Vehicular Access	Maintained 2WD tracks	
Toilets & Shower	Composting toilet facility	
Fireplaces	Constructed communal fireplace	
Signage	Timber posts & sign	
Power	Generator power, gas lights	
1		



Typical Safari Tent Campground



Safari Tent



Communal Tent

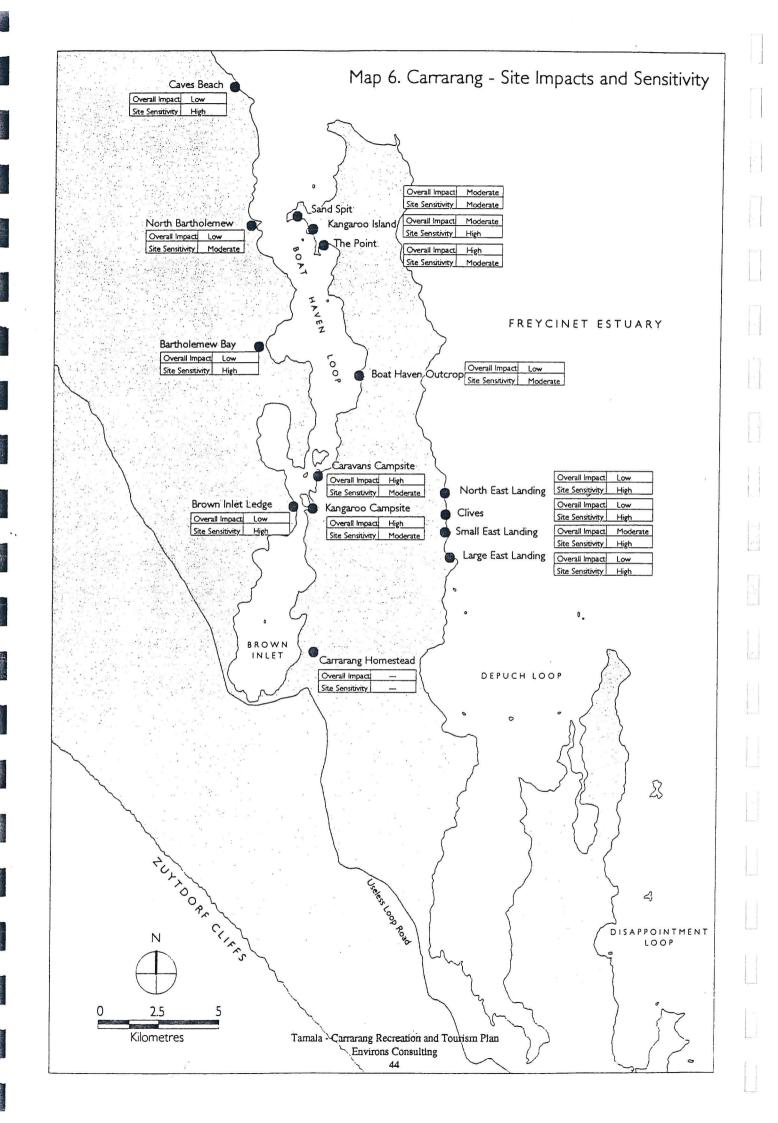
# 5. Site Analysis and Recommendations for the Visitor Sites on the Tamala-Carrarang Coast

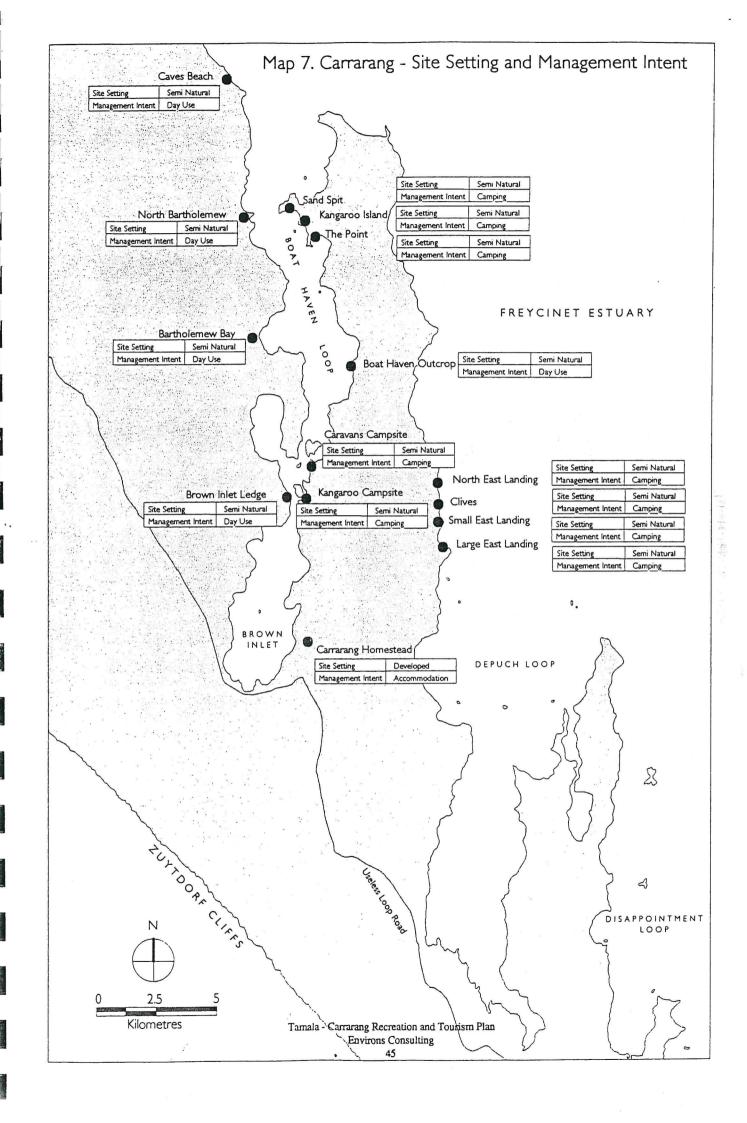
The site analysis technique used in this study is detailed in Section 2, Site analysis, of this report.

An assessment was made of all sites used for camping and day use in the study area. The results and analysis are divided into two sections: the first section covers sites on Carrarang Station and the second covers sites on Tamala Station.

Maps 6 and 8 provide summaries of current site impacts for Carrarang and Tamala Stations caused by recreation and the sensitivity of the sites to disturbance such as vegetation removal and soil erosion. Maps 7 and 9 provide summaries of suggested settings and types of activity or management intent for each station.

Descriptions of each Zone identified in Map 4 are provided following the maps for each section. The report for each zone includes a description, the current use and setting, values, opportunities and constraints and a table demonstrating the existing setting of each zone in relation to a number of criteria. Brief descriptions are provided for each site together with an assessment of impact and site sensitivity. Finally suggestions for desired outcomes and future uses together with suggested management actions are provided.



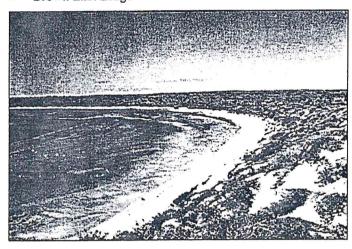


# Zone 1. Heirisson Prong Day Use Zone.

# General Description.

This zone is comprised of four fishing and overnight camping areas located on the western coastline of Brown Inlet and Boat Haven Loop. Access to the areas is via rough 4WD tracks following fence lines from Useless Loop Road. The coastline consists of a number of limestone headlands and sand dunes which form bays with sandy beaches and shallow waters. Vegetation is characterised by low shrubs and ground covers. Sites assessed within this zone are:

- Cave Beach
- North Bartholemew
- · Bartholemew Bay
- Brown Inlet Ledge



Bartholemew Bay

# Zone Use and Setting.

The four sites in this zone function as natural/semi-natural camping and fishing areas. Sites are undeveloped and moderately - highly sensitive due to sand dunes erosion and unique fauna. As visitor numbers are small environmental impacts are generally low. Current use is mainly by local people from Useless Loop Town.

### Zone Values

Visual - scenic views over Freycinet Estuary
Tourism and Recreation - recreational fishing and water activities

## Zone Opportunities and Constraints

Strengths -

sandy beaches, scenic views over Boat Haven Loop and Freycinet Reach

Weaknesses -

exposure to strong winds, difficulty in provision of water and services, shallow

coastal waters

Opportunities -

day use areas, recreational fishing, water activities

Threats -

vehicle damage, campsite proliferation, litter, disturbance of flora and fauna

Recreation			Setting Asses	sment		Notes
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			Access for 4WD vehicles
Site modification		1				Undeveloped campsites, no facilities provided
Social interaction		1				Usually one group per site
Recreation experiences			1			Isolation and infrequent contact with other visitors
Self reliance			1			Visitors are vehicle dependent
Visitor management		1				No on-site modifications
	1	1			1	

#### Site Assessments

#### Cave Beach

Cave Beach is located on the coastline adjacent to Briggs Rocks, approximately 15 kilometres south of Useless Loop. It is a long sandy beach defined by two limestone headlands to the north and south and sand dunes to the west. A cave with a bat colony has formed in the southern headland. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - Low

- minor damage to sand dunes caused by 4WD vehicles
- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to 4WD vehicles driving on the beach and intrusion of feral animals
- some litter at cave

Site Sensitivity - High

- linear site with impacts occurring on the beach, sand dunes and cave
- coastal sand dunes are susceptible to erosion and further damage
- vegetation disturbance will increase if area evolves into a campsite
- bat colony is highly susceptible to disturbance

#### North Bartholemew

This site is located on the western bank of Boat Haven Loop approximately 20 kilometres south of Useless Loop with 4WD access via the fence line from Biddy Giddy Outcamp. The coastline is flat with a limestone rock shelf adjoining Boat Haven Loop. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - Low

 minor removal of ground cover vegetation due to 4WD vehicles driving on the beach and intrusion of feral animals Site Sensitivity - Moderate

- small, linear site with impacts occurring on the beach
- vegetation disturbance will increase if area evolves into a campsite

## **Bartholemew Bay**

Located approximately 25 kilometres south of Useless Loop, Bartholemew Bay comprises three sandy bays on the western bank of Boat Haven Loop. Large sand dunes and rocky headlands define the bays which have a north easterly aspect. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - Low

 minor removal of ground cover vegetation due to 4WD vehicles driving on the beach and intrusion of feral animals Site Sensitivity - High

- linear site with impacts concentrated to the beach
- coastal sand dunes are susceptible to erosion
- vegetation disturbance will increase if area evolves into a campsite

Brown Inlet Ledge

This site is located on a the western bank of Boat Haven Loop with 4WD vehicle access via the fence line from Foster Outcamp. The site consists of a rocky limestone platform and sand dunes adjoining the channel. Vegetation is sparse and characterised by low shrubs and ground covers.

Level of Impact - Low

- minor removal of ground cover vegetation due to the collection of firewood and intrusion of feral animals
- · some litter at camp, fire rings present

Site Sensitivity - High

- small site with impacts concentrated to the rock platform
- coastal sand dunes are susceptible to erosion
- vegetation disturbance will increase if area evolves into a campsite

# Desired Outcomes and Future Use.

Due to the susceptibility of the sand dunes to erosion and disturbance of fauna (at Cave Beach), no development or increase in use should occur within this zone. The sites should remain undeveloped with limited on-site modifications. Access for 4WD vehicles should be maintained to existing levels, however, 4WD vehicles should not be permitted on the beaches. Visitors will be isolated with very few support services available and only infrequent contact with other visitors. Strict visitor control is required. The area should not be available to the general public due to the difficulty and expense of managing the sites. Access should only be by permission from Useless Loop Town or Carrarang Station

## Desired setting and implications

Semi Natural.

A semi-natural setting requires an increase in the current level of on-site management, site constraints and regulations (for example, ranger patrols and provision of interpretive material). Minor site modifications for essential management purposes are necessary (for example, signage/bollards restricting vehicle use).

## Prime Management Intent

Day Use (applicable to all sites).

No camping is to be permitted. No identification signs or facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, picnicking, water activities).

## Recommended Number of Visitors and Groups

Day use only.

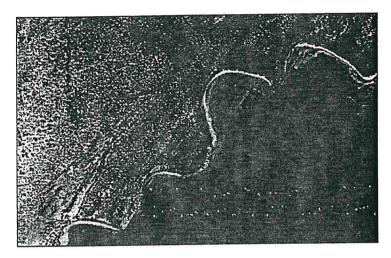
# Suggested Management Actions

- reduce damage to beaches and sand dunes by restricting vehicles use on site
- remove rubbish and litter
- address vegetation disturbance or removal by: prohibiting fires, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material at station eg site maps with regulations
- ensure strict visitor control.

# Zone 2. Boat Haven Loop and Brown Inlet Zone.

# General Description.

This zone comprises the currently inaccessible areas of the coastline from Briggs Rocks at Boat Haven Loop to the Carrarang Homestead at Brown Inlet. No camping or day use exists within this zone and no vehicle or walking access is provided. Brown Inlet is a shallow bay which, at low tide, lose significant amounts of water. Vegetation includes low shrubs and ground covers, and saline coastal flats are located in the south of Brown Inlet. No sites were assessed within this zone.



Air photo of Heirisson Prong

# Zone Use and Setting.

This zone functions as a remote environment with limited boating and fishing activity. Currently, the areas are accessible only from the Freycinet Reach and there are no land based tourism or recreation uses or facilities. Visitor impacts are minimal, environmental degradation caused by grazing/feral animals was not assessed.

#### **Zone Values**

Tourism and Recreation - limited boating and fishing activities

# Zone Opportunities and Constraints

Strengths -

Brown Inlet offers calm water and is a sheltered inlet

Weaknesses -

northern areas are exposed to strong winds, difficulty in provision of water and

services, poor boating access, highly erodable foreshore sand dunes

Opportunities -

remote walking and camping, recreational fishing

Threats -

further intrusion of grazing/feral animal

Recreation		,	Setting Asses	sment	Notes	
Opportunity Spectrum criteria	remote	natural	Semi Natural	semi developed	developed	
Access	1					No vehicle or walking tracks exist
Site modification	1					Campsites do not exist, no facilities provided
Social interaction	1					Little or no visitation occurs
Recreation experiences	1				, -	Little or no contact with other visitors
Self reliance	1					Visitors are self sufficient
Visitor management	1					<ul> <li>No on site modifications made by management</li> </ul>

#### Zone Assessment

Level of Impact - Low

 removal of ground cover vegetation and/or disturbance to shrubs due to intrusion of feral and/or grazing animals not assessed Site Sensitivity - High

- open linear zone
- sensitive shallow coastal flats at Brown Inlet are susceptible to damage
- vegetation is likely to be further disturbed by intrusion of feral and/or grazing animals

## Desired Outcomes and Future Use.

In order to provide a full range of camping opportunities remote camping zones need to be identified. A remote setting (which severely restricts access) helps protect the sensitive coastal environment by minimising visitor numbers and impacts. In a remote zone tracks and campsites do not exist and walking tracks are undefined. Campers are isolated with no support services available and no contact with other visitors.

## Desired setting and implications

Remote

As the zone is currently functioning as a remote environment no on-site modifications are necessary. However, for safety reasons and as a measure to maintain the zones remote setting, interpretive material and "check in - check out booking system should be provided at Carrarang Station or Useless Loop Town.

## Prime Management Intent

Camping

No sites or tracks to be provided. Preferred uses are those compatible to the sites remote setting (eg fishing, nature observation, water activities). The use of motorised vehicles to, and within, the zone is prohibited. Horses and domestic animals are not permitted.

## Recommended Number of Visitors and Groups

One group within the zone consisting of up to 8 persons.

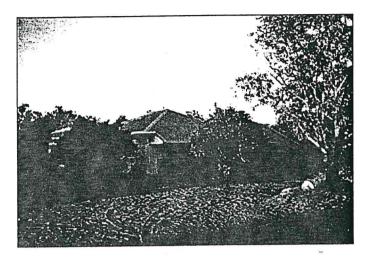
## Suggested Management Actions

- address vegetation disturbance or removal by limiting the intrusion of feral animals
- provide interpretive, safety material and visitor control from Carrarang Station and/or Useless Loop Town eg site maps with regulations etc.
- establish a "check in check out" booking procedure for safety purposes

# **Zone 3. Carrarang and Tamala Homesteads**

# General Description.

Tamala Homestead is located approximately 5 kilometres south east of Dissapointment Loop which adjoins Freycinet Estuary. Carrarang Homestead is located on the south east of Carrarang Peninsula approximately 300 metres east of Brown Inlet. Included at both stations are staff living quarters and work structures. 2WD access to the homesteads is via Useless Loop Road.



Tamala Homestead

# Zone Use and Setting.

The homesteads are the living areas and work places of the management, staff and their respective families. Currently, there are no tourism or recreation facilities provided at either Tamala or Carrarang homesteads. As would be expected, the environment surrounding the homesteads has been significantly modified for grazing and pastoral purposes.

## Zone Values

Cultural - historical homesteads, living quarters and work structures

## Zone Opportunities and Constraints

Strengths -

2WD access, availability of water and other services

Weaknesses -

difficulty in provision of water and services

Opportunities -

low key tourist accommodation

Threats -

tourism activities could interfere with pastoral activities

Recreation			Setting Asses	Notes		
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access					1	2WD vehicle access via Useless     Loop Road
Site modification					1	Built structures and significant on site modifications are evident
Social interaction					1	Continuous human occupation and interaction
Recreation experiences					1	Importance of safe and managed environment
Self reliance					7	A high level of support services and facilities provided
Visitor management						Not applicable

## Desired Outcomes and Future Use.

This plan recognises the importance of the homestead environment in the overall management of a pastoral station. The provision of recreation and tourism uses at the homesteads could be considered. The homesteads could provide low key built accommodation allowing visitors to gain an appreciation of the station from a comfortable and developed setting. Tours and hire of equipment such as sea kayaks could be provided. Visitors would have a very high level of support services and facilities available, and have frequent contact with station staff and other visitors. The demand for accommodation away from the coast has not been determined.

## Desired setting and implications

Developed.

Associated with providing accommodation, a high level of support services and facilities need to be established. This will require significant levels of management input (for example, servicing rooms) and considerable site modifications for management purposes. The scale of accommodation may not be sufficient for an economically viable operation.

## Prime Management Intent

Accommodation

Low key built accommodation. The built form should be in a style which is compatible to the existing buildings and should reflect the historical character of the homesteads. Development should not detract from the cultural values of the site. Preferably visitor activities would occur away from the homestead at day use areas on the stations. Activities at these day use areas would comply with the sites setting. Domestic animals would not be allowed.

Camping and caravan park facilities should not be provided as they would detract from the character of the homesteads and diminish the remote style setting. Providing for camping and caravanning at the homesteads would duplicate facilities at Nanga Station and there would be high costs and difficulty in providing services normally expected by caravaners.

## Recommended Number of Visitors and Groups

In order to maintain the remote style setting, provide accommodation for 5-10 people.

## Suggested Management Actions

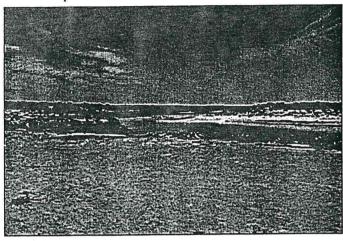
- investigate the feasibility of development
- develop detailed site plan

# Zone 4. Carrarang Peninsula - West Coast Zone.

# General Description.

This zone comprises the western coastline of Carrarang Peninsula. A 4WD trail provides access from Carrarang Homestead. The coastline consists of saline coastal flats in the south, with rocky limestone shores and ledges in the centre and north. Small tidal inlets are also present in the south at Kangaroo and Caravans campsites. Vegetation is characterised by low shrubs and ground covers. Intertidal plants (eg samphire) are found on the coastal flats. Sites assessed within this zone are:

- Kangaroo Campsite
- Caravans Campsite
- Boat Haven Outcrop
- The Point
- Kangaroo Island
- Sand Spit



Kangaroo Campsite

# Zone Use and Setting.

The sites in this zone function as natural/semi-natural camping and fishing areas. Sites are undeveloped and moderately sensitive as they are located on sandy beaches and small tidal inlets. Visitor numbers are low, but due to a lack of on site management, environmental impacts are generally high.

#### **Zone Values**

Visual - scenic views over Brown Inlet and passage

Tourism and Recreation - camping, recreational fishing, boating and water activities

## Zone Opportunities and Constraints

Strengths -

boating access, sandy beaches, scenic views

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

semi-natural camping, recreational fishing, canoeing and camping

Threats -

vehicle damage, campsite proliferation, stock and feral animal intrusion, litter

Recreation	1	Setting Asses	ssment		Notes
Opportunity remote natural semi semi Spectrum natural developed criteria	developed				
Access		1			Access for 4WD vehicles and limited 2WD access
Site modification	1				Undeveloped campsite, no facilities provided
Social interaction	1				One group booking allowed per site
Recreation experiences	_	1			Isolation and infrequent contact with other visitors
Self reliance		1			Visitors are vehicle dependent
Visitor management	1				No on-site modifications made by management, bookings required

#### Site Assessments

## Kangaroo Campsite

This site is located on Brown Inlet approximately 6 kilometres north of the Carrarang Homestead. It is a small confined beach camping area adjoining a small tidal inlet. Vegetation is sparse and is characterised by low shrubs and ground covers.

Level of Impact - High

- minor erosion caused by people launching boats and beach activities
- minor ground hardening caused by heavy vehicles and caravans
- major removal of ground cover vegetation and/or major disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach
- feral and/or grazing animals are significantly impacting on the sites natural regeneration
- large amounts of litter and unsightly materials are present

Site Sensitivity - Moderate

- small linear site with impacts occurring at the beach and immediate foreshore
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

## Caravans Campsite

"Caravans" is located approximately 7 kilometres north of Carrarang Homestead. It is defined by a limestone headland to the west and a salt flat to the east. A particular feature of the site is a large Nitraria tree shaped as a shelter. Camping occurs within the tree and on the sandy beach and immediate foreshore. Vegetation consists of low shrubs and ground covers.

Level of Impact - High

- major removal of ground cover vegetation and/or major disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- feral and/or grazing animals are significantly impacting on the sites natural regeneration
- large amounts of litter and unsightly materials are present

Site Sensitivity - Moderate

- small linear site with impacts occurring on the beach, dunes and headlands
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

#### **Boat Haven Outcrop**

A day use and fishing area located on a rocky outcrop adjoining Boat Haven Loop. The site offers little protection from the elements and is not a popular camping area. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - Low

- minor removal of ground cover vegetation due to people walking from vehicles to site
- some litter at camp, fire rings present

Site Sensitivity - Moderate

- steep access across the sand dune adjoining the road
- coastal sand dunes are susceptible to erosion and further damage
- vegetation disturbance will increase significantly if area evolves into a campsite and vehicles are permitted.

#### The Point

This campsite is located in a small bay adjoining Boat Haven Loop approximately 17 kilometres north of the Carrarang Homestead. The small bay has a southerly aspect, a good natural boat launch area and is bounded by two limestone headlands to the east and west. The beach area is exposed to strong winds and camping occurs on the foreshore with protection provided by tea trees. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - High

- major removal of ground cover vegetation and/or major disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- large amounts of litter and unsightly materials are present

Site Sensitivity - Moderate

- small, linear site with impacts concentrated to the foreshore
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

#### Kangaroo Island

This fishing and overnight camping area is located a short distance north of the Point. It is a small secluded site with camping occurring within the coastal dunes. The removal of ground covers exposing the dunes to wind erosion is a major concern. Vegetation is characterised by low shrubs and ground covers.

### Level of Impact - Moderate

- moderate and/or significant localised erosion caused by camping and inappropriate vehicle use
- moderate removal of ground cover vegetation and/or disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles and intrusion of feral animals
- some litter at camp, fire rings present

#### Site Sensitivity - High

- small site with impacts concentrated to the dunes
- coastal sand dunes are susceptible to erosion and further damage
- vegetation disturbance will increase significantly with further use

# Sand Spit

This camping area overlooks Boat Haven Loop and is located approximately 18 kilometres north of the Carrarang Homestead. Sand Spit is a long beach and offers a number of camp sites both on the beach and foreshore. Vegetation is characterised by low shrubs and ground covers.

#### Level of Impact - Moderate

- moderate removal of ground cover vegetation and/or disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral animals
- · moderate amounts of litter present

## Site Sensitivity - Moderate

- linear site with impacts concentrated to the foreshore and beach
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

## Desired Outcomes and Future Use.

In order to protect the zones environment and provide for a diversity in recreation experiences, no development or increase in use should occur at the sites. The sites should remain undeveloped with limited on-site modifications. Access for 4WD vehicles should be maintained at existing levels. Campers should remain isolated with very few support services available and only infrequent contact with other visitors.

## Desired setting and implications

#### Semi Natural.

A semi-natural setting requires an increase in the current level of on-site management, site constraints and regulations (for example, removing litter, ranger patrols and provision of interpretive material). Minor site modifications for essential management purposes are necessary (for example, informal site definition).

## Prime Management Intent

# Camping (Kangaroo Campsite, Caravans Campsite, The Point, Sand Spit)

Firewood, campsite identification signs and toilets will be required, no other facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, boating, water activities), generators are permitted, however domestic animals are not allowed.

#### Day Use (Boat Haven Outcrop)

No identification signs or facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, picnicking, water activities), No camping is to be permitted. Provide parking adjacent to vehicle track, walking access to site only.

## Rehabilitation (Kangaroo Island)

Sites are managed to restore disturbed areas to their former state. Management signs indicating a rehabilitation site required. No uses, facilities or visitor access is permitted. The area is considered too sensitive for future recreation use.

## Recommended Number of Visitors and Groups

One group per campsite consisting of up to 8 persons.

## **Suggested Management Actions**

# Camping Sites (Kangaroo Campsite, Caravans Campsite, The Point, Sand Spit)

- consolidate vehicle entry/exit points
- · provide signage identifying site
- · remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- address campsite proliferation by defining camp sites.

## Day Use Site (Boat Haven Outcrop)

- provide vehicle parking on road edge (restrict vehicle access to site)
- · remove rubbish and litter
- address vegetation disturbance or removal by prohibiting fires
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations

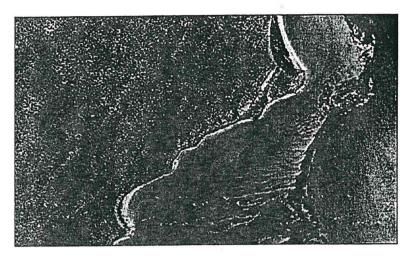
#### Rehabilitation (Kangaroo Island)

- erect management signs indicating a rehabilitation site and no visitor access
- remove rubbish and litter
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations

# Zone 5. Carrarang Peninsula - North East Coast Zone.

# General Description.

This zone comprises the north eastern coastline of Carrarang Peninsula from Kangaroo Head in the north to North East Landing in the south. No camping or day use areas exist within this zone and no vehicle or walking access is provided. The coastline is primarily rocky and features numerous limestone headlands. Vegetation is characterised by low coastal shrubs and ground covers. No sites were assessed within this zone.



Air photo of North East Carrarang Peninsula

# Zone Use and Setting.

This zone functions as a remote environment with limited boating and fishing activity. Currently, the area is accessible only from Freycinet Estuary and there are no land based tourism or recreation uses or facilities. Visitor impacts are minimal.

#### **Zone Values**

Visual - scenic views over Freycinet Estuary
Tourism and Recreation - boating and fishing activities

# Zone Opportunities and Constraints

Strengths -

boating access, scenic views and headlands

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

natural camping, boat based camping, recreational fishing

Threats -

sand dune erosion, further stock and feral animal intrusion, litter

Recreation	**		Setting Asses	sment	, ,	Notes
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access	1				7	No vehicle or walking tracks exist
Site modification	1					Campsites do not exist, no facilities provided
Social Interaction	1					Little or no visitation occurs
Recreation experiences	1					Little or no contact with other visitors
Self reliance	1					Visitors self sufficient
Visitor management	1					<ul> <li>No modifications made by management.</li> </ul>

#### **Zone Assessment**

Level	of	Impact -	- 1	nu
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 removal of ground cover vegetation and/or disturbance to shrubs due to intrusion of feral and/or grazing animals not assessed Site Sensitivity - High

- open linear zone
- coastal sand dunes are susceptible to erosion

## Desired Outcomes and Future Use.

In providing for a diversity of recreation and tourism opportunities for now and in the future, natural camping sites should be identified in this zone. A natural setting will help protect the sensitive coastal environment by minimising visitor induced erosion and vegetation disturbance. Campsites should remain undeveloped with limited on-site modifications. Only rough tracks for walking should be provided and access by boat is permitted. Campers will be isolated with very few support services available and only very infrequent contact with other visitors.

## Desired setting and implications

Natural.

To achieve a natural setting, walking tracks and small undeveloped campsites need to established. This in turn, will require an increase levels of management input (for example, providing interpretive material and infrequent ranger patrols) and minor site modifications for essential management purposes (for example, informal site definition).

## Prime Management Intent

Camping

Campsite identification signs will be required, no other facilities to be provided. For safety reasons a "check in - check out" booking system should be provided at Carrarang Station. Preferred uses are those compatible to the sites natural setting (eg fishing, nature observation, water activities). The use of motorised vehicles is prohibited as are horses and domestic animals.

## Recommended Number of Visitors and Groups

One group per site consisting of up to 8 persons.

## **Suggested Management Actions**

The following management actions will be required if there is demand for recreational camping:

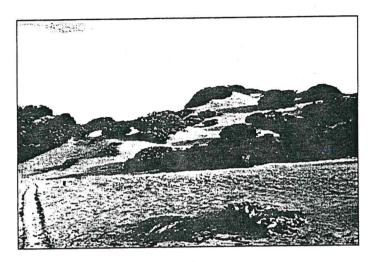
- identify suitable track and campsite locations taking into consideration viewing points, environmental conditions and safety issues
- provide vehicle parking areas at appropriate locations
- provide signage identifying sites
- address vegetation disturbance or removal by limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- define camp sites to prevent campsite proliferation
- establish a "check in check out" booking procedure for safety purposes

# Zone 6. Carrarang Peninsula - East Coast Zone.

# General Description.

This zone is located on the eastern coastline of Carrarang Peninsula. Two 4WD trails provide access from Carrarang Homestead. The coastline is characterised by a series of limestone headlands jutting into Freycinet Estuary and a linear coastal dune system. Vegetation is characterised by low shrubs and ground covers. Sites assessed within this zone are:

- North East Landing
- Clives
- Small East Landing
- Large East Landing



Clives

# Zone Use and Setting.

The 4 sites in this zone function as natural/semi-natural camping areas used primarily for fishing and boating purposes. Sites are undeveloped and highly sensitive due to sand dune erosion. As visitor numbers are small environmental impacts are generally low.

#### Zone Values

Visual - scenic views over Freycinet Estuary, attractive beaches Tourism and Recreation - camping, recreational fishing, boating and water activities

# Zone Opportunities and Constraints

Strengths -

boating access, sandy beaches, scenic views, headlands, attractive beaches

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

semi-natural camping, recreational fishing, water activities

Threats -

erosion, vehicle damage, campsite proliferation, stock and feral animal intrusion,

litter

Recreation		Setting Assessment				Notes
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			Access for 4WD vehicles and limited 2WD access
Site modification		1				Undeveloped campsite, no facilities provided
Social interaction		1				One group booking allowed per site
Recreation experiences			1			Isolation and infrequent contact with other visitors
Self reliance			1		0	Visitors are vehicle dependent
Visitor management		1				<ul> <li>No on-site modifications made by management, bookings required</li> </ul>

## Site Assessments

#### North East Landing

This site is the most northerly camping area located within this zone. It is a long open beach defined by two limestone headlands to the north and south with camping primarily occurring in the south. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - Low

- minor erosion caused by people walking on dunes
- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- · some litter at camp, fire rings present

Site Sensitivity - High

- linear site with impacts occurring at the beach and headlands particularly in the south
- coastal sand dunes are susceptible to erosion and further damage
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

#### Clives

This site is located in the adjoining bay immediately south of North East Landing. It is a small beach defined by a limestone headland to the north and a large sand dune and rocky headland to the south. Camping occurs on the sandy beach and immediate foreshore with many sites clustered at the base of the southern dune which offers protection from the elements. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - Low

- minor erosion caused by people walking on dunes
- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- · some litter at camp, fire rings present

Site Sensitivity - High

- small linear site with impacts occurring on the beach, dunes and headlands
- coastal sand dunes are susceptible to erosion and further damage
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

## **Small East Landing**

Located approximately 1 km south of Clives, Small East Landing is enclosed by two limestone headlands to the north and south and sand dunes to the west. Camping occurs on the beach and within the dunes which provide protection from the elements. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - Moderate

- moderate erosion evident caused by walking and vehicles driving on the dunes
- moderate removal of ground cover vegetation and/or removal of shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- some litter at camp, fire rings present

Site Sensitivity - High

- small linear site with impacts concentrated to the beach and dunes
- coastal sand dunes are susceptible to erosion and further damage
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

## Large East Landing

This site forms the southern most camping area on the east coast of Carrarang Peninsula. It is a long open beach bounded by a large sand dune in the north and a limestone headland in the south. Due to the protection offered by the headland, camping occurs primarily in the south. Vegetation is characterised by low shrubs and ground covers.

Level of Impact - Low

- · minor erosion caused by people walking on dunes
- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- · some litter at camp, fire rings present

Site Sensitivity - High

- linear site with impacts concentrated to the beach and foreshore
- coastal sand dunes are susceptible to erosion and further damage
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

# Desired Outcomes and Future Use.

Due to the susceptibility of the sand dunes to further erosion no development or increase in use should occur at the sites. The campsites should remain undeveloped with limited on-site modifications. Access for 4WD vehicles should be maintained to existing levels. Campers should be isolated with very few support services available and only infrequent contact with other visitors.

## Desired setting and implications

Semi Natural.

A semi-natural setting requires an increase in the current level of on-site management, site constraints and regulations (for example, ranger patrols and provision of interpretive material). Minor site modifications for essential management purposes are necessary (for example, informal site definition).

## Prime Management Intent

Motorised Camping (applicable to all sites).

Firewood, campsite identification signs and toilets will be required, no other facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, boating, water activities), generators are permitted, however domestic animals are not allowed.

## Recommended Number of Visitors and Groups

One group per site consisting of up to 8 persons.

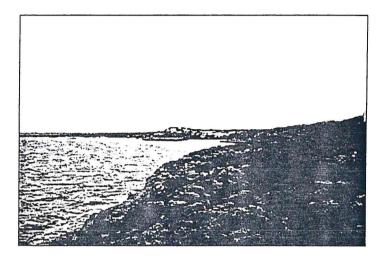
## Suggested Management Actions

- · consolidate vehicle entry/exit points
- provide signage identifying site
- · remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- address campsite proliferation by defining camp sites.
- Provide a toilet facility

# Zone 7. Depuch Loop Zone.

# General Description.

The Depuch Loop coastline from Large East Landing in the west to Turtle Ledge in the east forms this zone. No camping or day use areas exist within this zone and no vehicle or walking access is provided. Depuch Loop is a shallow bay which, at low tide, loses significant amounts of water. High sand dunes border the beaches to the north of the zone. Vegetation includes low shrubs and ground covers, and saline coastal flats are located in the south of the Bay. No sites were assessed within this zone.



Depuch Loop

# Zone Use and Setting.

This zone functions as a remote environment with limited boating and fishing activity. Currently, the area is accessible only from Freycinet Estuary and there are no land based tourism or recreation uses or facilities. Visitor impacts are minimal with environmental degradation caused by grazing/feral animals. The zone is highly sensitive due to its undisturbed nature and hyper saline areas.

#### **Zone Values**

Tourism and Recreation - limited boating and fishing activities

## **Zone Opportunities and Constraints**

Strengths -

scenic views over Depuch Loop and Freycinet Estuary

Weaknesses -

exposure to strong winds, difficulty in provision of water and services, poor boating

access

Opportunities -

Remote walking and camping, recreational fishing

Threats -

further intrusion of grazing/feral animal, sand dune erosion

Recreation		1	Setting Asses	Notes		
Opportunity Spectrum criteria	remote	natural	Semi Natural	Semi developed	developed	
Access	1					No vehicle or walking tracks exist
Site modification	1					Campsites do not exist, no facilities provided
Social interaction	1					Little or no visitation occurs
Recreation experiences	1					Little or no contact with other visitors
Self reliance	1					Visitors self sufficient
Visitor management	1					No on site modifications made by management

#### Zone Assessment

Level of Impact - Low

 removal of ground cover vegetation and/or disturbance to shrubs due to intrusion of feral and/or grazing animals not assessed Site Sensitivity - High

- open linear zone
- sensitive shallow coastal flats are susceptible to damage
- vegetation is likely to be further disturbed by further intrusion of feral and/or grazing animals
- high sand dunes bordering beaches in the north of the zone are highly susceptible to erosion

## Desired Outcomes and Future Use.

In order to provide a full range of camping opportunities remote camping zones need to be identified. A remote setting (which severely restricts access) helps protect the sensitive coastal environment by minimising future visitor numbers and impacts. In a remote zone, tracks and campsites do not exist and walking tracks are undefined. Campers are isolated with no support services available no contact with other visitors.

## Desired setting and implications

Remote.

As the zone is currently functioning as a remote environment no on-site modifications are necessary. However, for safety reasons and as a measure to maintain the zones remote setting, interpretive material and a "check in - check out" booking system should be provided at the Carrarang Station.

## Prime Management Intent

Camping

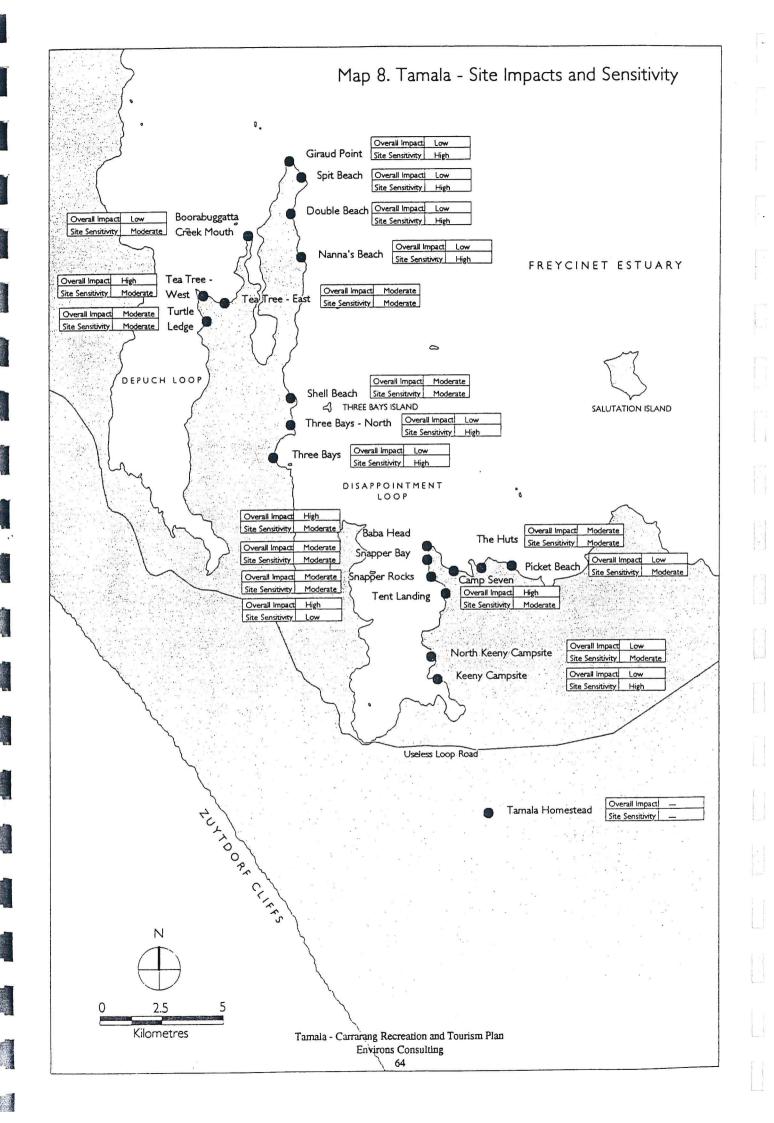
No sites or tracks to be provided. Preferred uses are those compatible to the sites remote setting (eg fishing, nature observation, water activities). The use of motorised vehicles within the zone is prohibited. Horses and domestic animals are not permitted.

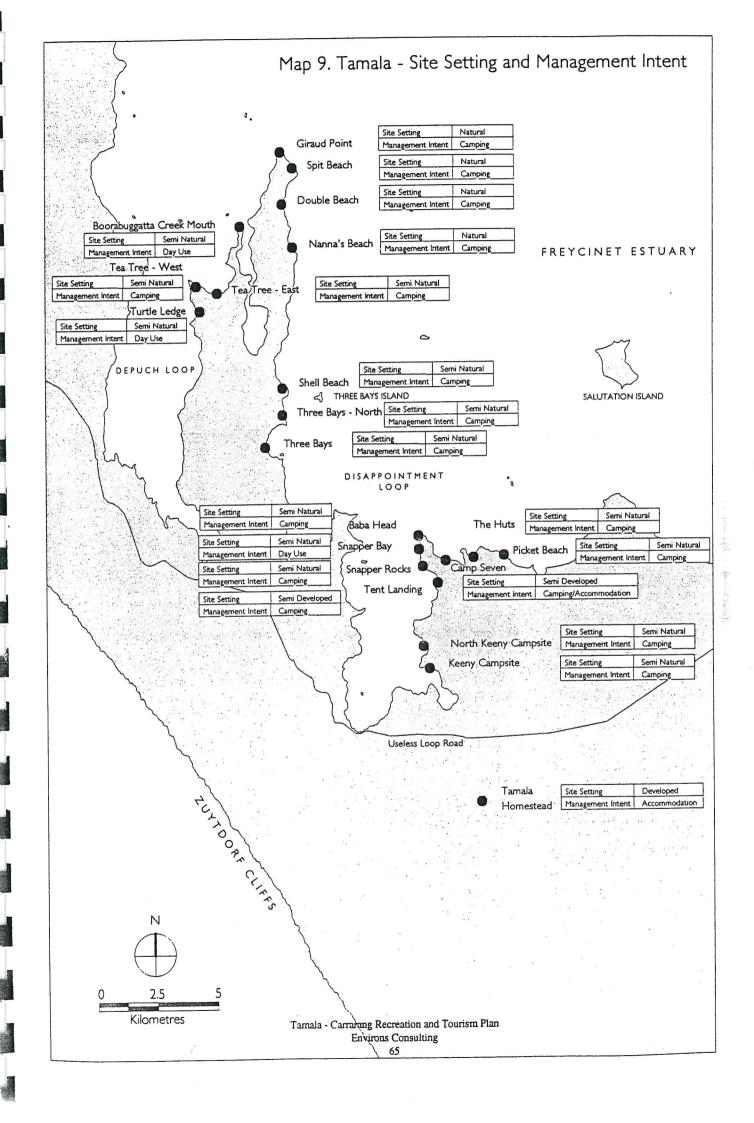
# Recommended Number of Visitors and Groups

One group within the zone consisting of up to 8 persons.

#### Suggested Management Actions

- rezone to legally permit camping activities
- manage vegetation disturbance by removing feral and/or grazing animals to maintain conservation values
- provide interpretive, safety material and visitor control upon entry to station eg site maps with regulations etc.
- establish a "check in check out" booking procedure for safety purposes



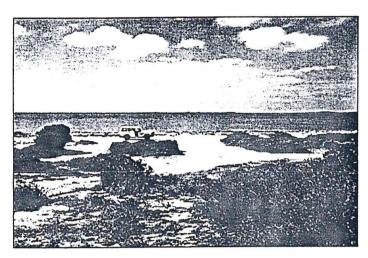


# Zone 8. Boorabuggatta Peninsula West Coast Zone.

# General Description.

This zone comprises the west coast of Boorabuggatta Peninsula from Turtle Ledge in the south to Boorabuggatta Creek Mouth. A 4WD trail provides access from Useless Loop Road. The coastline consists of rocky limestone shores, ledges and headlands with a sand beach at Tea Tree Bay. Vegetation is characterised by sparse shrubs and ground covers. Sites assessed within this zone are:

- Turtle Ledge
- Tea Tree Bay West
- Tea Tree Bay East
- Boorabuggatta Creek Mouth



Tea Tree - West

# Zone Use and Setting.

The sites in this zone function as natural/semi-natural camping and fishing areas. Sites are undeveloped and moderately sensitive as they are located on sandy beaches and exposed ledges. Due to a lack of on site management, environmental impacts are moderate - high.

## **Zone Values**

Visual - scenic views over Depuch Loop

Tourism and Recreation - camping, recreational fishing, boating and water activities

## **Zone Opportunities and Constraints**

Strengths -

boating access, sandy beaches, scenic views

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

semi-natural camping, recreational fishing

Threats -

vehicle damage, campsite proliferation, stock and feral animal intrusion, litter

Recreation			Setting Asse	ssment	Notes	
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			Access for 4WD vehicles and limited 2WD access
Site modification		<b>√</b>				Undeveloped campsite, no facilities provided
Social interaction		1				Up to three group bookings allowed per site
Recreation experiences	10		1			Isolation and infrequent contact with other visitors
Self reliance			1			Visitors are vehicle dependent
Visitor management		1				No on-site modifications made by management, bookings required

## Site Assessments

#### Turtle Ledge

This site is located on the west Boorabuggatta Peninsula coastline approximately 1 kilometre west of the Top Boorabuggatta Well. It is a small fishing area on a rocky limestone ledge overlooking Depuch Loop. There is little protection from strong winds which are eroding exposed sand foreshore. Vegetation is characterised by low shrubs and ground covers.

#### Level of Impact - Moderate

- moderate removal of ground cover vegetation and/or disturbance to shrubs due to collection of firewood and inappropriate vehicles access
- feral and/or grazing animals are significantly impacting on the sites natural regeneration
- some litter is present

## Site Sensitivity - Moderate

- small site with impacts occurring on the sandy foreshore
- vegetation disturbance will increase if the area evolves into a campsite and vehicles are not restricted to road edge.

## Tea Tree Bay - West

This site is located on the west Boorabuggatta Peninsula coastline approximately 1 kilometre north of the Top Boorabuggatta Well. It forms the western part of Tea Tree Bay and is defined by a rock headland in the west and a rock outcrop in the east. Camping occurs on the sand beach, within the immediate foreshore and near the headland which provides protection for campers from the elements. Vegetation is characterised by low shrubs, tea trees and ground covers..

#### Level of Impact - High

- major removal of ground cover vegetation and/or major disturbance to shrubs due to campsite proliferation, collection of firewood, vehicle damage, and intrusion of feral and/or grazing animals
- feral and/or grazing animals are significantly impacting on the sites natural regeneration
- considerable amounts of litter present

## Site Sensitivity - Moderate

- linear site with impacts concentrated to the beach and immediate foreshore
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

#### Tea Tree Bay - East

This camping area forms the eastern section of Tea Tree Bay. It is defined by limestone rock outcrops to the east and to the west. Camping and other activities occur primarily in the west due to ease of access. Vegetation consists of low shrubs, tea trees and ground covers.

## Level of Impact - Moderate

- moderate removal of ground cover vegetation and/or disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- feral and/or grazing animals are significantly impacting on the sites natural regeneration
- some litter present

#### Site Sensitivity - Moderate

- linear site with impacts concentrated to the beach and immediate foreshore
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals.

## Boorabuggatta Creek Mouth

This site is located on the western bank at the mouth of Burraguggatta Creek. It is a small fishing and camping area located on a rocky limestone outcrop jutting into Depuch Loop. As there is little protection from strong winds camping is not popular. Vegetation is characterised by sparse shrubs and ground covers

#### Level of Impact - Low

- minor removal of ground cover vegetation and/or limited disturbance to shrubs campsite collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- some litter present

## Site Sensitivity - Moderate

- · small site with impacts concentrated to the beach
- vegetation disturbance will increase if the area is not managed as a day use area and vehicle use restricted.

## Desired Outcomes and Future Use.

In order to protect the zones environment and provide for a diversity in recreation experiences, no development or increase in use should occur at the sites. The sites should remain undeveloped with limited on-site modifications. Access for 4WD vehicles should be maintained at existing levels. Campers will be isolated with very few support services available and only infrequent contact with other visitors.

## Desired setting and implications

Semi Natural.

A semi-natural setting requires an increase in the current level of on-site management, site constraints and regulations (for example, removing litter, ranger patrols and provision of interpretive material). Minor site modifications for essential management purposes are necessary (for example, informal site definition).

## Prime Management Intent

## Camping (Tea Tree Bay - West, Tea Tree Bay - East )

Firewood, campsite identification signs and toilets will be required, no other facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, boating, water activities), generators are permitted, however domestic animals are not allowed.

## Day Use (Turtle Ledge, Boorabuggatta Creek Mouth)

No camping is to be permitted. No identification signs or facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, picnicking, water activities).

## Recommended Number of Visitors and Groups

Two groups at Tea Tree Bay - East and West consisting of up to 8 persons.

## Suggested Management Actions

## Camping Sites (Tea Tree Bay - West, Tea Tree Bay - East)

- consolidate vehicle entry/exit points
- provide signage identifying site
- remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- address campsite proliferation by defining camp sites
- provide toilets.

## Day Use Site(Turtle Ledge, Boorabuggatta Creek Mouth)

- provide vehicle parking on road edge at Turtle Ledge to restrict vehicle access to site
- remove rubbish and litter
- address vegetation disturbance or removal by prohibiting fires
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations

# Zone 9. Boorabuggatta Peninsula - North East Coast Zone.

# General Description.

This zone comprises the north eastern coastline of Boorabuggatta Peninsula from Boorabuggatta Creek in the north to Nanna's Beach in the south. 4WD vehicle access is provided from Useless Loop Road to Giraud Point, further to the west of Giraud Point is only accessible via the beach. The coastline features numerous limestone headlands, steep sand dunes and sandy beaches. Vegetation is characterised by low coastal shrubs and ground covers. The sites assessed within this zone are:

- Giraud Point
- Spit Beach
- Double Beach
- Nanna's Beach



Double Beach

# Zone Use and Setting.

The four sites in this zone functions as natural/semi-natural camping areas. Due to the length of access visitor numbers are small and environmental impacts are generally low with degradation mainly caused by feral animals. Beaches and sand dunes are relatively undisturbed, the sites are highly sensitive.

## **Zone Values**

Visual - scenic views over Freycinet Estuary

Tourism and Recreation - recreational fishing, water activities, nature observation

## Zone Opportunities and Constraints

Strengths -

scenic views, undisturbed flora and fauna

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

natural camping, boat based camping, recreational fishing

Threats -

erosion, vehicle damage, campsite proliferation, further feral animal intrusion, litter

Recreation			Setting Asses	ssment		Notes
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			4WD access only
Site modification		1				Undeveloped campsites, no facilities provided
Social interaction		1				One group booking per site
Recreation experiences		1				Isolation and very infrequent contact with other visitors
Self reliance			1			Visitors are vehicle dependent
Visitor management		1				No modifications made by management, bookings required

#### Site Assessments

#### **Giraud Point**

Beach camping area located at the northern tip of Booraguggatta Peninsula. The site includes a small, sheltered bay to the east of the headland and the sandy beach at the tip of the point. Vegetation is characterised by low shrubs and wattles and the headland is sparsely vegetated.

Level	of	Im	pact	-	Low
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- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to intrusion of feral and/or grazing animals
- some litter present

#### Site Sensitivity - High

- linear site with impacts occurring at the beach
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals.

### Spit Beach

This site is a beach camping area located approximately 1 kilometre south of Giraud Point on the eastern coastline of Booraguggatta Peninsula. Spit beach is prograding and is defined by rock outcrops in the north and south. Vegetation is characterised by shrubs, wattles and low ground covers.

#### Level of Impact - Low

- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to intrusion of feral and/or grazing animals
- some litter present

#### Site Sensitivity - High

- linear site with impacts occurring at the beach
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals.

#### **Double Beach**

This site comprises two small, sandy bays defined by rock outcrops approximately 2 kilometres south of Giraud Point on the eastern coastline of Boorabuggatta Peninsula. Sand dunes adjoin the beach to the west and vegetation is characterised by shrubs and ground covers.

#### Level of Impact - Low

- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to intrusion of feral and/or grazing animals
- some litter present

#### Site Sensitivity - High

- small, linear site with impacts occurring at the beach
- coastal sand dunes are susceptible to erosion
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals.

#### Nanna's Beach

This site is a beach camping area located on the eastern coastline of Boorabuggatta Peninsula approximately 3.5 kilometres south of Giraud Point. It is a long open beach defined by a sand dune and rock headland in the north and a limestone shelf in the south. Camping occurs primarily at the headland which provides some protection. Vegetation is characterised by low shrubs, wattles and ground covers.

#### Level of Impact - Low

- minor erosion caused by people walking on dunes
- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- · some litter at camps, fire rings present

#### Site Sensitivity - High

- linear site with impacts occurring at the beach and headlands particularly in the north
- coastal sand dunes are susceptible to erosion and further damage
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

# Desired Outcomes and Future Use.

In providing for a diversity of recreation and tourism opportunities, as well as protecting the environment, the four sites should be managed as natural camping areas. A natural setting will help protect the sensitive coastal environment by stopping vehicle induced vegetation disturbance and erosion. . Campsites should remain undeveloped with limited on-site modifications and only rough walking tracks provided. Contact between visitors should be very infrequent.

# Desired setting and implications

Natural.

To achieve a natural setting vehicles would be prohibited and a small parking area established at Shell Beach. An informal, scenic coastal walking track linking the four sites also needs to be sensitively placed to minimise impacts and provide a variety of views and experiences. A natural setting will require an increase levels of management input (for example, providing interpretive material and infrequent ranger patrols) and minor on-site modifications for essential management purposes (for example, informal site definition).

It is recognised that there is existing use of these sites by regular visitors. It is envisaged that current regular users could continue to have vehicular access until they no longer wish to have availability to the sites.

# Prime Management Intent

Campsite identification signs will be required, no other facilities to be provided. Preferred uses are those compatible to the sites natural setting (eg fishing, nature observation, water activities). The use of motorised vehicles is prohibited as are horses and domestic animals.

# Recommended Number of Visitors and Groups

One group per site consisting of up to 8 persons.

# Suggested Management Actions

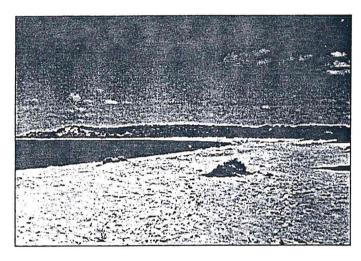
- identify suitable track and campsite locations taking into consideration viewing points, environmental conditions and safety issues
- provide vehicle parking areas at appropriate locations
- close existing vehicle track and erect barriers
- provide signage identifying site
- address vegetation disturbance or removal by limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- define camp sites to prevent campsite proliferation
- identify and inform regular users of access changes and their rights

# Zone 10. Boorabuggatta Peninsula - East Coast Zone.

# General Description.

This zone is located on the eastern coastline of Boorabuggatta Peninsula from Nanna's Beach in the north to Three Bays in the south. A 4WD track provides access from Useless Loop Road. The coastline consists of a series of limestone headlands jutting into Freycinet Estuary and white sandy beaches. Vegetation is characterised by low shrubs and ground covers. The sites assessed within this zone are:

- Shell Beach
- Three Bays North
- Three Bays



Three Bays

# Zone Use and Setting.

The three sites in this zone function as natural/semi-natural camping areas used primarily for fishing and boating purposes. The undeveloped sites are moderately - highly sensitive due to the susceptibility of beaches to damage and sand dunes to erosion. Environmental impacts are generally low, however they are moderate at Shell Beach due to greater visitation.

#### Zone Values

Visual - scenic views over Freycinet Estuary

Tourism and Recreation - camping, recreational fishing, boating and water activities

#### **Zone Opportunities and Constraints**

Strengths -

boating access, sandy beaches, scenic views

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

semi-natural camping, recreational fishing, water activities

Threats -

erosion, vehicle damage, campsite proliferation, feral animal intrusion, litter

Recreation			Setting Asses	sment	Notes	
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			Access for 4WD vehicles and limited 2WD access
Site modification		1				Undeveloped campsite, no facilities provided
Social interaction		1				Up to three group booking allowed at some sites
Recreation experiences			1			Isolation and infrequent contact with other visitors
Self reliance			1			Visitors are vehicle dependent
Visitor management		1				No on-site modifications made by management, bookings required

#### Site Assessments

#### Shell Reach

Shell Beach is located directly west of South Guano Island approximately 9 kilometres south of Giraud Point. It is a long open beach defined by a rock outcrop to the north and a limestone headland to the south. Camping occurs on the beach and foreshore with many sites clustered at the base of the southern headland which offers protection from the elements and a large open camp area near the northern rock outcrop. A natural boat launch area adjoins the headland. Vegetation is characterised by low shrubs and ground covers.

#### Level of Impact - Moderate

- moderate removal of ground cover vegetation and/or disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- some vandalism and graffiti present at small cave on headland
- some litter at camps, fire rings present

#### Site Sensitivity - Moderate

- linear site with impacts occurring at the beach and headlands particularly in the north
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

#### Three Bays - North

This site is located approximately 1 kilometre south of Shell Beach on the coastline. It is enclosed by two limestone headlands to the north and south and sand dunes to the west. Camping occurs on the beach and within the dunes which provide protection from the elements. Vegetation is characterised by low shrubs and ground covers.

#### Level of Impact - Low

- moderate erosion of sand dunes caused by walking and vehicles driving on the dunes
- minor removal of ground cover vegetation and/or removal of shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- some litter present

### Site Sensitivity - High

- small, confined linear site with impacts concentrated to the beach and dunes
- coastal sand dunes are susceptible to erosion and further damage
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

#### Three Bays

Three Bays is the southern most camping area on the east coast of the Boorabuggatta Peninsula. It is a long open beach defined to the north by a limestone rock ledge and to the south by a large sand dune. Due to the protection offered by the headland, camping occurs primarily in the south. Vegetation is characterised by low shrubs and ground covers.

#### Level of Impact - Low

 minor erosion caused by people walking on dunes minor removal of ground cover vegetation and/or limited disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals

### Site Sensitivity - High

- linear site with impacts concentrated to the beach and foreshore
- coastal sand dunes are susceptible to erosion and further damage
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

# Desired Outcomes and Future Use.

Due to the susceptibility of the sand dunes to erosion no development or increase in use should occur at the sites. The campsites should remain undeveloped with limited on-site modifications. Access for vehicles should be maintained to existing levels. Campers will be isolated with very few support services available and only infrequent contact with other visitors.

### Desired setting and implications

Semi Natural.

A semi-natural setting requires an increase in the current level of on-site management, site constraints and regulations (for example, ranger patrols and provision of interpretive material). Minor on-site modifications for essential management purposes are necessary (for example, informal site definition).

#### Prime Management Intent

Motorised Camping (applicable to all sites).

Firewood, campsite identification signs and toilets will be required, no other facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, boating, water activities), generators are permitted, however domestic animals are not allowed.

## Recommended Number of Visitors and Groups

Shell Beach - Two groups per site consisting of up to 8 persons Three Bays - North and Three Bays - One group per site consisting of up to 8 persons

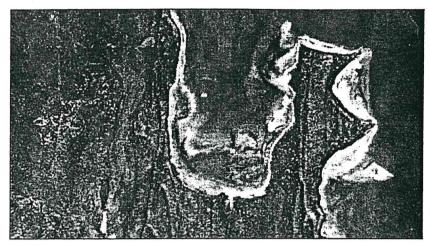
#### **Suggested Management Actions**

- consolidate vehicle entry/exit points
- provide signage identifying site
- remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- address campsite proliferation by defining camp sites
- provide toilets.

# Zone 11. Disappointment Loop Zone.

# General Description.

This zone comprises the Disappointment Loop coastline from Three Bays in the west to Keeny Campsite in the east. No camping or day use areas exist within this zone and no vehicle or walking access is provided. Disappointment Loop is a shallow bay which, at low tide, loses significant amounts of water. Vegetation includes low shrubs and ground covers, and saline coastal flats are located in the south of the Bay at Baba Bight. No sites were assessed within this zone.



Air photo of
Disappointment Loop

# Zone Use and Setting.

This zone functions as a remote environment with limited boating and fishing activity. Currently, the area is accessible only from Freycinet Estuary and there are no land based tourism or recreation uses or facilities. Visitor impacts are minimal with environmental degradation caused by grazing/feral animals. The zone is highly sensitive due to its undisturbed nature and hyper saline areas.

#### **Zone Values**

Tourism and Recreation - limited boating and fishing activities

#### **Zone Opportunities and Constraints**

Strengths -

scenic views over Disappointment Loop and Freycinet Estuary

Weaknesses -

exposure to strong winds, difficulty in provision of water and services, poor boating

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Opportunities -

remote walking and camping, recreational fishing

Threats -

further intrusion of feral animals

Recreation			Setting Asses	sment	-	Notes
Opportunity Spectrum criteria	remote	natural	Semi Natural	semi developed	developed	
Access	1					No vehicle or walking tracks exist
Site modification	1					Campsites do not exist, no facilities provided
Social interaction	1					Little or no visitation occurs
Recreation experiences	1					Little or no contact with other visitors
Self reliance	1					Visitors self sufficient
Visitor management	1					No on site modifications made by management

#### Zone Assessment

Level of Impact - Low

 removal of ground cover vegetation and/or disturbance to shrubs due to intrusion of feral and/or grazing animals not assessed

Site Sensitivity - High

- open linear zone
- sensitive shallow coastal flats are susceptible to damage
- vegetation is likely to be further disturbed by further intrusion of feral and/or grazing animals

## Desired Outcomes and Future Use.

In order to provide a full range of camping opportunities, remote camping zones need to be identified. A remote setting (which severely restricts access) helps protect the sensitive coastal environment by minimising future visitor numbers and impacts. In a remote zone, tracks and campsites do not exist and walking tracks are undefined. Campers are isolated with no support services available and no contact with other visitors.

## Desired setting and implications

Remote.

As the zone is currently functioning as a remote environment no on-site modifications are necessary. However, for safety reasons and as a measure to maintain the zones remote setting, interpretive material and a "check in - check out" booking system should be provided at the station.

## Prime Management Intent

Camping

No sites or tracks to be provided. Preferred uses are those compatible to the sites remote setting (eg fishing, nature observation, water activities). The use of motorised vehicles within the zone is prohibited. Horses and domestic animals are not permitted.

#### Recommended Number of Visitors and Groups

One group within the zone consisting of up to 8 persons.

#### Suggested Management Actions

- address vegetation disturbance or removal by limiting the intrusion of feral animals
- provide interpretive, safety material and visitor control upon entry to station eg site maps with regulations etc.
- establish a "check in check out" booking procedure for safety purposes

# Zone 12. Prickly Point - West Coast Zone.

# General Description.

This zone is located on the western coastline of Prickly Point from Tent Landing in the north to Baba Bight in the south. A 4WD track provides access from Useless Loop Road. The coastline consists of saline coastal flats, rock ledges and sandy beaches. Vegetation is sparse and characterised by low shrubs and ground covers. The sites assessed within this zone are:

- Keeny Campsite
- · North Keeny Campsite



Keeny Campsite

# Zone Use and Setting.

The two sites in this zone function as natural/semi-natural camping areas. Keeny Campsite is used by Keeny College as a camping and retreat area, while North Keeny Campsite is used primarily for fishing and camping purposes. The undeveloped sites are moderately - highly sensitive due to the susceptibility of beaches to damage and sand dunes to erosion. Environmental impacts are low as visitor numbers are small.

#### **Zone Values**

Visual - scenic views over Disappointment Loop Tourism and Recreation - camping, recreational fishing and water activities

# Zone Opportunities and Constraints

Strengths -

sandy beaches, scenic views

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

semi-natural camping, recreational fishing, water activities

Threats -

erosion, vehicle damage, campsite proliferation, feral animal intrusion, litter

Recreation			Setting Asses	ssment		Notes
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			Access for 4WD vehicles and limited 2WD access
Site modification		1				Undeveloped campsite, no facilities provided
Social interaction		1			0	One group booking allowed per site
Recreation experiences			1			Isolation and infrequent contact with other visitors
Self reliance			1			Visitors are vehicle dependent
Visitor management		1				No on-site modifications made by management, bookings required

#### Site Assessments

#### Keeny Campsite

This site is a beach camping area located on the western coastline of Prickly Point at Baba Bight. It is a small beach defined by a rock ledge and sand dune in the north and a rock outcrop in the south. Camping occurs on the beach and foreshore. Vegetation is characterised by low shrubs, wattles and ground covers.

#### Level of Impact - Low

- minor erosion caused by people walking on dunes
- minor removal of ground cover vegetation and/or limited disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals

#### Site Sensitivity - High

- small, linear site with impacts occurring at the beach and foreshore
- coastal sand dunes are susceptible to erosion and further damage
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

#### North Keeny Campsite

North Keeny Campsite is located on the west coat of Prickly Point approximately 1 kilometre north of Keeny Campsite. The campsite is on a limestone rock outcrop adjoining Disappointment Loop. Camping occurs on the foreshore with tea trees offering campers protection from the elements. Vegetation is characterised by low shrubs, tea trees and ground covers.

#### Level of Impact - Low

- minor removal of ground cover vegetation and/or minor disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the site and intrusion of feral and/or grazing animals
- some litter present

## Site Sensitivity - Moderate

- · small site with impacts occurring on the foreshore
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

## Desired Outcomes and Future Use.

Due to the susceptibility of the sand dunes and beaches to damage no development or increase in use should occur at the sites. The campsites should remain undeveloped with limited on-site modifications. Access for vehicles should be maintained to existing levels. Campers should be isolated with very few support services available and only infrequent contact with other visitors.

### Desired setting and implications

Semi Natural.

A semi-natural setting requires an increase in the current level of on-site management, site constraints and regulations (for example, ranger patrols and provision of interpretive material). Minor on-site modifications for essential management purposes are necessary (for example, informal site definition).

## Prime Management Intent

Camping (applicable to both sites).

Firewood, toilets and campsite identification signs will be required, no other facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, boating, water activities), generators are permitted, however domestic animals are not allowed.

#### Recommended Number of Visitors and Groups

One group per site consisting of up to 8 persons.

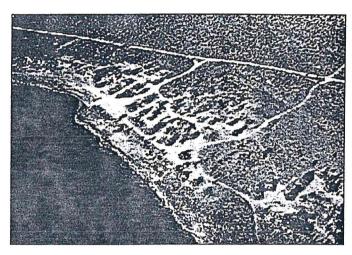
## Suggested Management Actions

- consolidate vehicle entry/exit points
- provide signage identifying site
- remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- address campsite proliferation by defining camp sites
- provide toilets.

# **Zone 13. Tent Landing**

# General Description.

Tent Landing is a large informal campsite located on the west coast of Prickle Point overlooking Disappointment Loop. An all weather 4WD trail provides access from Tamala Station. The coastline adjoining the site consists of limestone rock which forms a shelf at the waters edge. Vegetation, which is characterised by coastal shrubs (wattles and tea trees) and low ground covers, is highly disturbed in areas due to camping impacts.



Tent Landing

# Zone Use and Setting.

This zone functions as a semi-natural/semi-developed campsite. It is the most popular camping site of the two stations due to an excellent natural boat launching area. At peak times up to 8-10 groups (approximately 30-40 people) camp at the site. It is the only site at which bore water is available and some visitors have been known to stay up to 3 months. Visitor impacts are high with large areas of vegetation cleared for campsites. Feral animals are impacting upon the natural regeneration of the site.

#### Zone Values

Visual - scenic views over Disappointment Loop

Tourism and Recreation - semi-developed camping, boating, recreational fishing and water activities

## **Zone Opportunities and Constraints**

Strengths -

boating access, scenic views, bore water

Weaknesses -

exposure to strong winds, difficulty in provision of services

Opportunities -

semi-developed camping, recreational fishing, water activities

Threats -

further vegetation clearance, vehicle damage, campsite proliferation, feral animal

intrusion, litter, toileting

Recreation			Setting Asses	sment	Notes	
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			All weather access for 4WD vehicles and limited 2WD access
Site modification			1			Undeveloped campsite, only bore water supplied
Social interaction				1		Up to 8 groups allowed at site
Recreation experiences				1		Frequent contact with other visitors is accepted
Self reliance			1			Visitors are vehicle dependent
Visitor management		1				No on-site modifications made by management, bookings required

#### Zone Assessment

Level of Impact - High

- ground compaction caused by intensive camping and compaction by heavy vehicles and caravans.
- major removal of ground cover vegetation and/or major disturbance to shrubs due to campsite proliferation, collection of firewood, vehicle damage, and intrusion of feral and/or grazing animals
- moderate amounts of litter present
- high levels of crowding and noise at peak times due to large visitor numbers

Site Sensitivity - Low

- limestone rock shelf at beach protects foreshore from erosion
- no sand dunes are present
- significant visitor impacts have already occurred at the site
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

7.60

## Desired Outcomes and Future Use.

Tent Landing is a suitable site for relatively intense camping due to low site sensitivity and the need to provide a diversity of experiences. Tent Landing is not currently being managed sustainably as the level of visitor impact is unacceptably high. Due its popularity and high impacts the site requires a significant increase in current management input and would be better managed as a semi developed site. A semi developed site has facilities to service recreational use and protect the environment. It allows 4WD and limited 2WD access. Frequent contact between visitor groups is accepted.

### Desired setting and implications

Semi developed.

To achieve a semi developed setting requires a significant increase in both visitor management and onsite modifications. Visitors need to be made aware of site regulations and constraints via interpretive material and ranger patrols. The provision of facilities to service recreational use and protect the environment is vital, such facilities may include toilets, formal site definition, and parking areas.

#### Prime Management Intent

Camping.

Upgrade the site by providing camping facilities and services (eg toilets, drinking water, formal site definition), and increasing visitor management (eg providing managerial signage, interpretive material and ranger patrols). Suitable uses would include recreational fishing, water activities and boating activities. The site would cater for a small number of caravans. Generators would be permitted, however horses and domestic animals would be prohibited.

The prime management intent would provide an opportunity for visitors seeking a camping experience with improved facilities and frequent visitor contact. Tent Landing may be suited to greater development in the future.

#### Recommended Number of Visitors and Groups

Twelve groups consisting of up to 8 persons

#### Suggested Management Actions

- remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- · rotate camping sites to allow them to recover after heavy use
- address campsite proliferation by defining camp sites.

Note: a site concept plan for Tent Landing is provided on page 35 of this report, it addresses:

- additional camping facilities eg toilets
- consolidation of vehicle entry/exit points
- vehicle and trailer parking areas
- appropriate locations of signage identifying sites

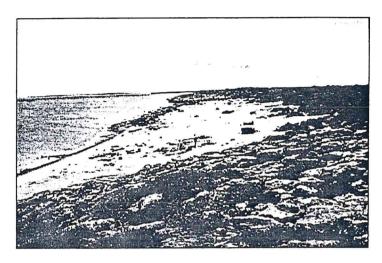
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# Zone 14. Baba Head Zone.

# General Description.

This zone is located on the north western coastline of Prickly Point from Camp 7 in the north to Tent Landing in the south. A 4WD track provides access from Useless Loop Road. The coastline consists of limestone rock ledges, rock outcrops and sandy beaches. Vegetation is sparse and characterised by low shrubs and ground covers. The sites assessed within this zone are:

- Snapper Rocks
- Snapper Bay
- Baba Head



Baba Head

# Zone Use and Setting.

The three sites in this zone function as natural/semi-natural camping areas used for fishing and boating purposes. The undeveloped sites are moderately sensitive as they are located on sandy beaches, rock ledges and rock outcrops. Although visitor numbers are small, due to a lack of on site management, environmental impacts are moderate - high.

## Zone Values

Visual - scenic views over Disappointment Loop and Freycinet Estuary Tourism and Recreation - camping, recreational fishing, boating and water activities

## **Zone Opportunities and Constraints**

Strengths -

Threats -

sandy beaches, sheltered inlets, scenic views, boating access (Baba Head)

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

semi-natural camping, recreational fishing, boating and water activities erosion, vehicle damage, campsite proliferation, feral animal intrusion, litter

Recreation			Setting Asses	ssment	Notes	
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			Access for 4WD vehicles and limited 2WD access
Site modification		1				Undeveloped campsite, no facilities provided
Social interaction		1				Up to 2 booking allowed at Baba Head
Recreation experiences			1			Isolation and infrequent contact with other visitors
Seif reliance			1			Visitors are vehicle dependent
Visitor management		1				No on-site modifications made by management, bookings required

#### Site Assessments

#### Snapper Rocks

This exposed beach camping area is located on the western coastline of Prickly Point approximately 500m north of Tent Landing. The campsite is on a small limestone rock outcrop adjoining Disappointment Loop. Vegetation is sparse and characterised by low ground covers.

## Level of Impact - Moderate

 moderate removal of ground cover vegetation due to campsite proliferation, collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals

### Site Sensitivity - Moderate

- · small site with impacts occurring at the foreshore
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

#### **Snapper Bay**

Snapper Bay is located on the west coast of Prickly Point approximately 1 kilometre north of Tent Landing. Camping is causing concentrated impacts on the foreshore. Vegetation is sparse and characterised by low shrubs and ground covers.

#### Level of Impact - Moderate

- moderate removal of ground cover vegetation and/or minor disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the site and intrusion of feral and/or grazing animals
- considerable amount of litter present

#### Site Sensitivity - Moderate

- small site with impacts occurring on the foreshore
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

#### Baba Head

This site forms the north west tip of Prickly Point. It is an enclosed beach defined by a large headland to the north and west and a rock outcrop to the south. Camping occurs on the sandy beach and immediate foreshore with many sites clustered at the base of the northern headland which offers protection from the elements. Major vegetation disturbance is evident on the headland due to vehicle use. Vegetation is sparse and characterised by low shrubs and ground covers.

### Level of Impact - High

- major removal of ground cover vegetation and/or major disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the site and intrusion of feral and/or grazing animals
- considerable amount of litter present

## Site Sensitivity - Moderate

- linear site with impacts occurring on the beach, foreshore and headland
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

# Desired Outcomes and Future Use.

In order to protect the environment of the zone and maintain a semi-natural camping and day use experience, no development or increase in use should occur at the sites. The campsites should remain undeveloped with limited on-site modifications. Access for vehicles should be maintained to existing levels. Campers will be isolated with very few support services available and only infrequent contact with other visitors.

## Desired setting and implications

#### Semi Natural.

A semi-natural setting requires an increase in the current level of on-site management, site constraints and regulations (for example, ranger patrols and provision of interpretive material). Minor on-site modifications for essential management purposes are necessary (for example, informal site definition).

### Prime Management Intent

# Camping (Snapper Rocks and Baba Head)

Firewood, toilets and campsite identification signs will be required, no other facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, boating, water activities), generators are permitted, however domestic animals are not allowed.

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#### Day Use (Snapper Bay)

No camping is permitted. No management or identification signs and no facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, picnicking, water activities). Provide vehicle parking with walking access only to the site.

### Recommended Number of Visitors and Groups

Snapper Rocks - One group consisting of up to 8 persons. Baba Head - Two groups consisting of up to 8 persons per group.

### Suggested Management Actions

## Camping Sites (Snapper Rocks and Baba Head)

- consolidate vehicle entry/exit points
- · provide signage identifying site
- remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- address campsite proliferation by defining camp sites
- provide toilets.

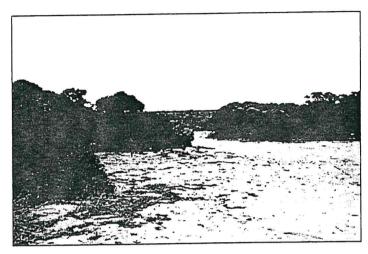
## Day Use Site (Snapper Bay)

- provide vehicle parking on road edge (restrict vehicle access to site)
- remove rubbish
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations.

# Zone 15. Camp Seven

# General Description.

Camp Seven is a beach camping area located on the north coast of Prickle Point overlooking Freycinet Estuary. The coastline at Camp Seven forms a shallow bay which, at low tide, loses significant amounts of water. A 4WD trail provides access from Useless Loop Road. Vegetation, which is characterised by coastal shrubs (wattles and tea trees) and low ground covers, is highly disturbed in areas due to camping impacts.



Camp Seven

# Zone Use and Setting.

This zone functions primarily as a semi-natural campsite used for fishing and boating purposes. The campsite is undeveloped with the beach and foreshore moderately sensitive to impacts. Overall visitor impacts are high with large areas of vegetation cleared for campsites and feral animals are reducing the natural regeneration of the site. The Tea Tree vegetation is particularly subject to disturbance and difficult to revegetate

#### **Zone Values**

Visual - scenic views over Disappointment Loop

Tourism and Recreation - semi-natural camping, boating, recreational fishing and water activities

# Zone Opportunities and Constraints

Strengths -

sandy beach, scenic views

Weaknesses -

exposure to strong winds, difficulty in provision of services

Opportunities -

low key accommodation or semi developed camping, recreational fishing, water

activities

Threats -

further vegetation clearance, vehicle damage, campsite proliferation, stock and feral

animal intrusion, litter, loss of Tea Tree vegetation

Recreation			Setting Asse	ssment	Notes	
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			All weather access for 4WD vehicles and limited 2WD access
Site modification			1			Undeveloped campsite, no facilities provided
Social interaction			1		31	2-3 group bookings allowed at site
Recreation experiences			1			Isolation and infrequent contact with other visitors
Self reliance			1			Visitors are vehicle dependent
VIsitor management		1				No on-site modifications made by management, bookings required

#### Zone Assessment

Level of Impact - High

- minor damage of vehicle routes caused by heavy vehicles and caravans.
- major removal of ground cover vegetation and/or major disturbance to shrubs due to campsite proliferation, collection of firewood, vehicle damage, and intrusion of feral and/or grazing animals
- · minor amounts of litter present

Site Sensitivity - Moderate

- linear site with impacts concentrated to the beach and immediate foreshore
- · low sand dunes present
- significant visitor impacts have already occurred at the site
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral/grazing animals

## Desired Outcomes and Future Use.

Similar to Tent Landing, Camp Seven is currently not being managed sustainably. Due to the unacceptable high levels of impacts the site requires a significant increase in management input and would be better managed as a semi developed site. A semi developed site has facilities to service recreational use and protect the environment. It provides 4WD access and limited 2WD access from Useless Loop Road and allows for frequent contact between visitor groups.

#### Desired setting and implications

Semi developed.

To achieve a semi developed setting requires a significant increase in both visitor management and onsite modifications. Visitors need to be made aware of site regulations and constraints via interpretive material and ranger patrols. The provision of facilities to service recreational use and protect the environment is vital, such facilities may include toilets, bore water, formal site definition, parking areas and low key built forms.

#### Prime Management Intent

Two management options have been identified for Camp Seven:

Option 1. Upgrade the site by providing camping facilities and services (eg toilets, bore water, formal site definition), and increasing visitor management (eg providing managerial signage, interpretive material and ranger patrols). Suitable uses would include recreational fishing, water activities and boating activities. Generators would be permitted, however horses and domestic animals would be prohibited.

Benefits - visitors seeking a camping experience can stay at Camp Seven with improved facilities and smaller visitor numbers than current usage. The site would be better managed reducing detrimental impacts on the environment.

Disbenefits - the threat of further vegetation clearance, vehicle damage, campsite proliferation, and litter still exist. Current users may no longer visit the site due to management changes.

## Recommended Number of Visitors and Groups

Two groups consisting of up to 8 persons.

#### **Suggested Management Actions**

- remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals by exclusion fencing
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- rotate camping sites to allow them to recover after heavy use
- · address campsite proliferation by defining camp sites
- provide toilets.

Tamala - Carrarang Recreation and Tourism Plan Environs Consulting Pty Ltd Option 2. Develop low key built accommodation in the form of safari tents or self contained huts and increase visitor management (eg providing managerial signage, interpretive material and cleaning/maintenance). Huts would be spaced approximately 50 metres apart. The total number will depend on the length of beach, but a maximum of three is recommended to maintain the zones seminatural setting. Alternatively a cluster of safari tents in one location would cater for tour parties and leave the remainder of the beach undisturbed. Suitable uses would include recreational fishing, water activities and boating activities. Horses and domestic animals would be prohibited.

Benefits - low key built accommodation would provide a different experience than currently provided for at Tamala/Carrarang and would appeal to a different visitor group. Smaller visitor numbers, defined site use and better management would reduce detrimental impacts on the environment. The threat of further vegetation clearance, vehicle damage, campsite proliferation, and litter would be reduced. There has been no assessment of demand for this style of accommodation.

Disbenefits - current users may no longer visit the site due to changes.

#### Recommended Number of Visitors and Groups

Three accommodation areas each designed for up to 8 persons.

### **Suggested Management Actions**

- · rezone to legally permit accommodation
- provide environmentally sensitive low key accommodation with toilet facilities (subject to Shire approval)
- provide signage identifying site
- address vegetation disturbance or removal by: providing firewood, reducing inappropriate vehicle
  use and limiting the intrusion of feral and/or grazing animals by exclusion fencing
- · provide interpretive material upon entry to station eg site maps with regulations
- · remove rubbish and litter
- provide interpretive material upon entry to station eg site maps with regulations

Note: a site concept plan for Camp Seven is provided on page 37 of this report, it addresses:

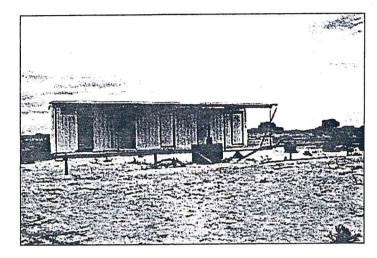
- accommodation and associated facilities
- consolidation of vehicle entry/exit points
- vehicle parking areas
- appropriate locations of signage identifying sites

# Zone 16. Prickly Point - Central Coast Zone.

# General Description.

This zone is located on the northern coastline of Prickly Point from Camp 7 in the west to Pickett Beach in the east. A 4WD track provides access from Useless Loop Road. The coastline consists of saline coastal flats, rock ledges and sandy beaches. Vegetation is sparse and characterised by low shrubs and ground covers. The sites assessed within this zone are:

- The Huts
- Picket Beach



The Huts

# Zone Use and Setting.

The 2 sites in this zone function as natural/semi-natural camping areas used primarily for fishing and boating purposes. Pickett Beach is undeveloped. The Huts contains a single transportable building providing 5 small rooms. The sites are moderately sensitive as they are located on sandy beaches which are susceptible to damage. Environmental impacts are moderate - low as visitor numbers are small.

#### Zone Values

Visual - scenic views over Freycinet Estuary

Tourism and Recreation - camping, recreational fishing, boating and water activities

#### **Zone Opportunities and Constraints**

Strengths -

sandy beaches, sheltered inlets, scenic views

Weaknesses -

exposure to strong winds, difficulty in provision of water and services

Opportunities -

semi-natural camping, recreational fishing, boating, water activities

Threats -

erosion, vehicle damage, campsite proliferation, feral animal intrusion, litter

Recreation			Setting Asses	ssment	Notes	
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			Access for 4WD vehicles and limited 2WD access
Site modification				✓		Low key built accommodation at     The Huts
Social interaction		1				Two group booking allowed at The Huts
Recreation experiences			1			Isolation and infrequent contact with other visitors
Self reliance			1			Visitors are vehicle dependent
Visitor management		1				Minimal on-site modifications made by management, bookings required

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#### Site Assessments

#### The Huts

This site, which offers donga style accommodation, is located on the northern coastline of Prickly Point approximately 3 kilometres east of Baba Head. It is a small beach defined by two rock headlands to the east and west which are sparsely vegetated. The accommodation has been recently repaired but is not designed to blend with the environment. Vegetation is characterised by low shrubs, wattles and ground covers.

Level of Impact - Moderate

- moderate removal of ground cover vegetation and/or moderate disturbance to shrubs due to collection of firewood, 4WD vehicles driving on the beach and intrusion of feral and/or grazing animals
- some litter present

Site Sensitivity - Moderate

- small, linear site with impacts occurring at the beach, foreshore, and huts
- vegetation is likely to be further disturbed by firewood collection, inappropriate vehicle use and intrusion of feral animals

#### Picket Beach

Picket Beach is located on the northern coastline of Prickly Point approximately 1 kilometre east of The Huts. Camping occurs on the beach and foreshore with shrubs offering campers protection from the elements. Vegetation is characterised by low shrubs, tea trees and ground covers.

Level of Impact - Low

 minor removal of ground cover vegetation and/or minor disturbance to shrubs due to campsite proliferation, collection of firewood, 4WD vehicles driving on the site and intrusion of feral and/or grazing animals Site Sensitivity - Moderate

- small site with impacts occurring on the beach and foreshore
- vegetation is likely to be further disturbed by campsite proliferation, firewood collection, inappropriate vehicle use and intrusion of feral animals

#### Desired Outcomes and Future Use.

In order to protect the environment of the zone and maintain a semi-natural camping experience, no development or increase in use should occur at the sites. The campsites should remain with limited on-site modifications. Access for vehicles should be maintained to existing levels. Campers should be isolated with very few support services available and only infrequent contact with other visitors.

#### Desired setting and implications

Semi Natural.

A semi-natural setting requires an increase in the current level of on-site management, site constraints and regulations (for example, ranger patrols and provision of interpretive material). Minor on-site modifications for essential management purposes are necessary (for example, informal site definition at Pickett Beach).

#### Prime Management Intent

Camping (applicable to both sites).

Firewood and campsite identification signs will be required, no other facilities to be provided. Preferred uses are those compatible to the sites semi natural setting (eg fishing, boating, water activities), generators are permitted, however domestic animals are not allowed.

### Recommended Number of Visitors and Groups

One group per site consisting of up to 10 persons.

#### **Suggested Management Actions**

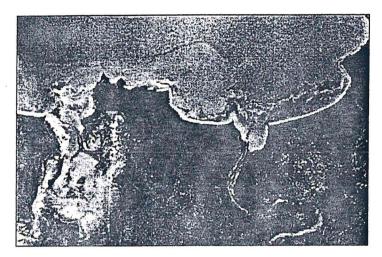
- remove donga after its economic life
- consolidate vehicle entry/exit points
- provide signage identifying site
- remove rubbish and litter
- address vegetation disturbance or removal by: providing firewood, encouraging the use of gas cookers, reducing inappropriate vehicle use and limiting the intrusion of feral and/or grazing animals
- increase the presence of management personnel
- provide interpretive material upon entry to station eg site maps with regulations
- address campsite proliferation by defining camp sites

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# Zone 17. Salutation Coast Zone.

# General Description.

This zone comprises the northern coastline of Prickle Point from Picket Beach in the east to the property boundary of Tamala and Nanga Station in the west. No camping or day use areas exist within this zone and only limited vehicle access is provided. Vegetation includes low shrubs and ground covers, and saline coastal flats are in the east of the zone. No sites were assessed within this zone.



Air photo of Salutation Coast

# Zone Use and Setting.

This zone functions as a remote environment with limited boating and fishing activity. Currently, there is no regular land based tourism or recreation usage, but minor visitation occurs by locals occurs from one access track. Visitor impacts are minimal.

#### **Zone Values**

Tourism and Recreation - limited boating and fishing activities

## Zone Opportunities and Constraints

Strengths -

scenic views

Weaknesses -

exposure to strong winds, difficulty in provision of water and services, poor boating

access

Opportunities -

remote camping, recreational fishing

Threats -

further intrusion of feral animals

Recreation	The said of the	a = 0	Setting Asses	ssment	Notes	
Opportunity Spectrum criteria	remote	natural	semi natural	semi developed	developed	
Access			1			One vehicle tracks exists at the Tamala - Nanga Station boundary
Site modification	1					Campsites do not exist, no facilities provided
Social Interaction	1					Little or no visitation occurs
Recreation experiences	1					Little or no contact with other visitors
Self reliance	1					Visitors are self sufficient
Visitor management	1					No on site modifications made by management

#### Zone Assessment

Level of Impact - Low

 minor removal of ground cover vegetation and/or limited disturbance to shrubs due to intrusion of feral and/or grazing animals Site Sensitivity - High

- · open linear zone
- sensitive shallow coastal flats are susceptible to damage
- vegetation is likely to be further disturbed by further intrusion of feral and/or grazing animals

# Desired Outcomes and Future Use.

In order to provide a full range of camping opportunities, remote camping zones need to be identified. A remote setting (which severely restricts access) helps protect the sensitive coastal environment by minimising future visitor numbers and impacts. In a remote zone, vehicle access and campsites do not exist, while walking tracks are undefined. Campers are isolated with no support services available and no contact with other visitors.

# Desired setting and implications

Remote.

In order for the site to function as a remote environment, visitors are not permitted to drive to the zone. No on-site modifications are necessary, however, for safety reasons and as a measure to maintain the zones remote setting, interpretive material and a "check in - check out" booking system should be provided at the station.

## Prime Management Intent

Camping

No sites or tracks to be provided. Preferred uses are those compatible to the sites remote setting (eg fishing, nature observation, water activities). The use of motorised vehicles within the zone is prohibited. Horses and domestic animals are not permitted.

# Recommended Number of Visitors and Groups

One group within the zone consisting of up to 8 persons.

## Suggested Management Actions

- address vegetation disturbance or removal by limiting the intrusion of feral animals
- provide interpretive and safety material upon entry to station eg site maps with regulations etc.
- establish a "check in check out" booking procedure for safety purposes
- close existing vehicle tracks save for management purposes.

# Appendix 1 PUBLIC CONSULTATION

Project steering group, and people, groups and organisations consulted in the study

Project Steering Group
Richard Hammond, CALM, Como
Sue Hancock, CALM, Geraldton
Bruce and Alison Brown, Tamala Station
Peter Newstead, Carrarang Station
Les Moss, Shire President, Shire of Shark Bay (the Shire of Shark Bay was included on the Steering Group part way through the project).

# Personal interviews with groups and individuals

Shire of Shark Bay. Shire Councilors; Les Moss (President), Alan Biggs, Ron Onions, Bryan Cane and Harold Crawford. Councilors also represent professional fishermen, Tourism Association, pastoralists, business and the World Heritage Committee

Jessie Shankland, charter boat operator, World Heritage Committee

Diane Bellottie, Dianne Drage, Cathy Drage and May Fosser, Yadgala Club

Ted Sears, Nanga Bay Resort

Les Fewster, charter boat operator

Don Breen, Denham restauranteur

Paul Brown, District Manager, CALM, Denham

Tony Miller, Manager Carrarang Station

Ian and Kerry King, Managers Tamala Station

# Telephone interviews

Dean Massey, Manager Monkey Mia Resort

Dave Evans, Shark Bay Tourist Information Centre

Paul Dickenson, Ranger Steep Point

Stephanie Tonkin, WA Tourism Commission Carnarvon

Pastoral Board, Gary Crow

WA Fisheries Department, Andrew Cribb

WA Maritime Museum, Jeremy Green

Aboriginal Affairs Department, Liz Bloor

CSIRO, Jacki Richards

# Summary of Main Points Raised in Stakeholder Consultation

The following points summarise the main issues raised in discussions with the stakeholders

# Environmental sensitivity

- The environment is very fragile and will not sustain intensive development.
- Organisation and formalisation of existing use with low key facilities is appropriate.

There must be control of numbers and location of use.

Current impacts are low but increasing use will increase impacts.

• Existing stations homestead areas are the only areas appropriate for more intensive development as long as it is low key.

• Control of domestic animals is required.

Wind erosion particularly severe in summer and on north south tracks.

Rocky and sandy coastal floor is not easily degraded

# Planning and control

Camping on Carrarang and Tamala is a non conforming use under the Town Planning Scheme.

• Legal issues such as the Caravan and Camping Act must be addressed as well as

access on leasehold and Crown Land.

Presence of management personnel is essential.

Ad hoc camping should be deterred.

Take into account the new Act governing the pastoral industry which: permits current situation of station leaseholders controlling access and charging for camping; considers that tourism should be a supplementary activity to pastoral activity; and if thee are to be high levels of tourism there needs to separate lease arrangements for the tourism industry.

Stations act as first aid post, rescue, education.

Gradual planned development preferred rather than sudden increases in infrastructure.

## Vehicular usage

Unnecessary tracks should be closed.

Tracks should not be allowed to expand in an unplanned manner.

#### Recreation demand

- Access since 1952, camping since 1960's, people paying since 1984, huts disallowed.
- Usage is mostly by the same people who have been coming for many years.

Increasing pressure for new sites.

Boat usage will increase if harbour plans are developed (see also constraints).

Increasing pressure if access improved.

- People want a remote experience, not a caravan park experience.
- There will be community concern if there is erosion of traditional use.
- More resorts are detrimental to the area.

Busiest in winter.

Visitors will increasingly want an nature based rather than fishing experience.

# Comments on Draft Plan by Key stakeholders

Comments on the Draft Plan were received from Tamala Station, Shark Bay Resources, CALM, Shire of Shark Bay, Environment Australia World Heritage Unit, Western Australian Tourism Commission and Shark Bay World Heritage Property Scientific Advisory Committee.

# Key issues:

# · Level of development.

The need for some development to return an income sufficient to maintain the resource could conflict with maintaining the remote experience.

# · Who pays for development?

The plan had suggested that as there is a historic legacy of degradation it is reasonable to expect a government/community contribution for restitution of sites and educational materials.

## • Maximum level of visitation

Concerns that potential high levels of visitation may degrade sites.

# Cabin/safari tent style accommodation

Justification for cabin/safari tent accomodation was questioned when there has been no market research to demonstrate a demand for this style of accommodation.

# Agreements with pastoralist under the CALM Act

Desirability for pastoral leaseholders to enter into formal agreements with CALM where CALM is managing the adjacent Marine Reserve.

#### • Litter

Camping materials left by campers for future use was considered to be litter by the study team.

# • Specific versus general recommendations

Concern that the plan did not allow flexibility and revision in the future.

# • Set back and design of structures

Proximity of developments to the beach in relation to sustainability of the beach front vegetation and the design of buildings in relation to visual amenity.

## Recreation type

- · Camping fishing and water activities.
- Maintain bush camping experience opportunities.

#### Education

- Education of users is very important.
- Stations are a good opportunity to distribute information.

#### Constraints

- Drinking water, vehicular access, firewood, toilets.
- Boat access is limited as area is only suitable for small boats with small fuel range and tidal considerations.
- Development at Tamala or Carrarang would be difficult to service.
- Very strong winds in summer

# Heritage

- An aboriginal land claim has been lodged over Shark Bay but not by the local community.
- Little is known about aboriginal traditional use and significance of Tamala and Carrarang Stations.

## **Economics**

• Development on Tamala or Carrarang has little benefit to Denham.

## Fishing

• A Regional Fishery Recreation strategy for the Gascoyne is being developed. The plan could include zoning for fishing type with some area being catch and release only.

# Appendix 2 TOURISM ON PASTORAL LEASES

Western Australian Tourism Commission

# Tourist Facilities on Pastoral Leases Land Administration Act 1998

The Department of Land Administration has advised that the new Land Administration Bill is likely to be proclaimed in early 1998.

Under the Land Act 1933, pastoralists wishing to diversify into tourism were required to apply to the Pastoral Board for approval. Ventures were categorised as either Low Key (Category 1) or Medium/Large Scale (Category 2), and different procedures were then applicable.

Under the Land Administration Act 1998, a pastoral lessee may apply to the Pastoral Lands Board for a number of specified purposes, including tourism. However, the grazing of stock must remain the predominant activity on the pastoral lease. It is likely that the same category guidelines for tourism developments will be applied under the new Act.

The new permit system is designed for the owner of the pastoral lease only and is not transferable or capable of having an investor participate in the venture undertaken by the pastoralist. If the pastoralist wants a partner, then the area of the lease involved must be excised by surrender and become a separate form of tenure which could be transferred to an investor on a share basis or totally. If the permit holder wishes to advance the tourist facilities to a medium/large scale (Category 2) development, then separate tenure and appropriate payment of lease rent will be required.

The "permit" must run in the same proprietorship as the pastoral lease. It is likely that a fee will be charged for Category 1 ventures.

For example, a permit is issued for station stay. Once the station stay operation becomes larger than traditional grazing practice or becomes a Category 2 enterprise, excision of land from the existing pastoral lease is required. Should land be excised, public applications may be called for.

It has not been policy or practice to resume land from a pastoralist in order to allocate it to an individual "outside party" for the purpose of granting another form of lease for any alternative special use or purpose.

It must be noted that any alternative tenure for the higher land use purpose is subject to Native Title Act 1993 clearance and the new lease must have legal dedicated road access.

Further information can be obtained by contacting Department of Land Administration on (08) 9273 7301.