

Performance Assessment Name:

***Purnululu Management Plan***

PA Category:

*Conservation Reserve Management Plan PA*

Lead Auditor:

*Tom Hughson*

Twelve month review:

*15/04/2010*

Twelve month review undertaken

Further action required

Comments:

Response to 12 month review received 8 September 2010.

Twelve month review details:

The full response to the 12 month review is attached. The response from DEC indicates that there has been progress in the time since this performance assessment was undertaken.

While the response to Finding 3 indicates that regional documentation procedures have improved, the related response to Finding 7 indicates that the management plan requirement for a policy/procedure has not been developed for internal environmental assessments of development proposals and operations within the park.

This issue (identifying through a documented procedure which proposals and operations should be subject to internal environmental assessment) has not been adequately addressed in this review. However, it is recommended that this assessment is closed and that the Conservation Commission continue to monitor issues of this nature in future reserve assessments on the conservation estate.



## **PURNULULU NATIONAL PARK MANAGEMENT PLAN 1995 – 2005 PERFORMANCE ASSESSMENT – 12 MONTH REVIEW OF FINDINGS**

I refer to the letter dated 28 June 2010 regarding the Purnululu National Park performance assessment findings. The opportunity to provide an update in response to the Conservation Commission's 12 month review of the eight key findings is appreciated.

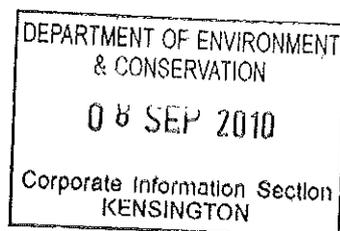
***Finding 1 update:*** Please advise the Conservation Commission of the progress of the Cultural Planning Framework for Purnululu.

Preparation of a cultural planning framework is well advanced. Project Officer Steve Vigilante has made several trips (including on-country trips) to meet with both the Djaru and Kidja people. While the process has taken longer than expected, it is expected to be completed by the end of the year. The cultural planning framework is considered necessary for the preparation of a new management plan and will deliver positive outcomes towards joint management of the park.

***Finding 2 update:*** Please advise the Conservation Commission if a Purnululu World Heritage Area Advisory Committee was formed, who the committee comprises and what part of the community they represent.

DEC is confident that the proposed approach to amalgamate the responsibilities of the Purnululu Park Council and the community advisory committee into a Purnululu World Heritage Area Advisory Committee will be an effective way to bring Aboriginal and wider community interests together. It is also the most efficient use of resources.

DEC has spent considerable effort over the past six months to get the endorsement of both Aboriginal groups to create a new advisory committee. This was a significant undertaking, and was finally achieved in early July.



The proposed make-up of the committee is:

- Purnululu Aboriginal Corporation (Kidja, up to four members);
- Mindi Mindi Aboriginal Corporation (Djaru, up to four members);
- tourism interests (one member);
- local community (two members);
- Shire of Halls Creek (one member);
- conservation interests (one member); and
- scientific/research interest (one member).

Staff from the Commonwealth Department of the Environment, Water, Heritage and the Arts have been involved in discussions with DEC regarding creation of the committee and are supportive.

***Finding 3 update:*** Please advise the Conservation Commission of procedures that have been implemented to improve regional documentation.

Major works have recently been undertaken on roading and a remote area power supply for the ranger station. Project documentation was largely prepared by engineering consultants in both cases and is held at DEC's Kununurra office.

Botanical surveys of the proposed Naturebank site were also undertaken in the past 12 months. The results of the surveys, again conducted by consultants, are held in the Kununurra office. A number of new sites are being investigated and will be subject to the same level of scrutiny, both from a cultural and biodiversity perspective.

A number of cultural site clearances have also been achieved over the past two years as a precursor to possible recreation site development. This has required anthropologists representing both Kidja and Djaru people. These reports are also held at the Kununurra office.

***Finding 4 update:*** Please advise the Conservation Commission if staffing levels have increased and the number of staff currently allocated duties involved in the management of the park.

Current staffing arrangements at Purnululu National Park are:

- 1 x senior ranger (1 FTE);
- 1 x ranger (0.7 FTE);
- 2 x ranger's assistants (2 x 0.7 FTE); and
- 2 x shopkeepers (2 x 0.5 FTE).

Annual contracts for the two ranger's assistants are a new initiative of the past two seasons. Previously, operational assistance throughout the tourist season was *ad hoc* and reliant on casual employment of Community Development Employment Project workers from Halls Creek or Warmun, topped up with DEC funding. It is intended that these two positions are converted to permanent positions at 0.7-1 FTE, specifically targeting Djaru and Kidja people. Further, it is DEC's intention to develop an Aboriginal Employment Strategy for the park during 2010.

***Finding 5 update:*** Please provide the Conservation Commission with the most recent visitor survey results.

Visitor numbers were recorded by DEC at 27,124 for the 2009/10 financial year. This figure is based on ticket sales for the full year with the exception of the April to June quarter, for which an estimate based on previous figures was used, with some downward adjustment due to brief park closures because of poor weather conditions. Visitor numbers have remained relatively stable at Purnululu over the last three years.

Due to insufficient visitor satisfaction surveys being returned, DEC does not have a sufficient sample size to provide any findings with statistical significance. However, from the limited responses that were returned, evidence is that visitors found their experience enjoyable on the whole and no concerns were raised about the preservation of the remote or unspoilt wilderness experience.

***Finding 6 update:*** Please advise the Conservation Commission whether the strategic plans for fire and nature conservation relevant to Purnululu National Park have been finalised.

A detailed fire management plan for the park and adjoining areas has been prepared and is reviewed annually. The Nature Conservation Service Plan for the Kimberley Region has also been finalised.

***Finding 7 update:*** Please advise the Conservation Commission if a policy/procedure has been developed on the internal environmental assessment of development proposals and operations, including identification of proposals and operations which should be subject to such assessment.

There have been no development proposals that DEC considered needed referral to the Environmental Protection Authority or the Commonwealth Government. DEC has been able to deal with development proposals (road upgrades and tourist/recreation developments) on a case-by-case basis through standard environmental/engineering assessment processes (for example, the Naturebank proposal referred to earlier).

Several applications for mineral exploration have been received over the past three years. These have also been dealt with using standard DEC procedures.

***Finding 8 update:*** Please advise the Conservation Commission if a fire management plan has been developed and implemented.

See the response to Finding 6 above.

Yours sincerely



Keiran McNamara  
DIRECTOR GENERAL

6 September 2010

# **Conservation Commission National Park Management Plan Performance Assessment**

**Purnululu National Park Management Plan 1995 - 2005**

Performance Assessment Number CRMPPA - 01/08



Conservation Commission

Conservation Reserve Management Plan Performance Assessment

Purnululu National Park Management Plan 1995 - 2005 – Performance Assessment Number  
CRMPPA - 01/08



**Conservation Commission  
of Western Australia**



Conservation Commission performance assessments are undertaken primarily to fulfil the functions described in S 19(g) of the Conservation and Land Management Act 1984. That is to “assess and audit the performance of the Department and the Forest Products Commission in carrying out and complying with the management plans”. They will also help inform its policy development function and its responsibility to advise the Minister on conservation and management of biodiversity components throughout the State.

This performance assessment was undertaken in accord with the “*Conservation Commission policy and guidelines for the performance assessment of conservation reserve and forest management plans and biodiversity management in WA*”. Further details are available at [www.conservation.wa.gov.au](http://www.conservation.wa.gov.au).

The use of Department of Environment and Conservation (DEC) data for the production of maps in this report is acknowledged.

Approved at Conservation Commission meeting – *16th February*  
2009

Conservation Commission of Western Australia  
Corner of Hackett Drive and Australia II Drive  
Crawley, WA, 6009

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## EXECUTIVE SUMMARY

This plan formally recognised for the first time in Western Australia the social, economic and cultural responsibilities of Aboriginal traditional owners toward their country through the establishment of a Ministerial Committee, the Purnululu Park Council (PPC).

The delivery of core functions required to continue to maintain the park are managed within limited staffing inputs due to the experienced and dedicated park staff. As noted in other assessments undertaken by the Conservation Commission the continuity and filling of positions in general is a constraint to the delivery of management in the remote areas of the State.

The plan stipulates the development of a resource management plan for fire management which has not yet been achieved. In general the management plan provides limited strategic direction in relation to biodiversity management issues and there is a lack of strategic direction in the plan relating to nature conservation strategies for the park.

A number of Key Findings are listed in the report and listed here as follows:-

**Key Finding 1** Implementation of the plan has not delivered management involvement with traditional owners in the manner which was envisaged for the park.

**Key Finding 2** Broader community participation in the plan's implementation has been limited primarily due to the joint CALM (now DEC) / community advisory council not being formed.

**Key Finding 3** There is no clear evidence which indicates that the requirements for an internal environmental assessment have been routinely applied as stipulated in Appendix 2 of the management plan.

**Key Finding 4** While the core functions of the park are maintained adequately from year-to-year, the current staffing levels appear to have limited the implementation of strategies under the management plan.

**Key Finding 5** There is little evidence of monitoring to help inform management decisions for the park against the following plan objective:- 'The preservation of the 'remote experience – of a largely unspoilt wilderness in a remote place'.

**Key Finding 6** There is a lack of nature conservation related strategies in the plan and therefore limited nature conservation outputs.

**Key Finding 7** Some of the key strategies such as a policy in relation to the environmental assessment of development proposals and operations and resource management plans for hydrology and geology have not been produced and implemented as per the requirements of the plan.

**Key Finding 8** A fire management plan for the area is yet to be prepared and implemented.

## INTRODUCTION

This Conservation Reserve Management Plan Performance Assessment (CRMPPA) reviewed the implementation of the Purnululu National Park Management Plan 1995 – 2005 (the plan). Purnululu National Park is located in the Department of Environment and Conservation's (DECs) Kimberley Region (see Figure 1 below). This management plan was identified as a priority for performance assessment by the Conservation Commission as it has reached its nominal term end and because of the intrinsic values within the National Park.

This performance assessment was undertaken in 2008 in accord with the Conservation Commission policy and guidelines for performance assessments.

The plan states the following in the preface,

*'The Conservation and Land Management Act 1984 (the CALM Act) requires that all national parks be managed so as to fulfill so much of the demand for recreation as is consistent with the proper maintenance and restoration of the natural environment, the protection of indigenous flora and fauna and the preservation of any feature of archaeological, historic or scientific interest. The perpetuation or conservation of parks and their features is of paramount importance. However, it is these same features which make national parks so attractive for visitors; the more spectacular or unusual an area, the greater the demands placed upon it. Parks must, therefore, be managed to ensure that opportunities for use and access are provided in appropriate areas while retaining the integrity of natural and cultural features. The biophysical and cultural environments of Purnululu National Park and Purnululu Conservation Reserve are recognised as fragile and especially sensitive to uncontrolled access. This management plan provides management of visitor numbers in order to achieve conservation objectives while allowing for appropriate recreational opportunities in a variety of settings. The impacts of visitors on the Park will be monitored and assessed.'*

The plan was the first management plan for the conservation estate of Western Australia to provide a formal management structure for the participation of Aboriginal traditional owners. The Purnululu National Park Management Plan for 1995-2005 aims to:

- Conserve and protect landforms, ecosystems and areas of scientific and cultural importance;
- Permit Aboriginal traditional owners to live on the land following their customary lifestyle;
- Provide for public recreation;
- Promote appreciation of natural processes and interpretation of the native culture;
- Protect the safety of residents, neighbours and visitors;
- Institute research and monitoring of all aspects of the Park to improve its management; and
- Control any commercial and industrial impacts.

In 2007 the 575,554 ha Ord River Regeneration Reserve (ORRR) was listed under a management order as a Miscellaneous Reserve under the Executive Director of CALM (now DEC - the Department of Environment and Conservation). The area is adjacent to the park on the eastern and southern sides and the purpose of management of this additional area is the regeneration of eroded areas in the Ord Dam catchment area. There is also a commitment to

add 61,817 ha of pastoral lands to the Purnululu Conservation Reserve as part of a pastoral lease renewal process in 2015 or earlier under a negotiated early surrender.

While the ORRR is not considered part of the park, management of this reserve by DEC is undertaken to complement the protection and conservation of the park.

## DESCRIPTION OF PURNULULU NATIONAL PARK

Purnululu National Park is approximately 250 km south of Kununurra (see Figure 1 below). For the purposes of the management plan and this assessment, the management area includes both the Purnululu National Park (vested as a Class 'A' Reserve) and Purnululu Conservation Reserve (vested as a Class 'C' Reserve) with a combined total area of 319325 hectares. The park includes the Bungle Bungles, a range of striped beehive-like hills which stand above the surrounding plain.

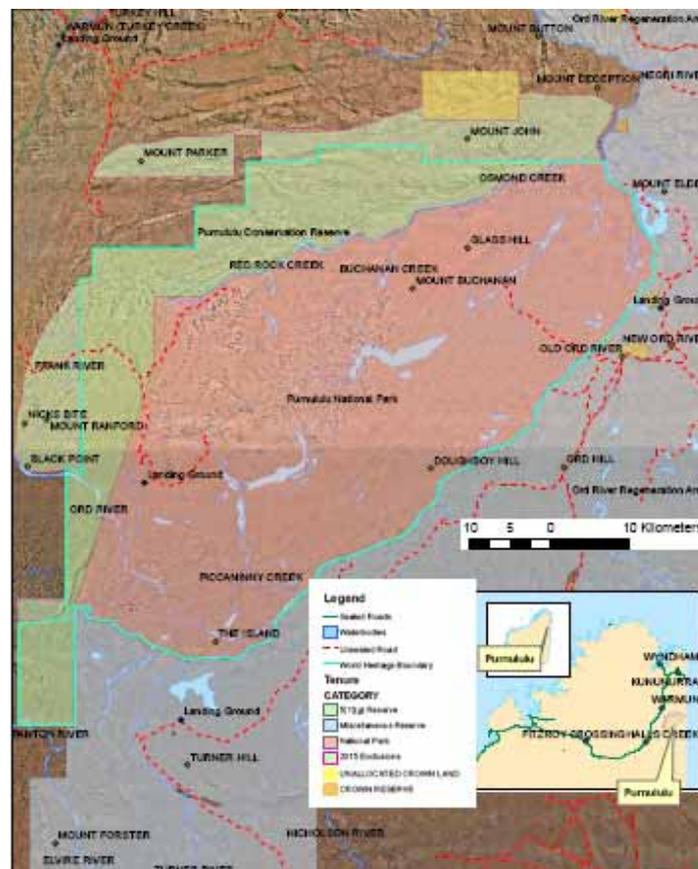


Figure 1 Location map Purnululu National Park, Conservation Reserve and Ord River Regeneration Reserve

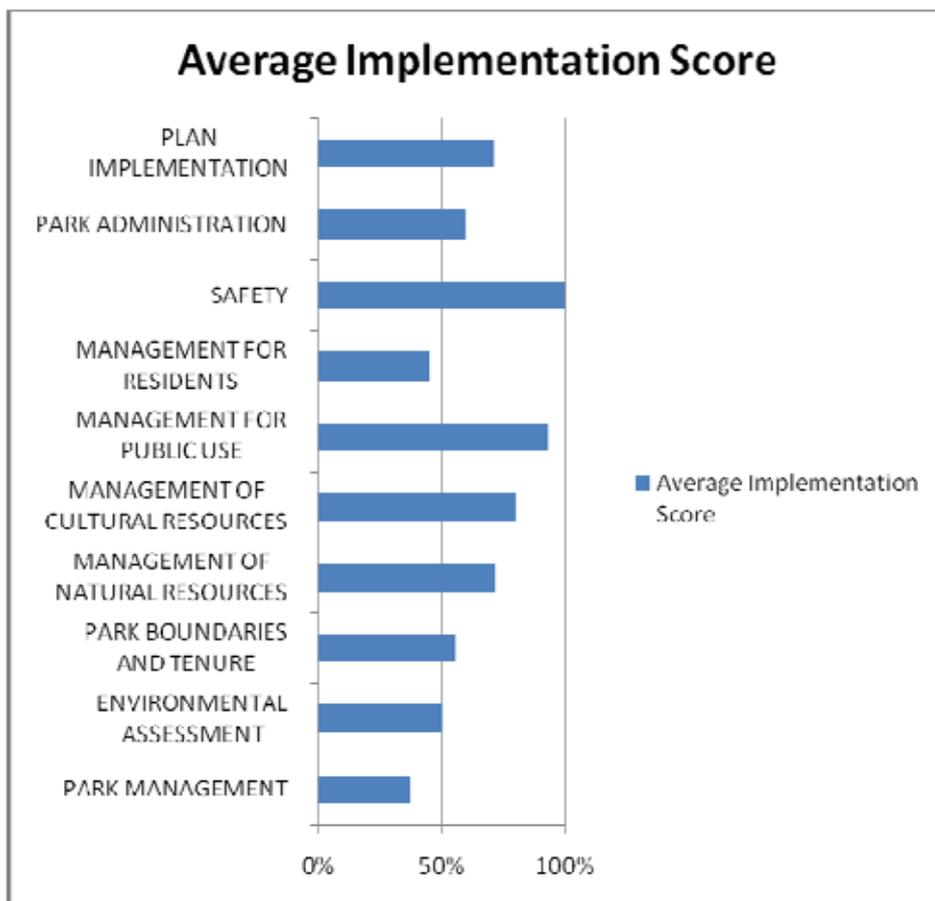
## PERFORMANCE ASSESSMENT FINDINGS

The assessment results are presented under the World Commission on Protected Areas performance assessment framework headings of Context, Planning, Inputs, Management Systems, Outputs and Outcomes. The assessment results are documented as either a 'Finding'

or a 'Key Finding'. Where a 'Key Finding' has been identified it will be accompanied by a management response that is developed following provision of the draft to DEC and consideration of the response by the Conservation Commission.

The assessment process is summarised in Appendix 2. The assessment was focused on major threatening processes to the values of the park and key operational issues, i.e. management of the unique geology, visitor access, levels of visitor use and other issues identified during a review of context. The report also includes a "self assessment" of progress completed by the DEC East Kimberley District. This "self-assessment" is primarily an assessment of implementation against identified actions in the management plan. The detailed "self assessment table" is included as Appendix 1, and included below in a summarized form as Graph 1.

Graph 1. Implementation scores which have been summarised from the self-assessment provided in Appendix 1



This graph is provided for the purposes of a 'snap-shot' of plan implementation. No weighting of the importance of the relative strategies has been applied and there are differing numbers of strategies associated with the different strategy headings which will influence the appearance of

the chart when the scores are averaged out for the relevant section. Therefore, the summary should be viewed in conjunction with the full details provided in Appendix 1.

## **CONTEXT**

*Understanding the "context" of the protected area: - including its values; the threats that it faces and opportunities available; its stakeholders; and the management environment.*

### **Future areas to be incorporated into the management planning area for Purnululu National Park**

The addition of the pastoral areas to the Purnululu Conservation Reserve and the ORRR (Ord River Regeneration Reserve) will bring the total area of land to be managed to protect and conserve the values of the park to over 716,000 hectares. This will have implications for the resourcing of strategies within the upcoming revised management plan.

### **Other context changes over the plan**

Other changes and potential changes which can influence the context within which Purnululu is managed include:-

- Climate change and its effect on the moisture composition of the porous sandstone bands;
- Cane toads;
- Native title deliberations and living area leases
- World Heritage Area status (2003)
- National Heritage List (2007)
- Increase in visitation

A large proportion of visitors to the park fly over the area but do not land. The impact that these fly-over activities have on the park values does not appear to have been monitored and assessed as required in the plan.

As detailed further under the section on 'Management Systems' there has been a steady increase in visitor numbers since the management plan was finalized in 1995.

## **PLANNING**

*Through "planning":- establishing vision, goals, objectives and strategies to conserve values and reduce threats.*

### **Joint Management**

While the term 'Joint Management' is not used in the management plan, this plan aims to '*in particular ensure the involvement of the Aboriginal traditional custodians in the ongoing management of the park*'. The plan formally recognised for the first time in Western Australia the social, economic and cultural responsibilities of Aboriginal traditional owners toward their country through the establishment of a Ministerial Committee, the Purnululu Park Council (PPC or Park Council). This Council, comprising representation from CALM and Aboriginal traditional owners, was to be established to ensure that the cultural and natural values of the Park were maintained and enhanced wherever possible and as an advisory body to the Minister with a formal role in developing policies and plans of management. During interviews for this assessment it was indicated that numerous unsuccessful attempts to form the Park Council were made after the plan was approved and whilst meetings of the Park Council were held there remain critical governance issues. One of the difficulties in forming the Park Council was determining traditional owner representation on the then proposed Park Council. The aspirations of the several Aboriginal families and language groups in the area has been complicated mainly because currently whilst the Gidja people's (or spelling variants) native title claims have been formerly recognised, the Djaru peoples (or spelling variants) native title claims have not been. The Western Australian Government decided that the Purnululu National Park Council would comprise representatives of the Department of Conservation and Land Management and the Purnululu Aboriginal Corporation (Gidja People). This Park Council which was formed in 2005 is the current Park Council. The Western Australian Government recognised the Purnululu Aboriginal Corporation as the appropriate Aboriginal organisation representing traditional owners because of the following stated determinations-

- (a) their native title claim passed the registration test as applied by the National Native Title Tribunal; and
- (b) the Purnululu Aboriginal Corporation claim was the only registered claim over the park.

At interviews for this assessment, it was indicated that the implementation of strategies in the plan has been limited by the difficulties encountered in forming the Park Council. Similarly, the plan requirement for the formation of a Purnululu Cultural Heritage Committee (PCHC - for reference on matters of Aboriginal cultural heritage) has not been achieved.

The plan has not delivered management with traditional owners in the manner which has been experienced from the implementation of contemporary joint management planning arrangements such as the Miriuwung Gajerrong Cultural Planning Framework in the proximity of Kununurra. DEC has advised the Conservation Commission that it is planning to undertake a

'Cultural Planning Framework' as part of the process for compiling the revised plan for the management of Purnululu National Park.

## **Key Finding 1**

***Implementation of the plan has not delivered management involvement with traditional owners in the manner which was envisaged for the park.***

### **DEC Response**

*The report is correct in that meaningful 'joint management' has proved extremely difficult. The report correctly highlights the main reasons for this as tensions between the Djaru and Kidja people, the lack of representation of the Djaru people on the Park Council, and the need for DEC to consult both parties regarding park decisions. The report does not mention further complicating factors:*

- *there are at least two families that are on the native title claim but not members of the Purnululu Aboriginal Corporation (PAC), hence the Park Council (formed from PAC members) is not representative of the claimant group;*
- *as a consequence there is a need for DEC to consult with the claimant group through the Kimberley Land Council (KLC).*

*The KLC has informed DEC that they are hoping to change the membership of PAC to align with the claimant group. This will ease the burden on DEC to consult on three fronts (the claimant group, the Park Council and the Djaru people).*

*The report states that DEC is proposing that a Cultural Planning Framework be prepared as a precursor to the preparation of a new management plan. To this end, DEC has applied for funding through the Australian Government program Caring for Our Country (World Heritage Properties) to engage a consultant to undertake the work. It is intended that this would be complete by 30 June 2009. In addition, DEC has supported a PhD study of the economic and social benefits of the park to the local (Indigenous) community. The thesis is expected to be completed in 2009.*

*The management plan contains several references to the dispute between the Djaru and Kidja language groups and indicates a willingness by the Department to work with both groups until the issues associated with who are the primary traditional owners are resolved.*

*The assessment report does not accurately reflect the efforts and positive outcomes achieved in the face of conflict between the groups.*

*The Park Council was established in December 2002 and had its first meeting in August 2003. Cultural heritage assessments have been undertaken for all capital works undertaken since that time, including airstrip extensions, roading and walk trail improvements. The Park Council has been consulted and approved commercial licensing, visitor information research projects, flight paths and operational conditions attached to helicopter operators within the park and other management issues.*

*The Department has undertaken extensive consultation with the disputing Djaru people, and whilst we have not been successful in bringing the two groups together to work in a harmonious Park Council, we have had exercises that involved cooperative assessments of park values in relation to fire management and protection of heritage values.*

*The implementation of the plan should not be compared with the implementation of the Miriuwung Gajerrong Cultural Planning Framework. The two cases are vastly different from the perspective of native title, Indigenous capacity, Government resourcing and joint management learning by DEC.*

*The management plan audit finding is therefore not substantiated and should be amended to recognise the efforts that have been made, the meaningful involvement results that have been attained, and the commitment by DEC to continue to apply new learnings in joint management to enable continuous improvement at Purnululu.*

### **Conservation Commission response**

*The Conservation Commission aims to establish through its management plan performance assessments the outcomes of implementing management plans and where outcomes have not been achieved to identify through evidence-based reporting the reasons for any shortfall. The assessment should then inform the content and development of the next management plan for the area. The assessment found that the implementation of the strategies presented in the Purnululu Management Plan have not delivered meaningful 'joint management'. If strategic outcomes in the plan have not been delivered it is not necessarily as a result of lack of effort of the managing agency, the report does not seek to infer this. It is acknowledged that legislative and policy restraints may need to be overcome prior to significant progress in joint management being achieved, and that this is a priority for DEC. The intent of reference to the Miriuwung Gajerrong Cultural Planning Framework was to highlight the contemporary success of implementing cultural planning. The Conservation Commission acknowledges the uniqueness and complexity of the issues underlying this finding and looks forward to reporting on the progress of the proposed Cultural Planning Framework for Purnululu at the time of the 12 month review of this report.*



Figure 2. A Living Area Lease in the park for traditional owners

The plan also stipulates the formation of a joint CALM (now DEC) / Community Advisory Committee to deal with Park management matters of broader local community interest. This has not been achieved during the term of the plan and a number of the strategies which relate to this particular strategy were therefore also not achieved. By default, it appears that the Park Council since being formed has served as the main mechanism for decision-making in relation to strategies and proposals. This lack of plan implementation has limited the potential for the broader community to engage and deal with park matters of broader community interest as per the intention of the plan.

## **Key Finding 2**

***Broader community participation in the plan's implementation has been limited primarily due to the joint CALM (now DEC) / Community Advisory Committee not being formed.***

### **DEC Response**

*The Department was not prepared to support the establishment of an additional advisory committee and threaten the viability of an already fractious joint management arrangement with traditional owners.*

*The Department is of the opinion that there was little or no concern expressed by community groups in relation to this decision and that they are comfortable to let DEC and the traditional owners proceed at a pace that is acceptable in cultural terms.*

However, in light of the continued dispute between Djaru and Kidja people, DEC will recommend to the Minister that a Purnululu World Heritage Area Advisory Committee be established and comprise:

- Djaru and Kidja representatives;
- tourism interests;
- local government;
- scientific experts; and
- park neighbours.

### **Conservation Commission response**

*The Conservation Commission acknowledges this proposed recommendation and will report on its progress at the time of the 12 month review of this performance assessment.*

### **Planning strategies**

A Feral Animal Control Plan and a Weed Control Plan have been developed for the park which is relevant to the plan strategies in sections 4.5 Flora and Vegetation and 4.6 Fauna. The requirements of the plan in relation to section 6.5 Visitor Interpretative planning have been achieved to a degree with the Purnululu National Park World Heritage Area Interpretation Plan (Final Draft 2006). This document is the guiding document for conveying information to visitors to the park. This document references the Purnululu Management Plan section 6.5 and its implementation has achieved the following relevant strategies from the plan:-

*Guidelines for the provision of information, education and interpretation will be developed, consistent with the Park policy on public use (Section B 6.1), and referred to the PPC and the Community Advisory Committee. These guidelines will include reference to: interpretation programs; Aboriginal involvement in Park management visitor information/orientation facilities; flora and fauna and the ecological basis underlying their management; Aboriginal and Colonial cultural history; information on the state of the access road, fees and visitor safety.*

However, this section of the plan also calls for internal environmental assessment as follows:-

*Internal environmental assessment procedure (Section B.2) will be applied to developments associated with the provision of information, education and interpretation.*

The section referred to in this extract from the plan (section B.2) states the following:-

*CALM, in association with the PPC and the Community Advisory Committee, will develop a policy on the internal environmental assessment of development proposals and operations, including identification of proposals and operations which should be subject to such assessment, to ensure developments and operations have minimal impact on the natural and cultural resources and values of the Park.*

As there is no policy on internal environmental assessment (and no Community Advisory Committee as outlined above) the number of related strategies cannot be considered as implemented. For instance, there is also a strategy under the section on Communications which outlines the establishment of an appropriate communications network which also refers to Section B.2 as follows:-

*Installation of communication facilities will comply with internal environmental assessment procedures (Section B.2).*

Available planning details for both the installation of a radio repeater ( due to commence at the time of this assessment), the major re-developments at the Piccaninny Creek and Mini-Palms car parks and the water storage facility shown in figure 3 (below) indicate that no internal environmental assessments have been documented.



**Figure 3. Solar bores (background) and water storage facility**

The guidelines for the internal environmental assessments as proposed in the plan are stipulated in Appendix 2 of the plan. Appendix 2 also stipulates the development operations that will be subject to internal environmental assessment as follows:-

*Development and operations that will be subject to assessment include:*

- alterations to, and maintenance of, existing developments that involve disturbance of ground vegetation beyond the original area disturbed during construction, or which alter the colour, size or external appearance of the development.*
- new vehicle tracks, walks and service lines (water pipes, electricity lines)*
- new buildings (including residential development), water tanks, campground and day use sites*
- new signs, and alterations to signs that change the message conveyed*
- the location of new borrow pits.*

### **Key Finding 3**

***There is no clear evidence which indicates that the requirements for an internal environmental assessment have been routinely applied as stipulated in Appendix 2 of the management plan.***

#### **DEC Response**

*The development works that have occurred in the park have essentially involved the upgrading of existing infrastructure at sites which have little or no environmental sensitivity. Nonetheless standard operating procedure at Purnululu requires environmental assessment by qualified landscape architects, which was undertaken by Steve Vigilante from the Midwest Region.*

*All development works were also considered by the Park Council and heritage clearances were obtained prior to works being undertaken.*

*There does appear, however, to be insufficient documentation held at the regional office level, to easily demonstrate to the Conservation Commission that these procedures have been applied. DEC intends to improve its regional documentation in relation to this finding.*

#### **Conservation Commission response**

*The Conservation Commission acknowledges that DEC intends to improve regional documentation and will seek confirmation of these efforts for Purnululu national park at the time of the 12 month review of this performance assessment.*

### **INPUTS**

*Allocation of "inputs" (resources) of staff, money and equipment to work towards the objectives.*

There have been a number of significant inputs into the park over the period of the management plan.

- MOU with Mining Companies and conservation volunteers for weed removal, feral animal control and visitor facility upgrades (2006)
- Resource inputs for airstrip for tourists, road improvements and upgrade of walking trails (2006)
- Permanent monitoring sites established at Purnululu to identify changes and trends to biodiversity that occur over time as part of natural processes, the effect of threatening processes and the success of management actions (2005/06)
- Visitor interpretation plan, improvements to visitor facilities and safety (2005/06)

- DEH external funding for World Heritage Projects
- Major guided interpretive program (2004/05)

### **Budget**

The park generates revenue from park entrance fees and royalties from commercial tour operations. Costs for maintaining the park include the usual annual operational requirements as well as facilities, staff and living areas for the traditional owners.

### **Staffing**

The present staff employed at the park includes one Ranger in Charge, one assistant ranger, and volunteer (seasonal) campground hosts. DEC can draw on staff expertise from within the management district based at Kununurra in relation to the divisional areas of Parks and Visitor Services, Nature Conservation, and Fire Management Services. There is also a World Heritage Officer in the DEC district. At the time of this assessment there was no Regional Leader for Parks and Visitor Services. As noted in other assessments undertaken by the Conservation Commission the continuity and filling of positions in general is a constraint to the delivery of management in the remote areas of the State. The delivery of core functions required to continue to maintain the park are managed within the current limited staffing inputs due to the experienced and dedicated park staff. It will remain important to record and document through mapping, work-plans and procedures the on-ground knowledge of these staff.

### ***Key Finding 4***

***While the core functions of the park are maintained adequately from year-to-year, the current staffing levels appear to have limited the implementation of strategies under the management plan.***

### ***DEC Response***

*The report correctly states that the core functions of the park have been maintained and DEC acknowledges that the implementation of the various strategies under the management plan has been limited due to resourcing constraints and staff turnover in operational and regional support positions, eg. Purnululu World Heritage Officer, Regional Leader Parks and Visitor Services and the Regional Manager.*

*The Department will give consideration to increasing staffing levels in the park as resources permit. However, in the immediate future the Department is facing a reduction in resourcing levels*

### ***Conservation Commission response***

*The Conservation Commission notes that DEC will consider increasing staffing levels at Purnululu national park and acknowledges the ongoing staff resourcing issues in remote areas of the state. At the time of the 12 month review of this performance assessment an update on staff resourcing for the park will be requested.*

## **Biodiversity Monitoring**

A long-term biodiversity monitoring program was commenced (2005) in the Kimberley by DEC. This program includes sites in Purnululu National Park and it aims to establish benchmark information for monitoring changes and trends over time. The monitoring includes fauna (vertebrate and invertebrate) sampling and vegetation sampling. This program contributes to the implementation of several relevant strategies under the plan.



Figure 4 Location of a permanent monitoring site established to identify changes and trends to biodiversity that occur over time.

### **MANAGEMENT SYSTEMS**

*Implementing management actions as detailed in the plan and/or according to accepted "processes".*

## **Erosion control measures**

Soil erosion due to overgrazing has reportedly come under control but continues to be monitored. Feral animals were visible in the national park during the brief field inspection. Visitor numbers will likely continue to increase and in-turn potentially increase the present high level of wear on certain tracks and trails. Current issues for managers include the erosion of fragile sandstones, and the need for safe vehicle tracks, a fire protection management program, and

risk-management from flooding and rockfalls.



Figure 5. Walking track adjacent to Picaninny Creek

### **Management of visitors**

There are more facilities and accommodation options (tourist camps) in the park than were present at the commencement of the plan. Camping areas are provided at Walardi and Kurrajong campsites and visitors to these areas must carry in all food and water. The management of visitor risks is focused on avoiding flooded river crossings and rock injury through Park closure during the wet season and minimising the fire risks through prescribed burning early in the dry season. There are a wide variety of other risk management visitor measures such as fire bans in the camping areas and installation of handrails and steps on some walks. Closing the park during the wet season provides a means of stopping vehicle-induced track erosion.



Figure 6. Fire ban in the visitor campground facility - Walardi campsite

### **Commercial Tour Operators**

Approximately half of the visitors who land or drive in to the park are through visits arranged by organised tour groups or Commercial Tour Operators (CTO).

- number of current CTO licences for Purnululu - 104 at 25/2/2008 (including four E class licences<sup>1</sup>)
- the number of CTO licences with additional conditions attached – 4. Three for semi-permanent accommodation and fly drive (two based at Bellburn, one at Walardi – licensed for a five year period, at which time, licences may be renewed for a further five years) and licenses exist for helicopter flights for a five year period and may be renewed for a further five year period.
- number of CTO licences with additional activities approved - 4 (as above)
- type of additional activities approved - semi-permanent accommodation and fly drive, helicopter tours.

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<sup>1</sup>E Class or restricted licences. These are restricted in numbers, activities or sites, or all three and managed by a specific set of conditions. Licence numbers are usually restricted because of environmental, management or risk constraints.

T Class or unrestricted licences. There is no restriction currently to the number issued for the particular reserves (or sites) or activities for which they are issued. Management is by a set of general licence conditions. These are normally granted for 12 months but longer terms (3 or 5 years) can be given subject to achieving one or two recognised tourism accreditation schemes (Currently National Tourism Accreditation Program [NTAP], Eco Certification Program [ECP, formerly NEAP] or Green Globe International). Most licences issued are “T Class”.

The number of CTO permits has remained relatively steady over the available reporting period from 2002 to 2007. In the course of this assessment, the audit findings (from a consultant's assessment) of a Commercial Operation License at the site were inspected and no major non-compliances with the license conditions were noted.

**Table 2. Number of Commercial Tour Operators over time.**

<b>Licenses in issue</b>	<b>Date</b>
104	14/11/2002
106	24/6/2003
119	28/6/2004
105	23/06/2005
111	15/06/2006
108	28/06/2007



**Figure 7. Camp accommodation at the Kimberley Wilderness Adventure facility**

## Visitor numbers

Trends in visitor numbers for Purnululu have showed a steady increase since the initial approval of the plan (see Table 3 below).

Table 3 Total visits for Purnululu 1995 - 2006/07 from DEC Visitor Information Statistics (VISTAT) Program.

Year	Total Visits
1995	13,000
1996	14,000
1997	14,000
1998	17,000
1999	17,073
2000	17,800
2001	21,451
2002	21,152*
2003-04	22,641
2004-05	21,995
2005-06	23,844
2006-07	24,446

\* FINANCIAL YEAR ANNUAL FIGURES (RATHER THAN SEASON)

This estimate does not include the estimates of those visitors who fly over the park but do not physically set foot in the park. As an example, details from the *Purnululu National Park World Heritage Area Interpretation Plan (Final Draft 2006)* indicate the following figures:-

Table 4 Visitation figures from Purnululu National Park World Heritage Area Interpretation Plan (Final Draft 2006)

Drive in - independently	11916
Drive in – on tour	6779
Fly in + ground tour	4920
Fly over only (plane and helicopter)	21093
<b>Total</b>	<b>44708</b>

This survey undertaken in 2004 estimated total visitation including these 'fly-over' visitations was 44,708 a figure which effectively doubles the visitation estimate for that year.

It is difficult to gauge from the available information whether this increase in numbers could be considered to be in keeping with the intentions of the plan. The term 'wilderness' is used in the plan and the wilderness concept has been expanded through the DEC *Policy Statement 62 – Identification and Management of Wilderness and Surrounding Areas*. The area has not been assessed against the wilderness criteria which were adopted after the plan was finalised.

Developments, re-developments and visitation increases may have implications for future management of the area. Incremental changes in visitor usage and increases in infrastructure

can influence the assessment of an area as wilderness under the Wilderness policy and the perception of wilderness for visitors.

### **Plan objectives relating to the Recreation and Tourism**

Appendix 1 of the management details a 'Discussion of Visitor Survey Results'. This appendix states the following:-

*From a management perspective, the major observations based on visitors' comments are:*

- *Retain the Park in its natural state with no development or commercialisation*
- *Some roadworks are required to reduce erosion of tracks*
- *More literature, information, maps and signs are needed*
- *Present campsites and facilities require improvement*
- *Increased involvement of Aboriginal people in park management would be appreciated*
- *Further road access and more walks are required*
- *Visitors enjoy a high level of contact with Park Rangers.*

At the time of the plan finalization visitor survey information indicated 'a desire to have a 'wilderness' experience in this Park' (see also extract of the visitor survey document titled *Bungle Bungle National Park and Conservation Reserve Visitor Survey April – September 1987 included as Appendix3*). The Management plan refers to the wilderness values and DEC promotional advice also indicates that 'the park offers a remote wilderness experience'. Another key element of the maintenance of the feeling of 'relative wilderness' as referred to in the plan is maintaining the access track to a four wheel drive standard. The Plan states the following:-

*'The level of visitor use of the Park is kept relatively low due to the four wheel drive standard of the access road, recognising that most visitors to the Park arrive by road. The benefits of this include minimising impacts of vehicle traffic on the Park - particularly erosion - and the preservation of the remote experience expressed by visitors to be of great significance. Careful monitoring will ensure that informed decisions on preferred visitor numbers and distribution patterns within the Park are made'. -The intrinsic natural and cultural values of the Park could be jeopardized through a premature increase in visitor use. The quality of the visitor experience will continue to relate directly to a perception of a largely unspoilt wilderness remote in place and time from major population centres.*



Figure 8. Access to the park along four-wheel drive track

The DEC policy on wilderness, *Policy Statement 62 – Identification and Management of Wilderness and Surrounding Areas* was not in place at the commencement of the plan. The policy outlines the approach to be taken to identify wilderness areas. It also includes guidelines on permitted management strategies and activities for land vested in the Conservation Commission and set aside for conservation purposes. The overall aim is to manage wilderness areas for their intrinsic values and to provide opportunities for solitude, inspiration and self-reliant recreation. The wilderness areas are intended to be islands of naturalness so that future generations can experience areas that have evolved relatively untouched by modern society. The criteria or ‘indicators’ for wilderness areas in the DEC policy include ‘apparent naturalness – defined as the degree to which a site is free from permanent structures associated with modern technological society.’

The process for the preparation of the new management plan for Purnululu will incorporate an assessment of the area against the DEC Wilderness policy.

### **Recreation and Tourism Monitoring**

Section 1.7 of the management plan details the following plan recreation and tourism related statement:-

*‘The overall aim of management for this Park should be to maintain the remote wilderness-adventure type of experience which is gained from exploring the unusual landscape.’*

It is clear from the plan that resource planning and the information derived from monitoring would be vital to future decision-making. The plan states the following:-

*'This management plan provides management of visitor numbers in order to achieve conservation objectives while allowing for appropriate recreational opportunities in a variety of settings. The impacts of visitors on the Park will be monitored and assessed.'*

Further details in the plan refer to the following,

*'Consideration will be given to a zoning system which could be used to balance retention of the Park's natural values with the range of activities visitors wish to undertake. A separate issues paper will be released for public comment when zoning options are being examined'.*

The impact of visitor number increases and increased air traffic and the effects of these activities does not appear to have been formally monitored however there is an external unpublished thesis study on flight impacts on the site which is currently being undertaken. It should also be noted that changes were introduced to the flight path taken by air operators as a management response to ground-based visitor feedback. There are current agreements in place for local air operators in relation to recommended altitude and routes for fixed-wing aircraft, however, these appear to be 'understandings' which are difficult to monitor or regulate.

It is apparent from the overall intent of the plan that monitoring information would be used to ensure that informed decisions would be made on preferred visitor numbers.

## **Key Finding 5**

***There is limited evidence of formal monitoring to help inform management decisions relating to the visitor management strategies in the plan.***

### **DEC Response**

*The Department undertakes visitor surveys throughout the State on a regular basis. Visitor surveys were conducted at Purnululu National Park in 2000, 2002, 2004, 2005, 2006 and 2007. In each case, inadequate surveys were returned to provide meaningful statistical analysis but have been useful in guiding park management.*

*The Department changed the route of the helicopter scenic flights in the park two years ago to address concerns raised by traditional owners and others.*

*The report understates the Department's initiative in managing the commercial tour operator camping areas and the use of sustainability criteria for measuring performance by an independent auditor. This represents 'best practice' and Purnululu National Park has been used as a model for doing business in parks across WA. Nor does the report make mention of the Steps to Sustainable Tourism program that was used at the park to identify sustainable tourism opportunities and the criteria that might be used to measure success and implementation.*

### **Conservation Commission response**

As stated in the report it is difficult to gauge from the available information whether the documented increase in visitor numbers could be considered to be in keeping with the intentions of the plan. The management plan states that:-

*'The overall aim of management for this Park should be to maintain the remote wilderness-adventure type of experience which is gained from exploring the unusual landscape.'*

It is clear from the plan that resource planning and the information derived from monitoring would be vital to future decision-making. The plan also states the following:-

*'This management plan provides management of visitor numbers in order to achieve conservation objectives while allowing for appropriate recreational opportunities in a variety of settings. The impacts of visitors on the Park will be monitored and assessed.'*

*In relation to these plan objectives the assessment found limited evidence that the documented increase in visitor numbers and the potential impacts of this increase on the maintenance of a 'remote wilderness-adventure type of experience' have been formally monitored and assessed against the plan objectives. The results of the visitor surveys referred to in the DEC response and how the resultant information was used may be relevant to this finding but these surveys were not provided at the time of the assessment. The Conservation Commission will request these survey results at the time of the 12 month review of this performance assessment. At that time the process for the preparation of the new management plan for Purnululu may have progressed and incorporated an assessment of the area against the DEC wilderness policy. This will also aid in determining decisions for management of the area in the future.*

## **OUTPUTS**

*The planning and implementation eventually produces "outputs" or goods and services (usually outlined in work plans etc).*

There have been numerous outputs for the Park which have been summarized below. The majority of these are in response to visitor management issues as follows:-

- Footpaths and seating at Walanginji lookout; Shade shelters at Echidna Chasm and Frog hole; new bores and solar installation (2003/04)
- Bungle Bungle Wilderness Camp (2005)
- BB, PNP, East Kimberley, W.A.: - Guide to the rocks, landforms, plants, animals and human impact (1997)

- Visitor centre (2000)
- 12 page full colour free guide Magpaper (2006)
- Steps to Sustainable Tourism (2006)
- Purnululu National Park World Heritage Area Interpretation Plan (Final Draft 2006)
- Feral Animal Control Plan – Purnululu National Park (2007)
- Weed Control Plan – Purnululu National Park (2007)
- Wet season access guidelines (2007)

### **Biodiversity outputs from the management plan strategies**

Outputs under the relevant nature conservation strategies in the plan such as a GIS (Geographic Information System) to record key information on for example vegetation mapping, mapping ecological communities and hydrology has not been achieved to date.

The management plan provides limited strategic direction in relation to biodiversity management issues. Instead the plan is clearly focused on providing a formal management structure for the participation of the Aboriginal traditional owners and to provide for public recreation. The plan states that '*Few of the Park's vegetation associations have been adequately surveyed. Some vegetation associations in the Park are poorly represented or not represented in conservation reserves elsewhere*'. This information appears to be derived from the 1992 biological survey, *A survey of the wildlife and vegetation of Purnululu (Bungle Bungle) National Park and adjacent area, Woinarski, J.C.Z. 1992, CALM, Research Bulletin 6, (Research Bulletin 6)* which after 16 years still appears to be the definitive source of biodiversity information.

The biological survey results documented in *Research Bulletin 6* recorded 619 species of vascular plants and 298 species of vertebrates (149 bird, 81 reptile, 41 mammal, 15 fish, 12 frog) in their wildlife and vegetation survey of Purnululu National Park and surrounding areas. A more recent list from the district records for the park area lists (41 mammals (6 introduced), 159 birds, 12 amphibians, 81 reptiles, 15 fish, 603 plants (including four Priority 2<sup>2</sup> plant species, one

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<sup>\*2</sup> **Priority 1:** Poorly known species. Species that are known from one or a few collections or sight records (generally less than 5), all on lands not managed for conservation and under threat of destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

**Priority 2 :** Poorly known species. Species that are known from one or a few collections or sight records (generally less than 5), some of which are on lands not under immediate threat of destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

**Priority 3:** Poorly known species. Species that are known from collections or sight records from several localities not under imminent threat, or from few widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

**Priority 4:** Rare, Near Threatened and other species in need of monitoring. (a) Rare. Species are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands (b) Near Threatened. Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependant, but that are close to qualifying for Vulnerable (c) Species that have been removed from the list of threatened species during the past 5 years for reasons other than taxonomy.

**Priority 5:** Conservation dependant species. Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within 5 years.

Priority 3 plant species, one Priority 4 plant species and 20 introduced plants). The changes in total numbers from 1992 to these more recent figures are apparently due to taxonomic changes to some of the species.



Figure 9. Dissected sandstone creates deep gorges for endemic species such as *Livistonia* palms

There are a number of recommendations in *Research Bulletin 6*. There is also some consistency between the recommendations of this report and the strategies in the final management plan (a draft Purnululu management plan was available at the time of the *Research Bulletin 6* and in fact the biological survey document references the draft management plan).

The *Research Bulletin 6* document concentrates specifically on conservation of the area's vegetation and wildlife. It provides a lot of the detail that would normally be found in management plans of this period particularly in relation to nature conservation which has limited related strategies in the plan.

Of particular relevance are the recommendations from *CALM Research Bulletin 6* in relation to establishing a GIS and recommendations in relation to fire as follows (extract *CALM Research Bulletin 6*) :-

*A1. Establish a GIS*

*A1.1. Introduce a geographic information system for the storage of data on wildlife distribution, vegetation, degradation, fire history, tourist access, Aboriginal sites and experimental plots. This database would then be used for management planning, prediction and information retrieval.*

*E. Fire Regime ( E1 Experimental trials)*

*E1.1 Establish long-term, carefully monitored experimental trials to examine the effects of different burning regimes on native plants and animals.*

*E3. Protect long-unburnt patches*

*E3.1 The Desert Mouse, at least, appears to favour areas with long intervals between fires. A reasonable proportion of such old spinifex country should be adequately protected.*

*E4. Establish a considered fire strategy*

*E4.1. Based on the above points and other criteria (e.g. protection of tourists, protection of rehabilitation plots, more general legislation relating to burning) prepare and implement a systematic policy governing fire regime in the Park area. The optimum policy is most likely to be one which uses a mosaic of burning to maintain a wide range of vegetation ages and types.*

While these strategies are not drawn from the plan under assessment and do not have the same requirements in relation to implementation and auditing, these issues from 1992 are still relevant and largely unresolved and highlight the lack of strategic nature conservation direction in the management plan which is reflected in limited nature conservation outputs. Perhaps due to this limited strategic nature conservation direction the potential utilization of regional strategies for nature conservation under a draft Regional Management Plan was referred to during the interviews for this assessment. Similarly, a draft document under development -Draft Regional Fire Plan (Kimberley Region) - was referred to by district staff as a potential guiding management document for important nature conservation related management activities. However, these plans do not appear to have any formal status.

## **Key Finding 6**

***There is a lack of nature conservation related strategies in the plan and therefore limited nature conservation outputs.***

### **DEC Response**

*The Department has implemented specific strategies that assist in achieving conservation outcomes. One such example is the maintenance of fences on the recently acquired Ord River Regeneration Reserve and feral animal control on the reserve. This has the effect of controlling re-invasion of the park by feral species (camels, donkeys and cattle).*

*The lack of formal status of the draft regional strategies for nature conservation and fire management has not hindered the region's fire and nature conservation programs. Annual burn programs are also developed in conjunction with the Purnululu Fire Management Committee (including traditional owners and adjacent pastoralists).*

*The approach to fire is consistent with that taken with most management plans over the past five years, where there has been a deliberate move away from overly-prescriptive strategies that are quickly dated by unplanned fire. The fire management framework described in the Regional Fire Management Plan framework is not dissimilar to the current contents of the fire section of any new management plan, including the inclusion of performance indicators.*

*Draft park-specific strategies have also been prepared for invasive species but none has formal status.*

### **Conservation Commission response**

*Reference is made in the DEC response to the inclusion of performance indicators in the regional strategies which may impact on nature conservation outcomes. This is noted however it is unclear what the indicators are, and what the reporting requirements are if these documents remain informal.*

*The Conservation Commission is concerned with the use of strategic documents which have no formal status. The cyclical process of plan endorsement; performance assessment; and implementing change is considered as vital for the demonstration of continuous improvement in management. When planning documents which have not been endorsed are in use, the assessment criteria are uncertain and this in turn can potentially break down the performance assessment phase of the continuous improvement cycle. This matter will be pursued with DEC to better determine the role of these draft and proposed strategic planning documents particularly in relation to the reporting of nature conservation outcomes.*

### **Re-development of the Bellburn airstrip**

An airstrip had been developed in the Park at the commencement of the plan. The plan states that the airstrip '*provides an opportunity for visitors to fly in to the Park, join a conducted tour, stay overnight and fly out the next day, or to join a shorter tour which arrives and departs by air on the same day. This is the preferred method to access the Park so that visitor impacts are limited, and the feeling of relative wilderness can be maintained*'.

A significant upgrade of Bellburn airstrip was completed in 2006, to reportedly achieve a standard suitable for aircraft up to 5,700 kg conducting transport operations. The upgrade included a redesign of drainage around the airstrip, as well as widening and lengthening the strip, and re-surfacing. The upgrade was planned as a result of requests from the tourism industry to improve aircraft access and safety in the park.

### **Resource Management Plans**

An annual report is produced by park staff which summarizes park activities for the preceding year and makes recommendations for the work program in the coming year, including priority work-program requirements. In this annual report there are summary observations in relation to visitation statistics for the year. This output fulfills some plan strategies to a degree. Other important related strategies such as guidelines for road access have not been formalized and the important question of maintaining the 4-wheel drive only access to the park or improving the access road will need to be addressed for the revised management plan. These types of

decisions will be more difficult without detailed monitoring and established public consultation mechanisms (see Key Finding 2 relating to the Community Advisory Committee - the roading strategy was to be developed through the Park Council and the CAC).

There is also a plan requirement to develop a policy in relation to environmental assessment of development proposals and operations, including identification of proposals and operations which should be subject to such assessment (see also Key Finding 3). Determinations in relation to future potential developments that may affect the national park, including potential future DEC management developments and re-developments, and discussions in relation to potential alternate access to the park will be made more difficult by the lack of formal policy and also the lack of resource management plans and related monitoring particularly in relation to hydrology and geology.

## **Key Finding 7**

***Some of the key strategies such as a policy in relation to the environmental assessment of development proposals and operations and resource management plans for hydrology and geology have not been produced and implemented as per the requirements of the plan.***

### **DEC Response**

*It is clear that some of the strategies in the plan are no longer relevant and there has been a significant shift in the way DEC conducts its business, both at a planning and operational level. The emphasis on deferring planning decisions to subsidiary documents (eg. resource management plans for hydrology and geology), is unnecessary where these matters can adequately be dealt with as part of the normal approval process for development proposals.*

### **Conservation Commission response**

*From the response to this finding and to key finding 3 it is apparent that there has been a determination by DEC that certain aspects of the management plan such as the development of resource management plans and internal environmental assessment of certain re-development proposals may be unnecessary. However, to provide assurance that deliberations on the need to assess developments are being appropriately considered, it is important to formalize and document such decisions. Some of the actions in the plan, such as forming a Community Advisory Committee and developing a policy on internal assessments, cannot be considered to be implemented as the underlying requirement (e.g. forming the committee) was not achieved. The Conservation Commission requests that as per management plan requirements, DEC, in association with the PPC and the Community Advisory Committee (or alternatively the proposed Purnululu World Heritage Area Advisory Committee), develop a policy on the internal environmental assessment of development proposals and operations, including identification of proposals and operations which should be subject to such assessment. Progress in relation to this finding will be assessed at the 12 month review of this performance assessment.*

## OUTCOMES

*All the above results in impacts or "outcomes", hopefully achieving defined goals and objectives.*

### **Biodiversity Audit**

The document *A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002*, Ed. J.E. May and N.L. McKenzie, Department of Conservation and Land Management, found the following for Purnululu NP and Conservation Park: – ‘generally reserve management standards were ranked as ‘fair’ with biodiversity values and or management issues poorly identified; resource degradation is occurring though retrievable. Issues – Regular cattle and donkey controls are implemented. Permanent ranger presence. Prescribed burning both aerial and hand undertaken’.

### **Regeneration of eroded areas**

The majority of regeneration work undertaken in the management area was undertaken prior to the commencement of the management plan. For instance treatment in the mid 1980s involving commercial mustering and shooting from helicopters removed some 25000 head of cattle and around 4000 feral donkeys. There was also work done in this area to allow the re-establishment of grasses by ripping hardpan areas and seeding with pasture species. Some small areas were ripped to allow water penetration but most of the eroded areas were allowed to regenerate without any ripping or seeding. Follow-up control of feral donkeys and cattle has reportedly kept numbers to a minimum over the park, and there is Feral Animal Control Plan for the park.



Figure 10. Monitoring point in 1991 and in 2008 - east of Picaninny – Bellburn turnoff

Regeneration is clear in some areas and less so in others but the removal of hard-hoofed grazers has clearly stabilized the site and allowed prolific regeneration and revegetation over much of the area. This, in turn, has increased the need to implement an appropriate fire regime.

### **Fire management outcomes**

Burning of strategic buffers commenced in 1987. This was the first application of aerial prescribed burning in the Kimberley. Subsequently there has been an ongoing program of protective burning in order to protect Park assets from the possibility of frequent large scale wildfires. There is a strong focus on the management of visitor risks by minimizing the fire risks through prescribed burning early in the dry season.

There is an ongoing requirement to develop and apply an appropriate fire management regime for the area. Plan Section 4.7 Fire highlights the requirement for a fire management plan to be prepared and implemented. A draft DEC Regional Fire Plan is under development however it is unclear what strategic guidance this will include for the Purnululu management area. Also noted during the assessment were comments by traditional owners that there was concern that uncontrolled fire was affecting cultural sites (particularly artwork) within the park. A prescribed burn was being undertaken during the period of the field inspection for this assessment. The planning template for this prescribed burn was sighted in the assessment and the document appeared to be an essentially generic document lacking in site specific details.

This particular fire burnt significantly more of the park than was planned for and damaged some park infrastructure. The fire burnt up onto the lower reaches of the massif itself which is an undesirable outcome for the site. While a review of the outcomes of this burn was undertaken, based upon the inspection of the prescribed burning records there is little documented evidence of a systematic review of the outcomes of prescribed burning in the park.



Figure 11. Aerial view of prescribed burn undertaken in April 2008

## **Key Finding 8**

***A fire management plan for the area is yet to be prepared and implemented.***

### **DEC Response**

*The department has made a commitment to the traditional custodians of the area to work with them to prepare strategies to (a) more fully involve them in the burning program; and (b) minimise the potential impact of fire on cultural sites. The sensitivity of art sites to fire was addressed in a study commissioned by DEC this year.*

*Annual burn programs are developed in conjunction with the Purnululu Fire Management Committee and fire patterns established as part of early dry season burning programs have enabled better fire suppression capability in times of wildfire.*

### **Conservation Commission response**

*There is an ongoing requirement to develop and apply a fire management plan for the area. At the time of the 12 month review an update of the status in relation to this finding will be requested.*

## **CONCLUSION**

The plan has not delivered management with traditional owners in the manner which has been experienced from the implementation of more contemporary joint management planning arrangements.

As noted in other assessments undertaken by the Conservation Commission the continuity and filling of positions in general is a constraint to the delivery of management in the remote areas of the State. The delivery of core functions required to continue to maintain the park are managed within the current limited staffing inputs due to the experienced and dedicated park staff.

Overall the area has continued to revegetate from an eroded state (due to historical overgrazing) through the removal of hard-hoofed grazers. This has clearly stabilized the site and allowed prolific regeneration and revegetation over much of the area. This, in turn, has emphasized the need to develop and apply an appropriate fire management regime for the area. The plan stipulates the development of a resource management plan for fire management which has not yet been achieved.

In general the management plan provides limited strategic direction in relation to biodiversity management issues and there is a lack of strategic direction in the plan relating to nature conservation strategies for the park.

APPENDIX 1

STRATEGY NUMBER	STRATEGY	LEVEL OF IMPLEMENTATION Fully implemented (5) Partially implemented (4) Started (3) Planning stage (2) No planning or implementation (1) No longer relevant (NR)	COMMENT
1	PARK MANAGEMENT		
1.1	Purnululu Park Council		
1	All matters of Aboriginal interest in the Park will be referred to the PPC for its consideration. The PPC will develop park management policies in relation to these matters and will report directly to the Minister for the Environment.	3	PPC exists, not yet functioning to potential. Issues relating to Native Title impair progress
2	The PPC will determine its procedures and will meet regularly.	4	PPC meets 3 -4 times per annum, procedures not documented
3	The PPC will refer any matter relating to Aboriginal cultural heritage to the Purnululu Cultural Heritage Committee for advice and comment prior to making any decisions on the matter.	3	PCHC has not been established, the Federal government have hinted that they may fund this via the Indigenous heritage management unit at DEWHA.
4	Any matter on which agreement cannot be reached will be referred to the Minister for the Environment for direction.		TO date there has been not issue requiring this action.
5	The PPC will keep the NPNCA and the Community Advisory Committee briefed on decisions arising from the PPC so that they can consider such decisions and advise the Minister independently as they see fit.	1	CAC has not been established
6	Joint Jaru / Kija representation on the PPC will remain in place until the current dispute is resolved, after which Aboriginal representation on the PPC may be varied to reflect the outcome of the dispute.	1	Dispute has hampered this KLC unsupportive, however it is a DEWHA requirement. PPC is all Kija, we consult with Jaru less formally.
1.2	Purnululu Community Advisory Committee		
1	A Community Advisory Committee will be formed as soon as practicable after the release of this plan.	1	CAC has not been established
2	The Community Advisory Committee will keep the PPC and NPNCA briefed on its decisions.	1	CAC has not been established
1.3	National Parks and Nature Conservation Authority		
1	The NPNCA will keep the PPC and the Community Advisory Committee briefed on decisions arising from the NPNCA in relation to the Park so that they can consider such determinations and advise the Minister independently as they see fit.	1	There has been no evidence of this
2	ENVIRONMENTAL ASSESSMENT		
1	New development proposals and some operations will require internal environmental assessment prior to implementation.	3	ongoing, process needs streamlining and documenting.
2	CALM, in association with the PPC and the Community Advisory Committee, will develop a policy on the internal environmental assessment of development proposals and operations, including identification of proposals and operations which should be subject to such assessment, to ensure developments and operations have minimal impact on the natural and cultural resources and values of the Park.	3	ongoing, process needs streamlining and documenting.

APPENDIX 1

STRATEGY NUMBER	STRATEGY	LEVEL OF IMPLEMENTATION Fully implemented (5) Partially implemented (4) Started (3) Planning stage (2) No planning or implementation (1) No longer relevant (NR)	COMMENT
3	Where internal environmental assessment is required, a written report will be prepared and submitted to the PPC and the Community Advisory Committee.	3	ongoing, process needs streamlining and documenting.
4	Prior to making their assessment, the PPC will seek the advice of the Purnululu Cultural Heritage Committee in relation to any report on the impact of a proposed development or operation on Aboriginal heritage values of the Park.	Not assessed	PCHC has not been established, the Federal government have hinted that they may fund this via the Indigenous heritage management unit at DEWHA.
<b>3 PARK BOUNDARIES AND TENURE</b>			
<b>3.1</b>	Park Boundaries and Tenure		
1	Any negotiations on future preferred boundaries of the Purnululu National Park will ensure that land tenure and Park boundaries provide the best possible protection to the environmental and cultural values of the area.	3	There is a requirement of the WH listing the inclusion of the Purnululu Conservation area into the National park be expedited, however there is little documented evidence negotiations on this.
2	The PPC and the Community Advisory Committee will comment on proposals to extend the National Park into the Conservation Reserve, and into adjacent pastoral leases as opportunities arise.	3	as above
3	Lease holders will be consulted to determine a preferred course of action for future management of adjacent lands. Three possible courses of action to be considered are: • Government acquisition of portions of leases from current leaseholders • agreements for management as per Section 16 of the CALM Act • restructuring of boundaries with adjacent properties.	3	Parcels of land adjacent to Purnululu Conservation reserve
4	CALM will liaise with appropriate bodies to incorporate sections of the Ord River Regeneration Reserve into the National Park.	1	will be included under the 2015 acquisitions. There is little documented evidence negotiations on this, current funding to manage ORRR inadequate
5	Further discussions will be held with DOLA with a view to transferring existing trigonometric sites out of the Park. If alternative sites are to be located within the Park, the advice of the PPC will be sought.	1	
<b>3.2</b>	<b>Mining Leases and Exploration Licenses</b> Applications for an exploration licence to undertake non ground-disturbing exploration within the Purnululu National Park would require notification to DEP, referral to CALM and the NPNC and the concurrence of the Minister for the Environment. If approved the licence would be subject to strict environmental conditions. Exploration involving significant environmental disturbance may be approved following referral to CALM, NPNC and EPA if required. Productive mining in the Park would be subject to EPA assessment, concurrence of the Minister for the Environment and Parliamentary approval.	3	This process takes place, however further complications need to be addressed under the EPBC act. This is a requirement of the World Heritage listing.

APPENDIX 1

STRATEGY NUMBER	STRATEGY	LEVEL OF IMPLEMENTATION Fully implemented (5) Partially implemented (4) Started (3) Planning stage (2) No planning or implementation (1) No longer relevant (NR)	COMMENT
2	Exploration licences within Purnululu Conservation Reserve may be approved by the Minister for Minerals and Energy following referral to CALM, recommendations of the NPNC A and the Minister for the Environment, and would be subject to strict environmental guidelines. Exploration involving environmentally significant disturbance may be referred to the EPA if required. In the case of productive mining proposals approval may be granted following assessment by the Department of Minerals and Energy, receipt by CALM/NPNC A of a Notice of Intent, and recommendations of the NPNC A and the Minister for the Environment. EPA can assess if significant impact is likely, and in the case of formal assessment the Minister for the Environment may impose conditions.	4	This process takes place, however further complications need to be addressed under the EPBC act. This is a requirement of the World Heritage listing.
3	The PPC and the Community Advisory Committee may provide advice to the Minister on all mining and exploration proposals.	4	This has only been tested once of twice. Process needs to be documented.
4	Applications for mining activity that may result in significant disturbance may be referred to the Department of Environmental Protection. Conditions consistent with this management plan will be recommended in order to minimise impacts on the biophysical and cultural environments and to ensure effective subsequent rehabilitation.	4	as above
<b>3.3 Living Area Leases</b>			
1	Ministerial approval will be sought to establish three living areas for Aboriginal traditional owners within the Park. With the approval of the Minister and the NPNC A, the Executive Director will grant leases for living areas at a peppercorn rent for the maximum permissible term under the CALM Act. The living area leases will include negotiated terms and conditions which secure reasonable Aboriginal aspirations while taking due account of other Park values.	4	Three leases approved, however one lease yet to have agreement signs by proponent. Dispute between Kija and Jaru in relation to Native title has complicated matter.
2	Aboriginal residents shall have appropriate access to approved living areas.	4	
3	The PPC and the NPNC A will provide advice to the Minister on all matters pertaining to Aboriginal living areas and access.	3	Little or no development has taken place on the leases.
4	All site planning and design and construction criteria will be subject to an internal environmental assessment procedure (Section B,2) and will be consistent with the management for residents' requirements (Section B.7).	1	as above
5	Applications for additional living areas will be endorsed by the Aboriginal traditional owners prior to their consideration by the PPC.	1	as above

**4.0  
MANAGEMENT  
OF NATURAL  
RESOURCES**

APPENDIX 1

STRATEGY NUMBER	STRATEGY	LEVEL OF IMPLEMENTATION Fully implemented (5) Partially implemented (4) Started (3) Planning stage (2) No planning or implementation (1) No longer relevant (NR)	COMMENT
<b>4.1 Resource Management Programs</b>			
1	An annual works program will be prepared and submitted to the PPC and the Community Advisory Committee for their consideration.	4	ongoing
2	An annual operations plan will be prepared for each category of natural resource (including fire and rehabilitation) to provide the basis for management decisions in relation to natural resources until the RMPs are developed. This plan will be submitted to the PPC and the Community Advisory Committee for their consideration.	3	Pest plant and animal plans have been completed, Fire management plan is being compiled.
3	Resource management programs will be prepared in order to provide detailed information on each natural resource and its management. These programs will be submitted to the PPC and the Community Advisory Committee for their consideration.	3	as above
4	A GIS will be established.	1	Plans to have this start by June 2008
<b>4.2 Hydrology</b>			
1	A resource management program (Section B 4. 1) will be prepared for hydrological resources of the Park, including river systems, permanent waterholes, springs, seeps and groundwater. The program will include monitoring of groundwater extraction, and an assessment of available water resources.	3	current infrastructure maintained, there is a need to develop monitoring and of extraction to enable predictions of future water requirements
2	In the development of all Park facilities an internal environmental assessment procedure will determine impacts on hydrology (Section B.2).	1	
3	The conservation of scarce water resources will be incorporated in the design of future Park buildings.	1	no evidence
<b>4.3 Soils and Geomorphology</b>			
1	A resource management program (Section B 4. 1) will be prepared for the management of soils and the surface of the massif and outliers.	1	maintenance is completed as required
2	In the development of all Park facilities an internal environmental assessment procedure will consider the impact of the proposed development on soils (Section B.2).	4	Taken into consideration. No documentation
<b>4.4 Landscape</b>			
1	A resource management program (Section B 4. 1) will be prepared for the protection of landscape. The visual resources of each landscape character type will be assessed and areas of high scenic quality requiring special management will be recorded. Degraded areas in need of rehabilitation will also be assessed.	4	The weed management plan covers this in part.
2	In the planning and development of all Park facilities, an internal environmental assessment procedure will consider impacts on visual landscape values. (Section B.2).	4	Taken into consideration. No documentation
<b>4.5 Flora and Vegetation</b>			

APPENDIX 1

STRATEGY NUMBER	STRATEGY	LEVEL OF IMPLEMENTATION Fully implemented (5) Partially implemented (4) Started (3) Planning stage (2) No planning or implementation (1) No longer relevant (NR)	COMMENT
1	A resource management program (Section B 4. 1) will be prepared for the Park's flora, including the use of appropriate fire management practices, and assessment of exotic species and proposals for their prevention, eradication or control.	4	Nature conservation has completed some survey work. Ongoing
2	In the development of all Park facilities an internal environmental assessment procedure will consider the impact of the proposed development on flora (Section B.2).	4	as above
3	Vegetation surveys will aim to assess and define significant species and associations in the Park.	4	as above
<b>4.6 Fauna</b>			
1	A resource management program (Section B 4. 1) will be prepared for the Park's fauna, including an assessment of feral species and proposals for their eradication or control.	4	A feral animal management plan has been drafted
2	In the development of all Park facilities an procedure will consider the impact of the proposed development on fauna (Section B.2).	4	Taken into consideration. No documentation
3	Surveys will aim to assess species, population levels, and conservation status and habitat requirements of fauna in the Park.	4	Taken into consideration. No documentation
4	Domestic animals will be allowed in the Park only under conditions of permit as provided by the Executive Director and in accordance with guidelines developed by the PPC. Domestic cats will not be allowed in the Park.	5	Complete
<b>4.7 Fire</b>			
1	A resource management program (Section B 4. 1) will be prepared on fire management for the Park which will include research needs and priorities.	3	On ground works are complete/ongoing. However more needs to do on research.
2	In the development of all Park facilities an internal environmental assessment procedure will consider the proposed development in the context of fire protection (Section B.2).	4	Taken into consideration. No documentation
3	Until a fire management plan is prepared, prescribed burning in the Park will be restricted to research, the protection of life and property, and strategic burning to protect the Park from wildfire.	4	Yearly fire management is planned via the 'Fire advisory Committee. A published Fire management plan is yet to be established.
4	Fire management procedures will comply with CALM Policy Statement No. 19 (Fire Management Policy) and provisions of the Bush Fire Act.	5	
<b>4.8 Rehabilitation</b>			
1	A resource management program (Section B 4. 1) will be prepared on rehabilitation of the Park's degraded resources. This program will include reference to the prevention, control and eradication, if feasible, of exotic flora and fauna.	4	Pest plant and animal plans have been completed, Fire management plan is being compiled.
2	All Park developments will be subject to an internal environmental assessment procedure which will refer to erosion potential and to rehabilitation requirements (Section B.2).	4	Taken into consideration. No documentation

APPENDIX 1

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3	Until a rehabilitation management plan is prepared, rehabilitation operations will be in accordance with the annual operations plan (Section B 4.1, Strategy 2) and referred to the PPC and the Community Advisory Committee for their consideration.	4	
5.0	MANAGEMENT OF CULTURAL RESOURCES		
5.1	Purnululu Cultural Heritage Committee		
1	All matters pertaining to Aboriginal cultural heritage including Aboriginal sites and objects will be referred to the PCHC.	4	PCHC has not been established, the Federal government have hinted that they may fund this via the Indigenous heritage management unit at DEWHA.
2	Aboriginal cultural heritage information will be held in confidence unless approved in writing by the PCHC.	5	Referred to Traditional Owners
3	Access to any site of Aboriginal significance will not be permitted or encouraged unless specifically agreed to by the PCHC.	5	as above
4	The PPC will refer applications for work and/or research to the PCHC for its advice.	1	N/A
5	Neither the Aboriginal traditional owners, nor the PCHC will be required to divulge or otherwise compromise any cultural information.	5	Complete
5.2	Traditional Aboriginal Activities		
1	In consultation with the PCHC, the PPC shall recommend areas within the Park for use by Aboriginal traditional owners for traditional activities such as hunting and gathering, or for ceremonial purposes.	4	No impact as yet
2	In consultation with the PCHC, the PPC shall develop guidelines pertaining to Aboriginal hunting and gathering as well as ceremonial activities to ensure that: natural resources do not become unduly depleted; incompatible activities are not carried out in or near visitor use areas; the possibility of interruption or intrusion by visitors is minimised; firearms in the Park will be licensed and separately registered with CALM's District Manager and; operated within strict safety procedures (Section B 8.2); suitable access is provided to areas established for hunting and gathering; a system for monitoring the use of natural resources of the Park will be developed and implemented.	4	as above
5.3	Colonial Cultural Heritage		
1	The Colonial cultural heritage of the Park will be recorded and future management will take Colonial heritage values into consideration.	4	Taken into consideration.
6.0	MANAGEMENT FOR PUBLIC USE		
6.1	Framework for Management of Public Use	5	
1	Maintain low key public access in a way which retains the wilderness values of the Park.	5	Complete
2	Ensure that proposals for future visitor facilities, including provision of commercial accommodation, are consistent with the Park's unique natural and cultural values.	5	"

APPENDIX 1

STRATEGY NUMBER	STRATEGY	LEVEL OF IMPLEMENTATION Fully implemented (5) Partially implemented (4) Started (3) Planning stage (2) No planning or implementation (1) No longer relevant (NR)	COMMENT
3	Encourage appropriate nature-based recreation activities which enhance visitor appreciation of the Park.	5	"
4	Monitor visitor numbers and the impacts of visitor use.	5	"
5	All proposed visitor developments will be subject to an internal environmental assessment procedure (Section B.2)	5	"
6	A system of zoning will be considered to provide a base for the regulation of activities within defined locations.	5	"
<b>6.2</b> Access			
1	Road access will continue to be low key to maintain the wilderness character of the Park. Guidelines for road access will be developed in consultation with the PPC and the Community Advisory Committee, and will reflect the current four-wheel drive sole access arrangements, wet season access restrictions, and fee collection arrangements.	5	Complete
2	An internal environmental assessment procedure will be applied to proposed road developments (Section B.2).	5	
<b>Aerial Access</b>			
1	Guidelines on aerial access developed by CALM will be monitored and reviewed by the PPC and the Community Advisory Committee. Applications for use of the Park airstrip will be processed by CALM in accordance with these guidelines.	5	Complete
2	Guidelines for wet season helicopter access will be prepared by CALM and referred to the PPC and the Community Advisory Committee.	5	Complete
3	Fees will continue to apply for aircraft landing rights at the airstrip, and for helicopter operations at the Park. Relocation of the helicopter operator's camp will be considered, and referred to the PPC and the Community Advisory Committee.	5	Complete
<b>6.3</b> Recreation			
1	Guidelines for walking access will be developed, and referred to the PPC and the Community Advisory Committee. These guidelines will include reference to: the protection of cultural, biological and landscape values; permits for overnight, extended, wet season, or unmarked walks; a code for minimal impact bushwalking; visitor safety.	5	Complete
2	An internal environmental assessment procedure (Section B.2) will be applied to proposed walks.	5	Complete
<b>Day Use Areas</b>			
1	Day use areas will be developed subject to review by the PPC and the Community Advisory Committee.	5	Complete
2	An internal assessment procedure (Section B.2) will be applied to the upgrading of current and proposed day use areas.	5	Complete

APPENDIX 1

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<b>Camping</b>			
1	Current camping areas at Belburn Creek, Walardi and Kurrajong will be monitored and improved as required.	5	Complete
2	Further camping areas will be developed subject to internal environmental assessment and referral to the PPC and the Community Advisory Committee. It is likely that new areas will be developed in the hills away from the massif within the Conservation Reserve.	1	N/A
3	Development of remote camping areas linked to low-impact bushwalking and wet season aerial access will be considered subject to appropriate guidelines, and referral to PPC and the Community Advisory Committee.	3	PPC are consulted, however there are no documented guidelines.
<b>6.4 Commercial Operations</b>			
1	Commercial operations which facilitate visitor enjoyment of the Park will be encouraged, but will be required to recognise the very high natural and cultural values of the area and comply with the limitations these impose	5	Commercial operators are subject to Licensing agreements
2	Commercial operations will be subject to scrutiny by the PPC and the Community Advisory Committee, and to internal environmental assessment.	5	as above
3	All concessions, whether lease or licence, will require the approval of the NPNC and the Minister.	5	Complete
<b>6.5 Information, Education and Interpretation</b>			
1	Guidelines for the provision of information, education and interpretation will be developed, consistent with the Park policy on public use (Section B 6.1), and referred to the PPC and the Community Advisory Committee. These guidelines will include reference to: interpretation programs; Aboriginal involvement in Park management visitor information/orientation facilities; flora and fauna and the ecological basis underlying their management; Aboriginal and Colonial cultural history; information on the state of the access road, fees and visitor safety.	4	No guidelines specific to the Park, however reference is made to Tour operators manual.
2	Internal environmental assessment procedure (Section B.2) will be applied to developments associated with the provision of information, education and interpretation.	4	
<b>7.0 MANAGEMENT FOR RESIDENTS</b>			
<b>7.1 Housing</b>			
1	Residential development plans will be produced in accordance with guidelines prepared by the PPC, and will be submitted to the PPC, the Community Advisory Committee and the NPNC for their consideration. These plans will be compatible with the overall planning philosophy for the Park and sympathetic to environmental and cultural values.	1	No guidelines specific to the Park.
2	Residential development plans including the provision of housing, facilities and other essential services will be subject to an internal assessment procedure (Section B.2).	4	Taken into consideration. No documentation
<b>7.2 Services</b>			

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STRATEGY NUMBER	STRATEGY	LEVEL OF IMPLEMENTATION Fully implemented (5) Partially implemented (4) Started (3) Planning stage (2) No planning or implementation (1) No longer relevant (NR)	COMMENT
1	Where provision of community services entails construction or major alteration of facilities it will be subject to an internal assessment procedure (Section B.2).	3	Taken into consideration. No documentation
2	The PPC will develop guidelines on the provision of community services, including health, education and communication facilities.	1	no guideline drafted
<b>8</b>	SAFETY		
<b>8.1</b>	Visitor Safety		
1	Guidelines for visitor safety will be developed by CALM, and reviewed by the PPC and the Community Advisory Committee. Advice will be provided for visitors in brochures and on notice boards.	5	ongoing
2	Public awareness of safety will be promoted.	5	ongoing
<b>8.2</b>	Occupational Health and Safety		
1	All Park staff will be trained in first aid, occupational safety, basic bushcraft and survival skills, radio communications, search and rescue, fire management and safe use of firearms.	5	ongoing
2	Firearms in the Park will be licensed, registered with the CALM District Manager and operated in accordance with strict safety guidelines.	5	complete
<b>8.3</b>	Emergency Procedures		
1	Procedures will be developed for civil or medical emergencies. These will be regularly reviewed.	5	complete
2	Park staff and residents will be kept informed of emergency procedures.	5	ongoing
3	Staff will be trained in fire suppression management, search and rescue procedures and first aid (Section B 8.2).	5	ongoing
<b>9</b>	PARK ADMINISTRATION		
<b>9.1</b>	Staffing		
1	Provide adequate staff to implement this plan.	1	Inadequate staffing levels
2	The PPC will develop guidelines for the selection and induction of staff employed by CALM within the Park. Selection guidelines will attend to CALM policy.	1	PPC not involved
3	Staff requirements will be monitored to ensure adequate protection and management of the Park.	1	Inadequate staffing levels
4	Promote the appointment of Aboriginal traditional owners to staff positions.	3	Ad hoc
5	The PPC will investigate additional categories of employment for Aboriginal people including contracts, consultancies and other forms of full-time or part-time employment.	3	
<b>9.2</b>	Staff Training		
1	Staff training and development programs will be provided for staff in accordance with guidelines developed by the PPC (Section B 7.2).	4	ongoing
<b>9.3</b>	Communications		

APPENDIX 1

STRATEGY NUMBER	STRATEGY	LEVEL OF IMPLEMENTATION Fully implemented (5) Partially implemented (4) Started (3) Planning stage (2) No planning or implementation (1) No longer relevant (NR)	COMMENT
1	An appropriate communications network will be established and maintained for the Park. In planning for and installing communication facilities, the communication needs of Park residents and visitors will be considered.	4	Upgrade in due for implementation mid 2008
2	Installation of communication facilities will comply with internal environmental assessment procedures (Section B.2).	5	
<b>9.4</b> Park Headquarters			
1	A Park Headquarters development plan will be produced and referred to the PPC and the Community Advisory Committee.	3	Works are referred on a case basis only, guidelines need to be development
2	Site development plans will be prepared before the construction of management facilities as identified in the development plan and subject to an internal environmental assessment procedure (Section B.2).	5	as above
<b>10</b> PLAN IMPLEMENTATION			
<b>10.1</b> Research and Monitoring			
1	Compile an inventory of natural and cultural resources of the Park, and transfer to GIS as the facility becomes available (Section B 4. 1).	1	
2	Establish research and monitoring priorities in accordance with guidelines developed by the PPC and the Community Advisory Committee.	3	Work undertaken and referred to PPC, no documented Guidelines.
3	Research proposals will be referred to the PPC for its consideration. The advice of the PCHC will be sought for research proposals involving matters of cultural significance.	5	ongoing
4	The use and dissemination of Aboriginal cultural information will be subject to approval by the PCHC.	5	referred to PAC
<b>10.2</b> Park Programs			
1	Priorities for management strategies and a five-year implementation plan will be prepared and referred to the PPC and the Community Advisory Committee.	3	
2	The implementation plan will be reviewed annually by the PPC and the Community Advisory Committee, and an annual progress report will be prepared by CALM staff for their consideration.	1	not happening
3	The NPNCA will monitor the implementation of the Purnululu National Park management plan as required under the CALM Act.	5	
<b>10.3</b> Term of Plan			
1	The term of this plan will be ten years, in accordance with Section 55(6) of the CALM Act.	5	Current plan three years out of date.
2	There is provision under Section 61 of the CALM Act for the plan to be amended, as required. If proposed amendments mean major changes to the plan, the revised plan will be released for the statutory period of public review.		

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3	The management plan will be reviewed five years following gazetta. This review will identify the extent to which management objectives have been achieved and strategies implemented, the reasons for lack of intended achievement or implementation, and a summary of information which may affect future management. The review will be released for public comment for the statutory period of two months.	4	review undertaken, no recommendations received at ground level.

## APPENDIX 2

### Assessment Process

The assessment process incorporated a self-assessment by the district then checks of office records, interviews with staff responsible for the implementation of priority actions, and site inspections within the National Park.

1. Self-assessment table sent to East Kimberley District 25<sup>th</sup> January 2008.
2. Completed self-assessment table received 22<sup>nd</sup> February 2008.
3. District meetings and records checks at DEC Kununurra Office 25<sup>th</sup> February 2008 to 28<sup>th</sup> February 2008.
4. Field visit to Purnululu National Park and records check at Park Headquarters 21<sup>st</sup> April 2008 to 24<sup>th</sup> April 2008.
5. Work in Progress draft assessment report sent to East Kimberley District for content discussion 26<sup>th</sup> May 2008.
6. First draft to Conservation Commission for endorsement to send to DEC for formal response to findings - 18<sup>th</sup> June 2008.
7. Final draft forwarded to DEC for response to Key Findings – 27<sup>th</sup> August 2008.
8. DEC response to key findings received – 28<sup>th</sup> November 2008.
9. Final draft presented at Conservation Commission Performance Assessment Review Committee 19<sup>th</sup> January 2009.
10. Final draft approved at the Conservation Commission meeting 16<sup>th</sup> February 2009.



Department of Conservation and Land Management

**BUNGLE BUNGLE  
NATIONAL PARK  
AND  
CONSERVATION RESERVE**

VISITOR SURVEY

April - September 1987

Mary Colreavy

Matt Cavana

March 1988

11. What did you like most about the Park?

1. ...Scenery, beauty..... 50.7%
2. ...Domes, formations, Gorges..... 47.2%
3. ...Remoteness, isolation..... 36.0%

12. What did you dislike about the Park?

1. ...Access road, tracks, creek crossings..... 26.4%
2. ...Insufficient signs, maps, information..... 14.5%
3. ...No campfires, BBQ's..... 13.9%

13. a. Do you intend to visit Bungle Bungle again?

Yes 84.2% No 15.8%

b. If yes, what method of transport are you likely to choose?

Charter Plane 14.4% Hire vehicle 5.1%  
 Helicopter 9.7% Private vehicle 59.7%  
 Commercial tour 6.9% Other (please specify) ...4.1%...Motorcycle

14. Please indicate if you have visited any of the following National Parks of Western Australia or the Northern Territory.

	a) This Trip	OR	b) Previously
Mirima (Hidden Valley)	33.6%		16.4%
Wolfe Creek Crater	40.9%		17.3%
Giekie Gorge	53.7%		27.2%
Windjana Gorge	56.1%		22.3%
Tunnel Creek	52.4%		20.6%
Keep River	20.2%		5.9%
Kakadu	35.5%		33.0%
Katherine Gorge	34.7%		42.6%
Kings Canyon	22.6%		31.7%
Uluru (Ayers Rock - Mt Olga)	31.2%		50.9%

15. Any further comments?

1. ...Retain in natural state, no development, commercialisation 22.8%
2. ...Some roadworks needed 11.4%
3. ...Information...signs...maps etc not satisfactory 10.1%
4. ...Thanked/liked Park rangers & spouses 8.9%
5. ...No improvement, keep 4WD 8.6%

TABLE 1.1 MOST POPULAR SITES VISITED IN THE PARK.

AREA VISITED IN PARK	RELATIVE FREQUENCY (%)
PICCANINNY AREA	87
ECHIDNA CHASM	54
RED ROCK CREEK AREA	23
BULL CREEK AREA	18
OTHER GORGES/AREAS	16
WULWULDJII/OSMOND CREEK	11

TABLE 1.2 CAMPSITES USED WITHIN THE PARK.

AREA CAMPED AT IN PARK	RELATIVE FREQUENCY (%)
BELLBURN CAMPSITE	64
THREE WAYS/KURRAJONG	21
SPRING CREEK TRACK	17
PICCANINNY CREEK AREA	14
RED ROCK CREEK AREA	11
DATE PALM/WULWULDJII/OSMOND CREEK	8
ECHIDNA CHASM	5
BULL CREEK AREA	3

TABLE 1.3 ACCESS ROUTES INTO AND OUT OF THE PARK.

ENTRANCE/EXIT ROADS	RELATIVE FREQUENCY (%)
ROUTE IN	
SPRING CREEK TRACK	97.8
OSMOND VALLEY TRACK	2.2
ROUTE OUT	
SPRING CREEK TRACK	95.4
OSMOND VALLEY TRACK	4.6