

**Submission to Sustainability and Pastoralism  
Committee**

**11 September 2002**

**From NROCA**

**(Ningaloo Reef Outback Coast Association)**

**TABLE 1 ESTIMATED CAPITAL AND OPERATING RELATING TO ENVIRONMENTAL AND RECREATIONAL MANAGEMENT ON NROCCA LANDS**

	Gnaraloo	Warroora	Cardabia	Mingaloo	TOTAL
<b>ANNUAL OPERATING COSTS</b>					
Staff working recreational management					
Number of full time equivalent workers all seasons	5	5	2 <sup>3</sup>	2	17
Additional FTE workers peak season	2	4	2	1	9
Total cost of staff	157,500	210,000	45,000	75,000	487,500
Annual cost including superannuation and workers comp	30,000				
<b>V vehicles and travel</b>					
Fuel	15,000	15,000	8,000	2,000	40,000
Vehicles	30,000	30,000	8,000	2,000	70,000
Communications	10,000	10,000	2,000	1,000	23,000
<b>Maintenance of infrastructure</b>					
Roads	5,000	18,000	3,000		26,000
Fences	20,000	30,000	15,000	5,000	70,000
Water	30,000	20,000	10,000	1,500	61,500
Power	15,000	20,000	2,000		37,000
Feral Animal Control	8,000	25,000	2,000	4,000	39,000
Number of emergency rescues / provision of aid events / year	120	150	6 <sup>4</sup>	50	
Person Hours per above event	4				
Emergency services rate / person hour	25				
Travel cost for each event	55				
Annual Cost of responding to emergency events	18,600	23,250	930	7,750	50,530
<b>CAPITAL COSTS</b>				<b>TOTAL</b>	<b>904,530</b>

Homestead buildings	400,000	667,000	300,000	200,000	1,567,000
Costs Out Camps	20,000	150,000	10,000	20,000	200,000
Water supply infrastructure	170,000	455,000 <sup>1</sup>	100,000	100,000	825,001
Electrical power infrastructure	20,000	250,000 <sup>2</sup>	10,000	10,000	290,002
Fencing infrastructure	150,000	300,000	180,000	200,000	630,000
Roads and access	150,000	100,000	100,000	150,000	500,000
				<b>TOTAL</b>	<b>4,212,003</b>

**NOTES**

- 1 This includes government grants for capping artesian bores
- 2 This is renewable power 55% of this was a grant from the Federal Government
- 3 This figure will grow to 18 when the new Baiyungu Aboriginal Corporation begin the Murlanda Enterprises camping enterprise at Bruboojoo
- 4 Correspondingly the other components will grow accordingly
- 5 This number is relatively low compared to the other stations because there is limited camping on Cardabia and the access to the coast is limited



## Section 1- Introduction

The Ningaloo Reef Outback Coast Association (NROCA) was formed in 1998. It is a non-profit association with the objective:

*To develop, produce and sustain an environmental management strategy for the long term conservation of cultural, heritage, recreation and tourist pursuits along the coastal rangelands of Gnaraloo, Warroora, Cardabia and Ningaloo Stations in the Gascoyne region of Western Australia.*

The 450 000ha of land under NROCA members' management covers 200km of coastal lands between Carnarvon and the Cape Range National Park. Each of the stations is adjacent to the Ningaloo Reef. NROCA's draft philosophy is provided in Appendix 1.

The Government is currently reviewing sections of the NROCA lands with a view that they should be excised and come under the management of the Government.

This submission to Government, and particularly the Sustainability Working Group set up by the Hon Alannah MacTiernan in response to the outcome of the Gascoyne Muster, places NROCA's argument for a more rational approach to land management, rather than purely excising land and giving its management to CALM.

The basis for this position is summarised in the following points

- NROCA's management approach reflects the State Sustainability Strategy, other management options may not deliver the same result
- Proposed excisions from the NROCA area oversteps previous government policy statements
- The objectives being sought through excisions can be met through other policy and management instruments

## Section 2      The State Sustainability Strategy

The State Sustainability Strategy has two sets of principals. Foundation Principles that will underlay all development in the State (see below), and Process Principles (see Appendix 2) that characterise transitions to sustainability. The relationship between the NROCA lands at the Principles is spelled out below.

### ***Foundation Principles***

*LONG - TERM ECONOMIC HEALTH Sustainability recognises the needs of current and future generations for long term economic health, diversity and productivity of the earth.*

All the NROCA stations are financially viable, carrying low levels of debt, providing employment, and a return on investment. The stations are paying taxes and do not require support from Treasury. This is not a short term phenomena but has been going on for decades.

The line between pastoral activities and recreational and environmental management is blurred, particularly on the coast. However, estimates shown in Table 1 show estimates of station operating and capital replacement costs. Annually, the stations have a combined operational budget of \$900 000 and a capital investment of in excess of \$ 4 000 000. In addition there is currently 17 full time and 9 part time staff managing activities in the NROCA area. This will grow by a further 18 once the Baiyungu Aboriginal Corporation's camping enterprise at Bruboodjoo starts operating. If the stations concentrated purely on pastoral activities, a very significant proportion of these resources would not be deployed on coastal environmental management or recreational management.

In addition, the visitors to the area looking for the wilderness experience, buy fuel, food, water, and equipment locally, enhancing local business enterprise. NROCA has been undertaking a survey of visitors in conjunction with the

Combined Universities Center for Rural Health in Geraldton. While the survey is still being analyzed preliminary results show that the average length of time that visitors stay in the Gascoyne region is 79 days, with an average stay of 53.5 days on NROCA stations and 1.7 days in Cape Range National Park. Unfortunately nearly 10% of unsolicited written comments on the surveys were highly critical of CALM's management and recreational product finding it expensive and unsatisfying, while nearly all of unsolicited written comments expressed strong support for the recreational product available through the NROCA lands.

One small group of 30 campers estimated that they spend a total of \$60 000 in local businesses in the few months that they stay on one of the station. Although the calculations have not yet been done, it is anticipated that the contribution of the campers to local business will be very significant.

Place table 1 here



*EQUITY AND HUMAN RIGHTS Sustainability recognises that an environment needs to be created where all people can express their full potential and lead productive lives and that significant gaps in sufficiency and opportunity endanger the earth.*

NROCA demonstrates and provides a high level of equity and diversity, it all accepts the rights of people to recreate freely, provided the recreation does not cause irreversible environmental change or disadvantage other groups.

The NROCA station owners represent significant cultural diversity. Gnaraloo is owned by the Japanese with Australian management, Warroora is owned by Exmouth family that have lived in the region for over 35 years, Cardabia is owned by the Baiyungu Aboriginal Corporation whose elders have linkages back to the land for tens of thousands of years. The Ningaloo station has been owned by the same family for the past fifty years. All of these stations work harmoniously and supportively together helping each other to manage the landscape sustainably and provide support to each other in an isolated environment. This cultural diversity is also available to the people who visit the area.

NROCA has been undertaking a survey of visitors in conjunction with the Combined Universities Center for Rural Health in Geraldton. While the survey is still being analyzed preliminary results show that the visitors to the NROCA area are of all ages, social, economic and ethnic types. They all come for the wilderness experience and consider the lack of facilities and the informality highly attractive. NROCA makes no restrictions on who or for how long people stay however there are some restrictions, for environmental reasons, where people can camp. People do not mind these restrictions. Many of the respondents in the survey are pensioners and low income earners who can't afford to stay in resorts, formal campgrounds or National Parks.

There has been criticism that pastoralists have a secret agenda to preserve their own slice of paradise and keep everybody else out. This may occur on other pastoral leases, however on NROCA lands the equity of access is extremely high, much higher than in National Parks. No one, except for those that have

caused major social disturbance, has been refused entry or the opportunity to camp.

***BIODIVERSITY AND ECOLOGICAL INTEGRITY Sustainability recognises that all life has intrinsic value, is interconnected and that biodiversity and ecological integrity are part of the irreplaceable life support systems upon which the earth depends.***

There have been a number of significant criticisms of ecological management by pastoralists, some of these have been applied to NROCA stations. These are discussed below.

*Pastoralism causes major loss of biodiversity* –where ever European styles of agriculture have been introduced there has been a lost of biodiversity. The NROCA stations have significant areas of buffel grass pasture, which while being highly productive, have low biodiversity. However there are very large areas of the NROCA leases that the NROCA members have identified as having high biodiversity and the members are setting aside as wilderness protection areas, reducing stocking and closing off to vehicle traffic.

NROCA is in discussions to develop linkages with local and international universities to provide input into its management of the region and there is hope of re-introducing endangered species back into this area of rangelands.

*Pastoral activities have caused soil erosion* - historically this may have been true, however all the stations are now running stock at rates far below the DSE numbers allowed under their leases thus considerably reducing the soil erosion which went hand-in-glove with the saturation stocking traditional in this area over 50 years ago. In addition the stations are (or are going to be) involved in the Department of Agriculture's Ecological/Environmental Management Unit approach to rangeland management. While there has been a loss of biodiversity in some areas, the EMU approach is a recognised and innovative, and proven

tool of land management which has as it's central focus the 'hands-on' knowledge of the pastoralist and their land. There have been recent examples where uncontrolled fire, started by some boat people landed on the coast by human smugglers, burnt out considerable areas of land south of Coral Bay. These areas were immediately de-stocked and allowed to revegetate naturally.

*Stock grazing has caused major sand dune blowouts along the coast – the geomorphological evidence is that large mobile dune blowouts are a natural phenomena and have been occurring for thousands of years before European settlement. However there is some evidence that stock have exacerbated the blowouts, particularly around stock watering points. All the stations are fencing off fragile coastal dune systems with the objective of being able to control stock and human access to these all these dunes systems within the next five years. Coastal watering points are, in some cases, being moved inland away from the coastal dunes or being fenced off to control damage by native wildlife and stock.*

*Tourists and campers are destroying the dunes and littering the coast –*

While coastal tracks are unsightly and there are a number of highly eroded dune areas around intensively used recreation points, the vast proportion of the coast is relatively untouched by human recreation. In recent months many tracks have been closed off and 'ripped' to encourage re-growth, and in the next few months this will be achieved on many more as part of the overall NHT Project. There are significant areas of the coast that are shut off and not accessible to recreational visitors.

As shown in Table 1 the NROCA area has a very high number of staff available to manage environmental and recreational use of the coast. NROCA is investigating contracting TAFE to deliver the new nationally accredited recreation and natural resource management course.

NROCA recently began a \$640 000 NHT funded project to control recreational access to the coast, rehabilitate tracks, undertake turtle protection programs,

revegetate intensively used areas. In addition all open tips in the coastal dunes have been closed, rubbish collected and new tips opened up inland on more stable soils. In the next 12 – 24 months all the controlled recreation areas will be equipped with compost toilets. The Baiyungu Aboriginal Corporation are also developing the Murlanda Enterprises one business of which will be a tent tourist camp at Brubdoojoo Point.

NROCA is seeking to educate and train the users of the recreation areas under its control. At a recent coastal planning workshop NROCA had 70 campers participated in the planning of recreation areas, all of these people gave a commitment to actively manage the sites and get involved in the rehabilitation work. There are other examples of community based restoration – one individual has worked for 3 months every year for the past 14 years stabilising and rehabilitating a large 40ha dune blow out. This represents a major resource for improving and repairing the landscape. A further example is one of the campers that has been coming to the area for the past 15 years has been observing the patterns of manta ray activity and has built up a very detailed knowledge of where and when they breed. This is a valuable scientific resource ready to be tapped into.

***SETTLEMENT EFFICIENCY AND QUALITY OF LIFE Sustainability recognises that the earth can only adjust to a more balanced state if settlements reduce their ecological footprint (ie. less material and energy demands and reductions in waste), while they simultaneously improve their quality of life (health, housing, employment, community ...).***

NROCA members are seeking to live sustainably. Most of the stations use wind or solar power for water supply, some of them are moving to renewable energy for electricity. New houses and accommodation that are being built use sustainable building technologies. All the NROCA members emphasize that their businesses are not about maximizing economic return, it is about living a sustainable lifestyle.

**COMMUNITY, REGIONS, 'SENSE OF PLACE' AND HERITAGE Sustainability**  
*recognises the significance and diversity of 'community and regions for the management of the earth, and the critical importance of 'sense of place' and heritage (buildings, townscapes, landscapes and culture) in any plans for the future.*

The NROCA stations are a very diverse group as has been referred to earlier. Within their lands are living connections that cover the range from the Aboriginal heritage from thousands of years ago, through the settlement of Europeans and Pastoralism through to 21 Century technology and tourism. All of these live and work together.

It would be unfortunate if this living and evolving group was cut off and the area reduced to a museum managed for only a few narrow conservation objectives.

NROCA's survey work shows that there is a strong sense of place and commitment by those who visit the area. Already these people are forming themselves into civil society action groups and linking with other NGO's active in the area to support the direction for the sustainability of the NROCA lands and resisting moves to reduce the sustainability by alienating the coast and Ningaloo station.

**NET BENEFIT FROM DEVELOPMENT Sustainability** *means that all development, and particularly development involving extraction of non-renewable resources, should strive to provide net environmental, social and economic benefit for future generations.*

There is no major extraction of natural resources from NROCA stations, however the renewable natural resources are being managed with sustainability objectives so that the underlying resources of top soil, water and air are not diminished.

*COMMON GOOD FROM PLANNING Sustainability recognises that planning for the common good requires equitable distribution of public resources (like air, water and open space) so that natural carrying capacities are not exceeded and so that a shared resource is available to all.*

NROCA is concerned that a "conventional mythology" has grown up around ideas of excision of a strip of the coast and the Ningaloo station that is divorced from the reality of what is happening now in the 21 Century. This is discussed further in Section 3.

NROCA has the objective of managing its lands sustainably, ensuring a high level of equity of access and preserving the culture, in all its different kinds, of the region.

### Section 3 Government Policy

Unlike Government Agencies NROCA has no capacity to implement policy and consequently it is at all times responsive to policy initiatives. However it is concerned that a "conventional mythology" has grown up around the excision of Ningaloo Station and its addition to the Cape Range National Park, and the excision of a coastal strip (in some cases this has been rumored to be up to 2km wide) from three of the remaining four NROCA stations.

This convention mythology has its roots in the System 9 CTRC Red Book from which, in 1976, the EPA endorsed a number of recommendations about the NROCA area. Essentially these were that - Ningaloo Station should be purchased if it came onto the market, if not it, should be acquired in 2015; and that a 2km development control zone should be created along the coast adjacent to the marine national park.

Since that time this idea has become entrenched into the government policy framework and, despite a number of submissions over the past 20 years by NROCA members, that there may be other management options, these opinions have been ignored and the "conventional mythology" has evolved to the point where there is the belief that Ningaloo Station and a 2 km coastal strip will be incorporated into the National Park.

Unfortunately this mythology has been accompanied by a degree of high handed action by CALM where its officers have placed signs and produced publications that create the impression that the NROCA area is under CALM's control. Neither has there been appropriate consultation by CALM with the lease holders about management of the coastal area. Even the creation of NROCA and the development of a Memorandum of Understanding between CALM and NROCA over the management of the 40m terrestrial component of the Marine Park have been NROCA's initiatives.

NROCA would like to challenge the conventional mythology that Ningaloo Station and the 2 km coastal strip should be added to the national park with the following reasons:

- The Red Book was written in at time when there was a state wide, community

culture that had a strong "develop at any cost" orientation and it was imperative to define and preserve areas within the conservation estate. The community has now changed and become strongly conservation and sustainability orientated.

- Ningaloo Station is not linked to the National Park, it is separated by a stretch of Commonwealth Defence use land where uncontrolled access is allowed and little management exists.
- CALM had the opportunity to purchase a share of Ningaloo Station in 2000. It did not purchase this share, despite this being recommended in the Red Book. However it did purchase Giralia station which is in the same geographic region and had not been identified by the Red Book as being important. It has to be questioned why CALM placed a higher priority on Giralia Station than it did on Ningaloo
- While there are always unique features of any landscape, the landforms in Ningaloo station are represented elsewhere in the conservation estate. Significant proportions of Ningaloo station, while being managed to prevent erosion, are ecologically modified and do not represent unique biodiversity assemblages.



**Section 4 There are other options**

NROCA supports the idea of preserving sections of the landscape so that they can be managed sustainably. It is of concern to NROCA that excising land and giving it to CALM to manage will only serve a narrow number of interests and will produce a loss of many historic, cultural and recreational facets of the region. NROCA does not want their area to become a museum visited by short term visitors who are fenced in behind regulations and physical barriers. It wants people to come, enjoy and participate in the management and preservation of a unique landscape and diverse cultures.

- NROCA is not opposed to changes and would actively be involved in ongoing research into developing a scientific basis to the management of its landscape
- Developing MOU for the management of interfaces between the Marine Park, the Shire of Exmouth and Carnarvon and the NROCA lands
- Carrying on ongoing consultation with the community to determine how to best meet community expectations for the area
- Continuing with the process of managing environmentally sensitive coastal areas
- Covenantee areas so that no development will occur into the future
- Working with the scientific and government community to develop triple bottom line assessment and reporting for the NROCA area

**As has been demonstrated earlier NROCA has considerable financial and personnel resources to support its management of the region. NROCA believes that it would be socially and economically untenable for the government to try and match the product and service that NROCA delivers to the people of this State.**

## Appendix 1 - The NROCA Philosophy

The Ningaloo Reef Outback Coast Association (NROCA) was formed in 1998. It a non-profit association with the objective:

*To develop, produce and sustain an environmental management strategy for the long term conservation of cultural, heritage, recreation and tourist pursuits along the coastal rangelands of Gnaraloo, Warroora, Cardabia and Ningaloo Stations in the Gascoyne region of Western Australia.*

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As a generalisation, in Western Australian there are many examples where the communities have banded to address major, cross boundary and cross sectoral sustainability issues. Examples include the Blackwood Catchment Coordinating Group, and the Lyndon LCDC.

NROCA is working on developing a community based model of management that it believes presents a viable future for the region. There are essentially three parts to this model which are discussed below.

**Equity** - how to let the most people, get access to most of the resource, for the longest time, at the lowest cost.

**Ecological Integrity** - how to maximise the preservation of biodiversity and repair areas that have been damaged by human intervention.

**Immersion** – describes the process by which people are immersed into the landscape and are actively involved in its management. There are some characteristics of this process. These are listed below

*High levels of personal ownership* - NROCA's user surveys show a very high level of ownership of the landscape by its visitors. A significant majority of respondents in a recent NROCA survey expressed a commitment to managing and respecting the landscape. In addition the station owners have a long term commitment to the landscape as stewards and managers.

*High levels of on-the-ground management* – Over 200km of the coast NROCA stations have approximately 15 – 20 people that are managers of the landscape, who are willing, and with training, could become active in landscape conservation and recreation management.

*High levels of enrolment of users in the planning and management* – NROCA is seeking to educate and train the users of the recreation areas under its control. At a recent coastal planning workshop NROCA had 70 campers participated in the planning of recreation areas, all of these people gave a commitment to actively manage the sites and get involved in the rehabilitation work. There are other examples of community based restoration – one individual has worked for 3 months every year for the past 14 years stabilising and rehabilitating a large 40ha dune blow out. This represents a major resource for improving and repairing the landscape. A further example is one of the campers that has been coming to the area for the past 15 years has been observing the patterns of manta ray activity and has built up a very detailed knowledge of where and when they breed. This is a valuable scientific resource ready to be tapped into.

*Adaptive management and treading lightly on the landscape* – It is part of NROCA's objectives to design any changes to the landscape for recreation purposes so that they can be easily reversed if such a change is dictated by ecological necessity.

Therefore NROCA does not intend to install sealed roads, major caravan parks, concrete toilet and shower blocks etc. The recreational users of the NROCA stations do not want major improvements to the road and track network, the theme appears to be "this is a wilderness – experience it". The dust, rough roads, smoky fires etc are all part of what makes the visits desirable.

Despite this NROCA realises that uncontrolled recreational use of the coast has resulted in unacceptable degradation. Consequently NROCA stations are hardening a few tracks to give access to camping areas, and shutting off many other tracks (particularly the north-south tracks through the dunes) so as to protect the coast environment and remove the unsightly "spaghetti junctions" of 4WD tracks.

*Capturing the indigenous architectural vernacular* – there is a particular style of architecture and human structure that is characteristic of the Gascoyne region. NROCA seeks to capture this vernacular in its signage and buildings. Typically this is characterised by the use of corrugated iron, steel, bush wood, fencing wire, raw timber etc. NROCA seeks to develop a non-corporate feel about its activities.

*Working in modified landscapes* – past station grazing activities have resulted in highly modified landscapes and, unfortunately, compromised ecosystems. It is NROCA's objective to try and restore these ecosystems while still managing the landscape for stock production and recreation. Across all NROCA lands every effort will be made to reduce soil erosion through such measures as reducing stock numbers and fencing off fragile or ecologically diverse areas (particularly on the coast), and hardening recreation areas. However it must also be recognised that there are areas that have greatly reduced biodiversity, such as buffel pastures (a grass species introduced approximately 70 years ago), that are best managed by ongoing grazing. Thus while NROCA considers it is important to preserve biodiversity of its lands it believes the best chance of achieving this goal is to be actively involved in the management of modified landscapes.

*Moderate and reasonable fees* – in accordance with its commitment to high levels of equity NROCA will charge fees for access to its lands for recreational activity. However these fees will only be for maintenance of roads, tracks, fences and other services. It will not be for making excessive profits as would occur in a fully commercial enterprise.

*Using scientific and community based education and research* – While NROCA has considerable resources to manage its landscapes it needs information and advice. NROCA is in the process of building linkages with various research institutions to assist with providing information and to capitalise on the considerable local knowledge that exists in its station staff and recreational users.

Similarly NROCA believes that educating its visitors will enable them to involve themselves in hands-on management and planning.

*Long term security and performance accounting* – It is a common concern that unless recreational and conservation lands are held in the Crown estate there is the possibility that they will be used in a way that compromises their ecological integrity and they will not be managed correctly. There have been many cases where governments have acted against the interests of ecological integrity, equity of access and community wishes in the ideological belief that they were acting for the greater good. Examples of this include forest policy, road and dam construction and coastal and mining developments.

This argument is levelled at pastoral lands and is often presented as – "pastoral leaseholders have not managed the landscape in a sustainable manner in the past so they will not manage it sustainably in the future". Aside from demonstrating poor logic, in NROCA's case, this does not account for an increasing awareness and changing priorities and commitments by the NROCA pastoralists. Similarly it has also been argued that because pastoralists are private individuals and companies they can and will shut off land that has previously been used for recreation. While conceptually this may be true the

reality is that far more land has been alienated from common public use by government agencies than by the pastoralists.

NROCA believes that with its management resources and management approach it can maximise both equity and ecological integrity to a level that may not be able to be achieved by placing the area under Government control. NROCA is setting triple bottom line performance criteria to measure how it meets its objectives of Ecological Integrity, Equity and Immersion and would be happy to see such criteria tied to its leases.

*Voluntary involvement* - All of NROCA members and visitors are voluntarily involved in the NROCA management approach. It is possible for any party to opt out if they choose. NROCA believes that this approach, while it may take longer at times, will produce an internal change in attitude in all its members and participants. In the long term NROCA believes that this process of "changing the heart and mind" will be more productive than motivating people through fear of retribution through legislatively enacted powers.

*Community and social control* - NROCA has no legislative backing or coercive powers to make its visitors or members behave in an ecologically or socially appropriate manner. Thus NROCA is relying on creating a sense of community cohesion and management between its visitors so that they self-monitor and self-manage their presence in the landscape. The analogy can be drawn here with the "Keep Australia Beautiful" and the "Quit" campaigns.

***Perhaps the most significant thing about the NROCA approach is that it is based in what is actually happening now, on the ground, in real time. What is described above is not an academic exercise that sits in the future. The most significant thing that is missing at the moment is expert input to the***

***management process, however this is, and will continue to be addressed in the near future.***

## Comparison of Management Models

<b>Management Characteristic</b>	<b>NROCA Management Model</b>	<b>CALM Management Model</b>
<i>Equity of access</i>	Very High – low fees, long visits, high access	Low to moderate – high fees, short visits, low access
<i>Ecological Integrity</i>	Compromised but improving	Generally high
<i>Management structure</i>	Local and democratic	Corporatist and centralised
<i>Land owners participation</i>	Voluntary	Legal and coercive
<i>Mandate for Action</i>	Personal commitment by owners	Legislative - Government charter
<i>Personal ownership of the landscape</i>	Very high personal commitment by owners Very high level of ownership by visitors	Corporate ownership, low – moderate ownership by visitors
<i>Management orientation</i>	Traditionally towards pastoral activities, changing over the past 5 years to include conservation and recreation.	Towards ecosystem conservation and recreation.
<i>Planning</i>	Owner and visitor involvement expert input	Expert driven
<i>Ecological management</i>	Managing modified landscapes, protecting for conservation	Protecting for conservation
<i>On-the-ground management</i>	High, 15 people over 200 km of coast	Low, < 5 for all the Cape Range NP and Ningaloo Reef MP
<i>Impact of infrastructure</i>	Dirt roads, little built	Large bituminised roads,



	facilities	some build facilities
<i>Visitor control mechanisms</i>	Self regulated using social and community values, education, low levels of environmental armouing	Policing, legislatively backed, high levels of environmental armouing. and education
<i>Cultural Style</i>	Local and indigenous	Corporate, State-wide product badging
<i>Visitor Experience</i>	High involvement in the landscape "this is wilderness - experience it" Visitors involved in the planning and management	Hardened and armoured experiences "hands off and observe"
<i>Metaphor</i>	Local hamburger store Studio Workshop	MacDonalds Museum Gallery

## **Appendix 2 State Sustainability Strategy - Process Principals**

### **INTEGRATION OF THE TRIPLE BOTTOM LINE**

Sustainability requires that economic, social and environmental factors be integrated by simultaneous application of these principles, seeking mutually supportive benefits with minimal trade offs.

**ACCOUNTABILITY, TRANSPARENCY AND ENGAGEMENT** Sustainability recognises that people should have access to information on sustainability issues, that institutions should have triple bottom line accountability, that regular sustainability audits of programs and policies should be conducted, and that public engagement lies at the heart of all sustainability principles.

### **HOPE, VISION, SYMBOLIC AND ITERATIVE CHANGE**

Sustainability recognises that applying these principles as part of a broad strategic vision for the earth can generate hope" In the future, and thus it will involve symbolic change that is part of many successive steps over generations.

**PRECAUTION** Sustainability requires caution, avoiding poorly understood risks of serious or irreversible damage, designing for surprise and managing for adaptation.