



Northern
Territory
Government

great
Territory
lifestyle

A Territory Government initiative



Litchfield National Park

Draft Plan of Management May 2011



Making a Submission on the Draft Plan

Submissions may be made on-line at <http://www.nt.gov.au/nreta/consult/>

Every submission is important but those that give reasons for concern with supporting information and constructive suggestions are most useful.

Please include your name, contact details and area of interest. Be clear what parts of the draft Plan you disagree with, as well as what you especially support. Refer to sections and page numbers.

The draft Plan is available for public comment for a four week period.

In keeping with the *Territory Parks and Wildlife Conservation Act*, the Parks and Wildlife Commission will consider all public comments and amend the draft as appropriate. Completed draft plans of management are tabled in the Legislative Assembly by the Minister for Parks and Wildlife and will unless disallowed by Parliament, come into effect after seven sitting days of the Assembly.

Litchfield National Park Plan of Management

Parks and Wildlife Service of the Northern Territory,

Department of Natural Resources, Environment, the Arts and Sport

PO Box 496,

PALMERSTON, NT, 0831

This document is available at: <http://www.nt.gov.au/nretas/parks/manage/plans>

Published by the Department of Natural Resources, Environment, the Arts and Sport.

Acknowledgements

The production of this Plan was made possible through the efforts and interests of many individuals and organisations. Principle among these has been Tourism NT, the members of the Litchfield National Park Stakeholder Reference Group and the Darwin Off Road Cyclists (DORC).

Executive Summary

Litchfield National Park received approximately 130 000 visitors in 1990 and 275 000 visitors in 2009. It is highly likely visitor numbers will continue to increase over the life of this Plan. The Park will therefore continue to be developed as a major national park offering visitors a range of recreational opportunities and experiences. The main attraction for visitors to the Park is the opportunity to swim, walk and relax in a spectacular natural setting within close proximity to Darwin. The Park also contains significant natural values.

It is recognised that the key visitor issues relate to poor circulation of visitors in the Park and over crowding at key visitor sites. This Plan of Management proposes upgrading a number of existing visitor sites to accommodate the current and potential visitor numbers. It promotes working with the tourism industry to improve the flow of visitors in the Park and promote new and under-utilised visitor sites to assist in dispersing visitors across the Park.

Anti-social behaviour has become an issue at specific sites within the Park in the last 5 to 10 years. The Plan addresses this issue. The Parks and Wildlife Service is attempting to enhance visitor safety by preparing amendments to the *Territory Parks and Wildlife Conservation By-laws* to enable the banning of glass at all designated swimming sites.

The Plan proposes the development of new recreation activities such as cycling / mountain bike riding and proposes investigating the potential for adventure activities to be established in the Park. The Plan proposes sealing 8 km of the Reynolds River 4WD Track which would provide more swimming, camping and walking opportunities for visitors with conventional vehicles. This would assist in dispersing visitors across more sites in the Park and alleviate the pressure on the key sites.

The Plan proposes investigating opportunities to develop Indigenous cultural tours. These tours could assist in educating visitors in the cultural landscape of the Park and may offer employment opportunities to local Aboriginal people and others.

The Plan identifies the potential for the development of a Signature Lodge / Eco Accommodation within the Park. This form of development has the potential to offer a world class, small-scale tourist accommodation in the heart of a national park. This type of accommodation would attract national and international attention and become a drawcard for the broader destination.

The Plan identifies that the greatest threat to the Park's biodiversity values is landscape-scale and overly frequent fire. Inappropriate fire regimes have the potential to negatively impact on the biodiversity of the Park, visitor safety and visitor infrastructure. The threat of wildfire is exacerbated by the spread of Gamba Grass in the Park. These threats need to be managed if the Park is to maintain its' significant natural values which ultimately are the major drawcard for visitors.

The Plan proposes a number of research and monitoring programs that will assist in protecting threatened fauna and increase the knowledge base of flora and fauna in the Park.

Finally, the Plan proposes continued engagement with the tourism industry, Aboriginal clan groups, the local community and neighbours. It is important for the Parks and Wildlife Service to maintain and support working relationships with key stakeholders in the Park.

Table of Contents

Making a Submission on the Draft Plan	iii
Acknowledgements	iii
Executive Summary	iv
Table of Contents	v
1. Introduction	1
1.1 The Concept of the Park and its Purpose	3
1.2 Values of the Park	3
1.3 Intent of the Plan	4
1.4 Zoning Scheme	4
2. Management for Visitors	7
Vision for Visitor Experiences	7
2.1 Current Visitor Trends	7
2.2 Visitor Issues and Opportunities	9
2.3 Summary of Current Works	9
2.4 Managing Existing Visitor Activities and Facilities	10
2.5 Proposed New Park Developments	33
Economic Value of Tourism	33
Cycle / Mountain Bike Tracks	33
Potential New Visitor Sites	35
Indigenous Tourism	37
Adventure Activities	38
Eco Accommodation / Signature Lodge	39
2.6 Visitor Safety	42
2.7 Visitor Information, Interpretation and Monitoring	43
Visitor Monitoring	43
2.8 Visitor Access	44
2.9 Anti-Social Behaviour	44
2.10 Waste Management	45
3. Management of Natural Values	46
Vision for the Park's Biodiversity	46
3.1 Water Resources	47
3.2 Flora	47
3.3 Fauna	48
Research and Monitoring	49
3.4 Managing Threatening Processes	52
Fire	52

Weeds	54
Feral Animals	56
4. Management of Cultural Values	57
The Cultural Vision for the Park	57
4.1 Aboriginal Cultural Values	57
4.2 European Historical Values	58
5. Park Administration	60
5.1 General Administration	60
Work and Business Opportunities	60
Mining	61
Development Proposals	61
5.2 Community and Stakeholder Engagement.....	62
Stakeholder Reference Group.....	62
Aboriginal Involvement	62
Tourism Industry Engagement	62
Community Involvement.....	62
5.3 Commercial Operations.....	63
6. Programs.....	64
7. References	72
Appendix 1	73

1. Introduction

Litchfield National Park (the Park) is located 120 km south of Darwin and covers approximately 145 600 hectares. The Park encompasses Tabletop and Tableland Ranges and parts of the Reynolds, Finnis and Adelaide Rivers drainage basins. The Park is an ancient landscape shaped by water features and numerous waterfalls which cascade from the sandstone plateau of the Tabletop Range.

Since being established, the Park has become a popular destination for Darwin residents, interstate and international visitors. In 1990 the Park received approximately 130 000 visitors. Since this time the Park has become one of the Territory's iconic attractions receiving over 270,000 visitors in 2009, making it one of the Territory's most visited National Parks. It is renowned for spectacular waterfalls, safe swimming and opportunities to experience the rugged landscapes of the Top End.

The Park is surrounded by several different land tenures including pastoral leases (Welltree, Litchfield and Tipperary Stations), Aboriginal freehold, private freehold and Crown Lease Perpetual (see Map 1).

History of the Park

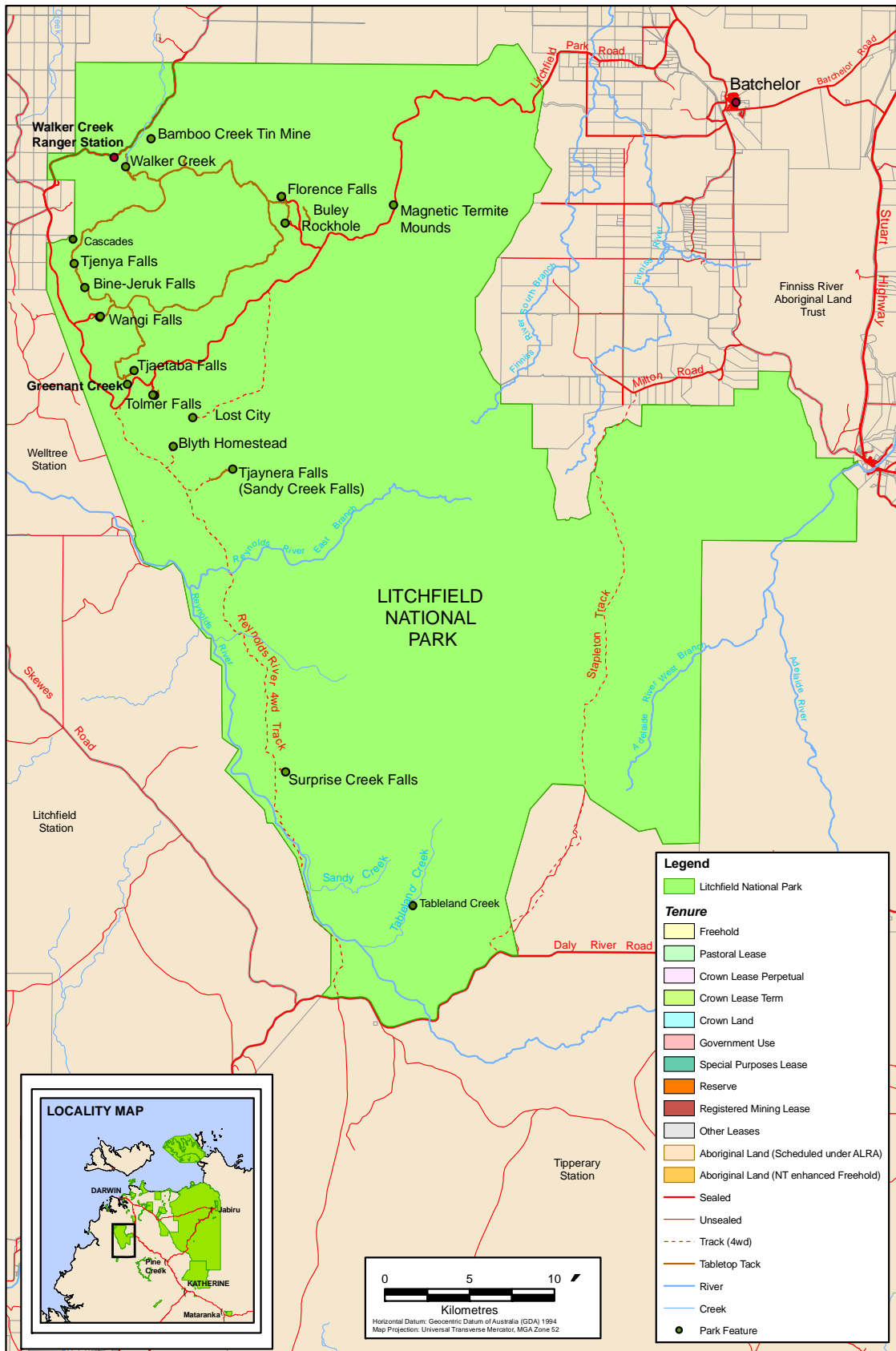
Litchfield National Park was named after the explorer Fredrick Henry Litchfield who was a member of the original Finnis Expedition to the Northern Territory in 1864. Litchfield led the expedition south-west from the Finnis River to the Reynolds River and then south to the Daly River. The discovery of copper and tin in 1870 led to the establishment of several small-scale subsistence mining operations which continued through to the 1950s. Pastoral occupation began in the 1870s and continued until the original declaration of the Park in 1991.

The Park was originally part of Stapleton, Tipperary and Camp Creek pastoral leases. In 1986 the lessees of Stapleton Station negotiated the surrender of the pastoral lease over NT Portion 2783 and it was taken up by the Conservation Land Corporation as Crown Lease in Perpetuity 616 and declared under the *Crown Lands Act*. The Park was extended with the addition of a portion of Tipperary Station, NT portion 3434, Camp Creek Sections 94 and 95, Hundred of Waterhouse and Section 2922, Hundred of Goyder. The Park was declared under Section 12 (1)(a) of the *Territory Parks and Wildlife Conservation Act* in July 1991. As a result of a decision of the High Court many Territory Parks and reserves, Litchfield National Park was redeclared under the *Territory Parks and Wildlife Conservation Act* in 2002.



Plate 1: Visitors enjoying the swimming opportunities at Buley Rockholes.

Map 1: Litchfield National Park Tenure Map



1.1 The Concept of the Park and its Purpose

The Park will continue to be developed as a major national park offering recreational experiences for the spirited and adventurous visitor. The major attraction of the Park will continue to be the opportunity to swim and relax in spectacular, natural plunge pools and waterholes in close proximity to Darwin. New recreation sites and activities will be opened and promoted within the Park to provide visitors with new and exciting opportunities, assist in dispersing visitors and to protect the natural values of the Park. The Park will continue to offer a range of visitor sites with different standards of access and facilities.

The protection of key natural values including monsoon rainforest pockets, sandstone habitats and the tabletop and watershed areas will be protected as a priority. Park management will focus on threats to the Park's landscapes and biodiversity through effective fire, weed and feral animal management programs.

Park management will continue to work closely with key stakeholders, traditional Aboriginal owners, neighbours and the Batchelor community to maintain good working relationships.

1.2 Values of the Park

The key values of the Park are:

Visitor values - The Park is one of the most highly visited parks in the Northern Territory. The Park's close proximity to Darwin and the range of activities (swimming, walking, camping, four-wheel driving, extended bushwalking, nature appreciation) and different standards of facilities (highly developed to natural) provides significant recreation and tourism opportunities of Territory importance. The Park receives over 275,000 visitors annually and is a key driver of tourism in the Batchelor area, the Top End and the Territory.

Natural values – The Park is recognised as a premier conservation reserve for its high biodiversity and large number of species of conservation value. It plays an important role in protecting a broad representation of Top End flora and fauna in a region that is developing rapidly. The high species diversity in the Park is due to the variety of habitats including sandstone plateaus, undisturbed remnant rainforests, upland swamps and black soil plains. Water movement is an important factor in the shaping and maintaining of these ecosystems. The Park contains water-dependent ecosystems, which are of regional significance as important wildlife habitats, including monsoon forests, riparian and floodplain habitats.

Cultural values - Litchfield National Park encompasses the traditional boundaries of the four Aboriginal language groups including *Werat*, *Kungarakan*, *Warai* and *Maranunggu*. The area is of significance to the Aboriginal people and they have an important connection to the land. Sites of cultural significance that are of ritual, mythological and spiritual importance to the Aboriginal people and that underpin local Indigenous people's connection to country and cultural obligations include several registered sacred sites and a variety of art sites dating back several thousands of years.

Historical values - The Park contains historical values of regional significance that illustrate the development of the Top End pastoral and mining industries which had a profound effect on the culture and lifestyles of local Indigenous people.

Two sites within the Park have been registered on the NT Heritage Register as being of historical significance. The sites are Blyth Homestead which was part of an operating pastoral station and Bamboo Creek tin mine which operated sporadically between 1906 and 1955.

1.3 Intent of the Plan

This is the second Plan of Management prepared for Litchfield National Park. It sets management objectives, addresses current issues and proposes appropriate measures to guide management and development of the Park over the life of the Plan. The main strategies of the Plan are to:

- Reduce over-crowding at the primary visitor sites and improve the flow of visitors through the Park;
- Manage anti-social behaviour to ensure all visitors can have a safe and enjoyable experience;
- Increase the range of visitor experiences;
- Manage natural resources to reduce the impacts of fire, weeds and feral animals on the Park.
- Maintain strong working relationships with the traditional Aboriginal owners and stakeholders of the Park.

This Plan has been prepared in accordance with section 18 of the *Territory Parks and Wildlife Conservation Act* (the Act) and will be laid before the Legislative Assembly pursuant to section 19. The Plan will remain in force unless it is revoked by a new plan of management coming into operation under the Act. There will be a review after five years to evaluate it's effectiveness in achieving it's management objectives.

1.4 Zoning Scheme

Outcome

- The Park's values are protected while providing for public enjoyment, education and recreation.

Litchfield National Park is managed for multiple purposes, including nature conservation, the provision of a range of visitor experiences and the protection of cultural values. Different areas of the Park however, will be managed differently, usually with greater emphasis on one of these purposes. A zoning scheme is a general summary of the purpose and focus of management for all areas of the Park based on the specific values of those areas and their level of visitor access and facility development.

The zoning scheme indicates management intent at the time of this Plan's preparation. It is not intended to be a basis for regulation of access or development and may be changed during the term of this Plan to provide for improved protection of values and / or enhancement of visitor opportunities.

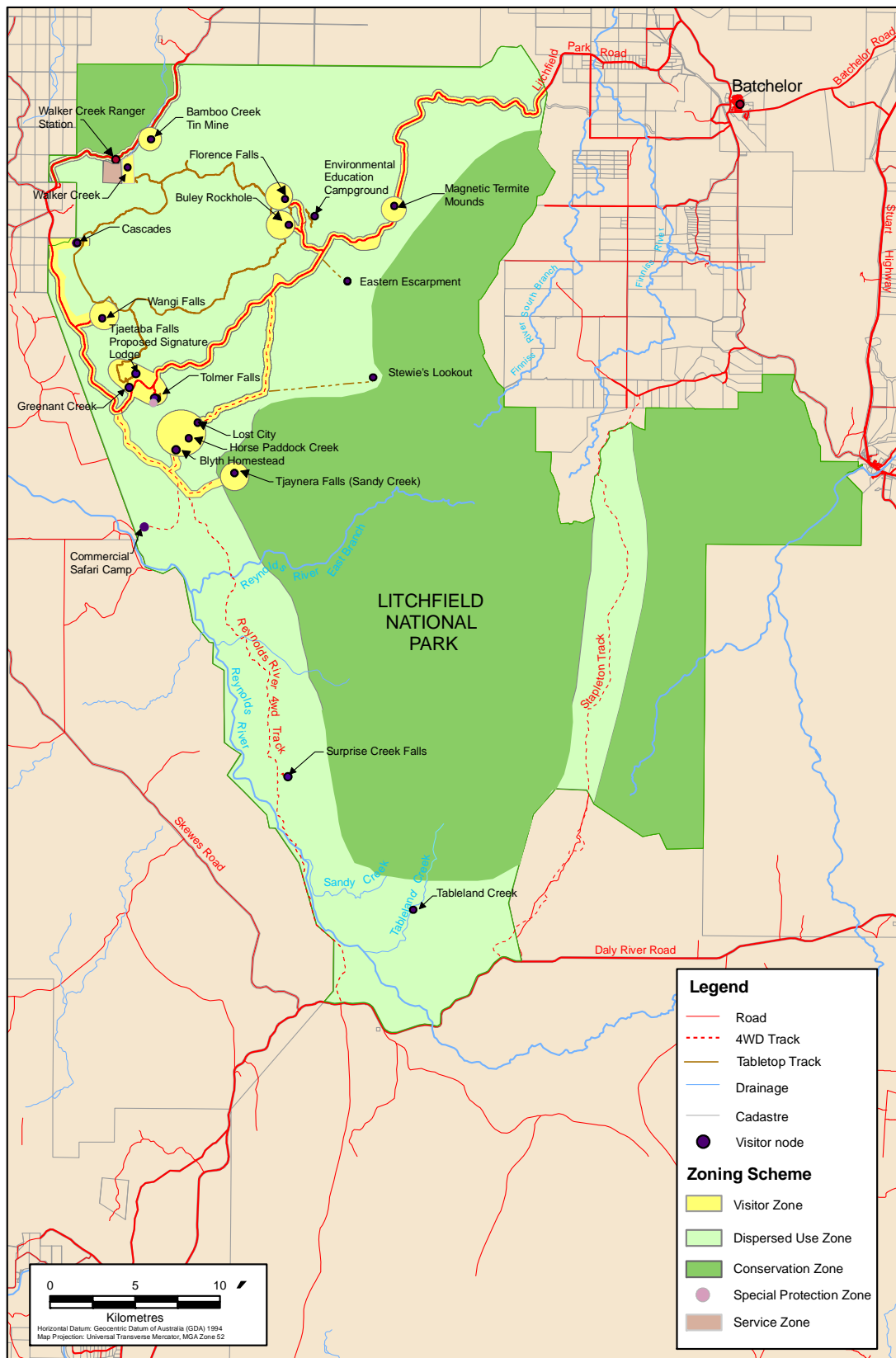
Management Actions

- The Park will be managed in accordance with the zoning scheme. (Ongoing)
- Regardless of the designated zone all management and development will have regard to maintaining the Park's natural character, its conservation values and visitor experiences. (Ongoing)
- Any new development will be subject to approval through standard environmental and heritage protection processes. (Ongoing)

Table 1 – Zoning Scheme Summary

Zone	Purpose	Access	Visitor Activities	Facilities	Management Strategy
Visitor	To provide for high levels of visitor use close to major attractions with infrastructure and facilities.	Sealed roads and two-wheel drive gravel roads to cater for high traffic levels and conventional vehicles and tourist coaches. Pedestrian access.	Orientation to the Park, interpretation, short interpretive walks, picnicking, camping, swimming, mountain bike riding and nature appreciation.	Walking and cycling tracks, car parks, picnic areas, campgrounds, viewing platforms, boardwalks, toilet blocks, barbeques and the Wangi Falls Centre.	Visitor information, control and monitoring. Weed control, fire management.
Dispersed Use	To provide for defined access and low key facilities in natural settings catering for the more self reliant visitors seeking experience away from crowds.	Marked walking and mountain bike tracks. Four-wheel drive access.	Bush walking, four-wheel driving, mountain bike riding, nature appreciation, swimming and camping.	Marked four-wheel tracks, walking tracks, signs, shelters, designated camping with basic facilities. New development may occur subject to public comment and appropriate environmental and heritage clearances.	Visitor information and safety. Maintenance of walking tracks, four-wheel drive tracks and camp sites. Monitoring visitor impacts on the natural values.
Conservation	To manage the vast majority of the Park for the protection of natural and cultural features.	Four-wheel drive access.	Restricted for management purposes. Bush walking by permit only.	Management facilities and communication infrastructure. New development may occur subject to public comment and appropriate environmental and heritage clearances.	Main focus on fire, weed and feral animal control programs.
Special Protection	Primary aim is the protection of natural and cultural values.	Public access by permit only. Allows for research and monitoring and cultural activities for traditional Aboriginal owners.	Activities that threaten the values of the site are not permitted.	Facilities appropriate to protect the site e.g., interpretive signs and barriers.	Management of natural and cultural values as required.
Service	Primary aim is to provide for park management and operation facilities. Ranger station located at Walker Creek.	Generally emergency contact for visitors only.	Nil. Business contact only.	Management facilities only, offices, workshops, accommodation, utility maintenance facilities.	Maintenance of management facilities and services.

Map 2: Litchfield National Park Zoning Map



2. Management for Visitors

Vision for Visitor Experiences

By 2021 it is envisaged the Park will offer an expanded range of high-quality nature based visitor experiences including:

- A small immersive, nature-based accommodation, as proposed by the NT Government's Signature Lodge initiative;
- A diverse range of non-swimming activities provided by commercial tourism operators (e.g. adventure experiences);
- Enhanced park infrastructure to facilitate an expanded range of recreational opportunities (e.g. mountain bike tracks, viewing platforms);
- Creation of and/or enhanced access to new swimming sites;
- Improved promotion of existing recreation opportunities (eg. Tabletop Track) and swimming sites with lower visitation (e.g. Cascades);
- Strategies which directly influence flow of visitors through the Park; and
- The development of a secondary visitor hub in addition to the Wangi Falls Centre.

2.1 Current Visitor Trends

Litchfield National Park is renowned for picturesque waterfalls, scenic Top End landscapes and safe swimming all in close proximity to Darwin. The Park provides a wide variety of visitor experiences ranging from conventional vehicle access and disabled access to the more remote, four-wheel driving, outback experiences.

Litchfield National Park annual figures have been over 263 000 visitors for the last three years (see Graph 1). In 2009, 18% (49 500) of visitors were Territorians, 50% (137 500) were from interstate and 32% (88 000) were international visitors (NRETAS 2009). Visitor surveys carried out in 2009 indicate the three main reasons people visit the Park is to swim, view waterfalls / waterholes and sightseeing. The range of activities available in the Park and undertaken by visitors is provided in Table 2. This table clearly shows that the top three activities undertaken by local, interstate and international visitors are swimming, short walks and photography.

Graph 1: Visitor numbers to Litchfield National Park (Parks and Wildlife Service, 2010)

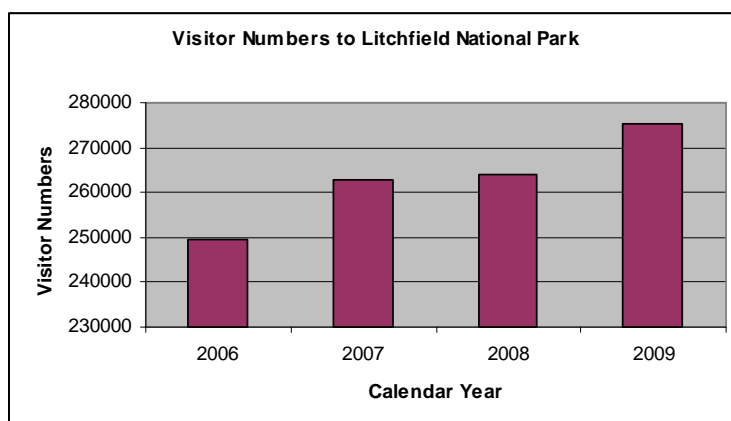


Table 2: Activities provided in the Park and percent of visitors undertaking the activities.

Activity	Local (%)	Interstate (%)	International (%)	Total (%)
Swimming	89	78	84	82
Short walk (< 2 hours)	51	76	73	71
Photography	42	66	68	62
Picnicking / Barbecuing	42	37	47	41
Driving / touring	27	48	38	41
Wildlife viewing	25	40	51	41
Camping	34	36	43	38
Bird watching	18	32	22	26
Medium walks (2-4 hours)	12	20	15	17
Four-wheel driving	17	20	10	16
Guided commercial tour	4	9	12	9
Long walks (>4 hours)	4	3	3	3
Overnight hike	3	1	2	2
Mountain biking	2	1	1	1

(Source: 2009 Visitor Survey Report, Litchfield National Park.)

Trends suggest that visitation will continue to increase during the life of this Plan as visitation to the Top End grows. It is anticipated that the proportion of Experiential Travellers visiting the Park will also increase in response to Tourism NT's marketing efforts. The Experiential Traveller is generally defined as the traveller seeking, fun, adventure and freedom. Experiential Travellers are seeking a holiday experience which offers the emotional and functional needs outlined in Table 3.

Table 3: The Emotional and Functional Needs of the Experiential Traveller

Emotional Needs of Experiential Travellers	Functional Needs of Experiential Travellers
Fun and adventure, freedom	Delivering what is promised
Inspiration, personal growth and learning	Cleanliness / comfort / safety / security
Relax and recharge	Convenience (location, distance, access)
Quality time with friends and family	Personalised service catering for individual requirements / customisation
Get back to nature and immersion in local culture	Being welcomed, appreciated and valued

(Source: Tourism NT 2010)

Aspects Experiential Travellers to Litchfield National Park consider important include:

- availability of a variety of activities;
- many sites to visit;
- not too many other visitors present;
- information on Indigenous culture;
- information on plants, animals and geology in the Park; and

- clear information about visitor safety.

These aspects can help determine the future management and direction of existing visitor sites and assist in identifying new visitor experience. These aspects were taken into consideration in the preparation of this Plan of Management.

2.2 Visitor Issues and Opportunities

A tourism industry workshop held in June 2009 identified major threats to the Park's recreation and tourism values. Many of these issues and opportunities were still considered relevant in the preparation of this Plan. These major threats and issues include:

- Visitor over-crowding, poor distribution and access at major visitor sites;
- Managing conservation values;
- Anti-social behaviour impacting on the visitor experience;
- The need for the loop road to be sealed;
- Conflicts between large groups and independent travellers at visitor sites due to poor site planning;
- Limited opportunities to experience landscape views from roads;
- Limited Indigenous tourism experiences;
- Limited range of 'adventure' type recreational opportunities;
- Plan promising extensive actions that cannot be resourced;
- Limited funding for recurrent maintenance of infrastructure;
- Inadequate visitor information or poor distribution channels affecting people's understanding on the range of visitor experiences; and
- Lack of innovative interpretation which does not meet visitor needs.

The Litchfield National Park Stakeholder Reference Group was established to provide a vehicle for stakeholder input into the development of this Plan of Management and to provide advice to the Parks and Wildlife Service on the management and future direction of the Park. The Stakeholder Reference Group comprises one representative from each of the four Aboriginal groups, a representative from Tourism NT, Tourism Top End, the Batchelor Tourism Development Group and tour operators and the Northern Land Council. The Group also includes three officers from the Parks and Wildlife Service.

The Stakeholder Reference Group identified the two major visitor issues faced in the Park to be:

- Visitor over-crowding at Wangi Falls, Florence Falls and Buley Rockhole; and
- Anti-social behaviour.

Many of the issues listed above can be addressed through upgrading existing visitor sites and opening new visitor sites. Some of these works are already in progress and others are identified in sections 2.4 and 2.5.

2.3 Summary of Current Works

In 2005 a Development Plan was prepared for the Park to develop facilities to cope with increasing visitor pressures without detracting from visitor experiences or the conservation values of the Park. This Development Plan identified works to the cost of \$7.5 million. Many of these works have been completed including upgrading the day-use

area, campground and car park at Wangi Falls and the development of the Cascades visitor site.

There are several developments which remain to be completed including:

- The development of the Wangi Falls Centre. This Centre will be a multi-functional venue providing information, a café and seating, local art for sale, a first aid room and a campground office. The Centre is due to be completed in early 2012.
- Formalisation of the walk between Florence Falls and Buley Rockholes. This walk is being upgraded to ensure a safer and easier walk and to reduce the impact on the environment. These works will include an upgrade to the Florence Falls day-use area and the installation of gas BBQs. These works are to be completed in mid 2011.
- Upgrade of the Florence Falls two-wheel drive campground. These works will include the development of additional campsites and the upgrade of the toilet block. These works are due to be completed in mid to late 2011.
- Upgrade picnic facilities at Tabletop Swamp including a redesign of the car parking area to accommodate coasters and the development of a boardwalk to allow visitors better viewing of the swamp and associated bird life. These works will be completed in mid to late 2011 subject to the availability of funding and receipt of appropriate clearances.

2.4 Managing Existing Visitor Activities and Facilities

Outcomes

- 90% visitor satisfaction with the range of activities and sites provided.

The tables in this section provide a summary of every visitor site in the Park. They identify the purpose of the site, existing facilities, issues, opportunities and proposed future directions. Table 4 provides a summary of all the visitor sites and proposed new sites categorised by their level use. The table shows there are a number of sites in all three categories from low to moderate to high levels of use. This range of sites provides opportunities for different types of visitors to experience and enjoy the Park.

Upgrades to some existing sites are required to accommodate the current visitor levels, potential increases in visitor levels and assist in managing the over-crowding at some of the primary visitor sites.

Buley Rockholes, Florence Falls and Wangi Falls are often at full capacity or over-crowded during the peak season. There is a clear need to alleviate the pressure on these sites and disperse visitors across other sites within the Park to protect these habitats and improve visitor experience. Four options to reduce overcrowding include:

1. upgrade existing visitor sites to cater for increased visitor numbers;
2. improved awareness and promotion of alternative sites in the Park;
3. improved flow of visitors through the Park; and
4. investigate options for new recreation sites in the Park to cater for current and future demands.

A number of developments and/ or upgrades are proposed to many of the existing sites in the Park. These proposals are a combination of the four options.

It is recognised that the key sites in the Park including Wangi Falls, Florence Falls and Buley Rockhole will continue to be key attractions for visitors. It is important to maintain these sites to a high standard to ensure visitors receive a high quality experience. It is important also that the Park offers alternative sites to encourage the dispersal of visitors to maintain visitor experiences and reduce over-crowding.

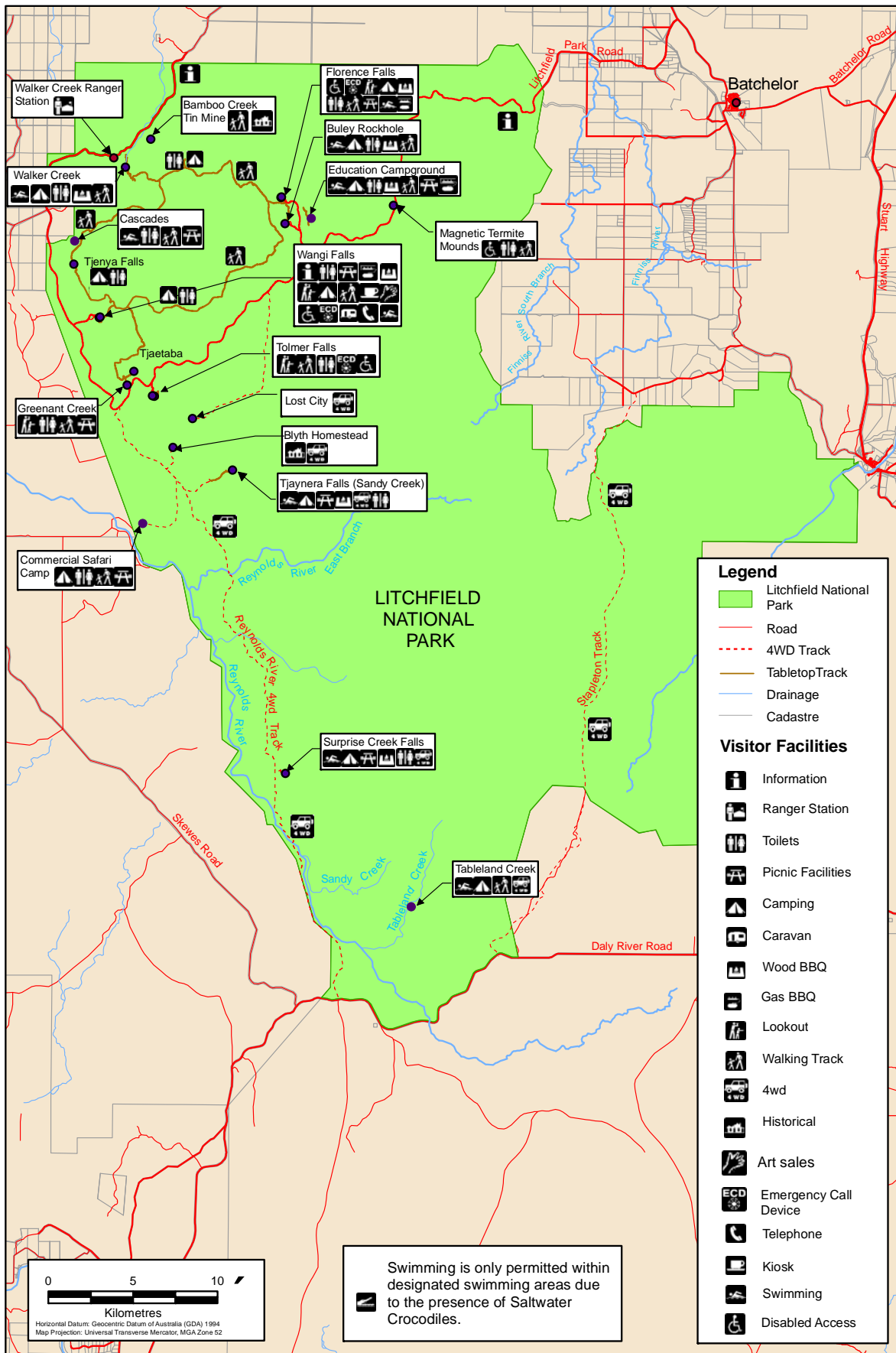
Table 4: Existing and proposed visitor sites classed by level of use.

Sites	Access	Swimming	Picnicking	Camping	Ablution Facilities	Walking Tracks (S, M, TT)
High Use						
Wangi Falls	2WD	✓	✓	✓	✓	S, M, TT
Florence Falls	2WD / 4WD	✓	✓	✓	✓	S, M, TT
Buley Rockhole	2WD	✓	✓	✓	✓	S, M
Tolmer Falls	2WD	✓ (proposed)	✓ (proposed)		✓	S, M
Magnetic Termite Mounds	2WD				✓	S
Moderate Use						
Cascades	2WD	✓	✓		✓	S, M
Walker Creek	2WD	✓	✓	✓	✓	M, TT
Environmental Education Campground	2WD	✓	✓	✓	✓	S, M
Blyth Homestead Ruins	2WD (proposed)		✓		✓ (proposed)	S
Tjaynera Falls (Sandy Creek)	2WD (proposed)	✓	✓	✓	✓	S, M
Horse Paddock Creek Falls #	2WD (proposed)	✓	✓	✓	✓	S, M
Low Use						
Tabletop Swamp	2WD		✓			S
Lost City	4WD		✓		✓ (proposed)	S, M
Greenant Creek (Tjaetaba Falls)	2WD	✓	✓		✓	S, M, TT
Bamboo Creek Tin Mine	2WD		✓			S
Surprise Creek Falls	4WD	✓	✓	✓	✓	S, M
Tableland Creek	4WD	✓	✓	✓		S, M
Commercial Safari Camp	4WD		✓	✓	✓	
Eastern Escarpment #	4WD	✓	✓	✓	✓	S, M
Stewie's Lookout #	4WD		✓	✓	✓	S
Signature Lodge #	restricted access	✓		✓	✓	S, M

- Proposed new recreation site.

S, M, TT – short, medium, long and links to Tabletop Track

Map 3: Existing Recreation Facilities and Activities



Wangi Falls

Purpose/ Level of Service:	Wangi Falls is the most popular site in the Park. It encompasses a spectacular twin waterfall with large plunge pool providing the opportunity for safe swimming, nature appreciation, picnicking and walks. It is a major site providing high standards of access, facilities and information for a large numbers of visitors.			
Visitor Experience	Typical Visitors: Tourists and park visitors seek comfort and convenience in a popular /iconic site.	Intensity of Use: High. Receives over 220,000 visitors per annum. Many stay in the main visitor area for less than two hours.	Zoning: Visitor Zone. Catering for high visitor numbers and mass tourist experiences.	Levels of Service: Very high level of service.
Access Standards	Vehicle Access: High standard sealed road.	Tracks & Paths: Highly accessible and high standard tracks. The Wangi Falls Walk from the viewing platform up across the escarpment is of moderate standard with some narrow and rocky sections.	Disabled Access: Barrier free access to key features and facilities of the main visitor node.	Car Parking: Designated car and bus parking.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads. Detailed site information supported on the website. Comprehensive site orientation and information.		Interpretation and Education: A comprehensive range of interpretation geared to large numbers of visitors, with diverse needs and usage patterns.	
Features and Activities	Activities encouraged include swimming, sightseeing, picnicking, short walks, photography, camping, nature and culture appreciation and relaxation. The presence of many other visitors is an expected part of the Park experience. It is proposed that the Wangi Falls Centre will include an Aboriginal Art Shop for the sale of Aboriginal art and craft.			
Visitor Facilities Standards	Seats & Tables and Shelter: Seating, tables and shelters provided. Drinking Water: Drinking water is provided at the campground. Toilets: Two toilet blocks with flushing toilets and wash basin facilities are provided. One toilet block is located in the day-use area and the other is located in the campground.		BBQs and Fireplaces: BBQs are provided in the day-use area and the campground. A communal fireplace is provided in the campground. Firewood is provided for the communal fireplace. Food Services: Currently developing the Wangi Falls Centre which will include a café. Camping: Provision for 12 tent sites, 51 caravan sites and 2 group camping sites. No powered sites are provided. Camping fees apply for all forms of camping. When complete the Wangi Falls Centre will provide services to book camp sites. The use of generators is not permitted in the Park.	
Management Service Standards	Visitor Safety and Risk Mitigation: Significant hazards and hidden threats communicated on site and in pre-visit information. Standard swimming safety equipment and signs installed on site. Risk mitigation and on-site compliance to minimise exposure to hazards. A public telephone is provided. Ranger Presence: Staff on site daily.		Litter Management: Rubbish bins are provided in the day-use area and campgrounds. Open Space Management: Mowing of day-use and camping areas for aesthetic appeal. Slashing of sides of access road for visitor safety (fire). Management Facilities: Management facilities will be located at the Wangi Falls Centre through a concessionaire. Current facilities are located at Walker Creek Ranger Station and in the town of Batchelor.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - Swimming in the plunge pool is closed over the Wet season when water levels become too high leading to hazardous conditions and the potential for saltwater crocodiles to enter pool. The pool is not opened again until the water levels have dropped and the pool has been thoroughly surveyed for crocodiles. - The main car park area was expanded in 2009 to accommodate an additional 12 long vehicles and 26 cars. This expansion was to cater for the large numbers of visitors in the peak visitor season. It now accommodates approximately 52 car parks and 25 spaces for coaches, caravans and long vehicles. - The proposed Wangi Falls Centre when complete will include a café, art sales and campground management services. The Wangi Falls Centre may assist in spreading the visitors across the site. It is recognised however that the development of this Centre is likely to attract more visitors to the site and potentially increase the length of stay of visitors at the site. - Opportunity to improve the use and the flow of the Tabletop Track through visitors registering at the Wangi Falls Centre. There is the opportunity to construct a secure car parking compound where visitors walking the Tabletop Track or cycling the overnight mountain bike loop (see section 2.3) can safely leave their vehicles. - Interpretive and orientation information located in the Interpretive Shelter is adequate. More interpretation will be provided within the proposed Wangi Falls Centre. - The campground was extended in 2009 and should provide adequate camp sites for the near future. - There is visitor over-crowding at peak times of the year at this site. The current size of the car park and campground will act as a method of controlling visitation to the site. When the car park and campground is full then the use of the site has reached its maximum number of visitors. No further expansion of the car park or campground will occur. - The opening of additional sites such as Cascades will help alleviate pressure on Wangi Falls. - There is an opportunity to work with tour companies to stagger the arrival of tour groups to Wangi Falls, Florence Falls and Buley Rockhole. 			

Future Directions

- **Proposed Development** – Investigate the potential for the development of a secure car parking compound for visitors using the Tabletop Track. (High)
- **Proposed Development** – Through the development of the Wangi Falls Centre encourage the site as the starting point for the Tabletop Track. (High)
- **Movement of Visitors** – Work with the tourism industry and tour companies to develop a system of staggering the arrival of visitors to the key visitor sites. Work with the tourism industry to more widely promote the lesser used sites in the Park. (High)
- **Visitor Safety** – Continue to implement the Crocodile Management Plan and the Emergency Response Procedure Manual. (High)



Plate 2: Wangi Falls in the Wet season.

Florence Falls

Purpose/ Level of Service:	Florence Falls is a spectacular twin waterfall surrounded by attractive monsoon rainforest. The site will be managed as a major site providing high standards of access, facilities and information for a relatively large number of visitors.			
Visitor Experience	Typical Visitors: Park visitors seek passive and active recreation opportunities. Visitors who are prepared to walk are provided with the opportunity to swim in a natural bush setting.	Intensity of Use: High. Approximately 200,000 visitors per annum. Many stay in the main visitor area for less than two hours.	Zoning: Visitor Zone. Catering for high visitor numbers and mass tourist experiences.	Levels of Service: Moderate level of service.
Access Standards	Vehicle Access: High standard sealed road.	Tracks & Paths: Disabled access to viewing platform. From the viewing platform the walk leads to a steep staircase to the plunge pool at the base of the falls. Shady Creek Walk from main pool to car park is an easy walk.	Disabled Access: Disabled access to the viewing platform. No disabled access to the plunge pool.	Car Parking: Designated car and bus parking.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads. Detailed site information supported on the website. Comprehensive site orientation and information.		Interpretation and Education: A range of interpretation geared to large numbers of visitors. Some talks given by Rangers within the group campground area located near the Florence Falls campground.	
Features and Activities	Activities encouraged within this zone include; swimming, sightseeing, picnicking, short walks, photography, camping, nature appreciation and relaxation. The presence of other users is an expected part of the Park experience.			
Visitor Facilities Standards	Seats & Tables and Shelter: Picnic platforms provided along Shady Creek Walk. No seating provided at plunge pool. Seating provided at viewing platform. Drinking Water: None. Toilets: Self composting toilets provided near the car parking area and at the campgrounds.		BBQs and Fireplaces: BBQs provided at day-use area. At the two-wheel drive and four-wheel drive camping areas there are wood BBQs. Visitors are asked to collect firewood along the road within the Park. Food Services: None. Camping: 14 sites provided within the two-wheel drive camping area and 5 at the four-wheel drive campground. Caravans are not permitted at this campground. No powered sites are provided. Camping fees apply. There is currently no booking system for the campgrounds however there is potential for a booking system to be implemented when Wangi Falls Centre concession is filled.	
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards communicated on site and in pre-visit information. Risk mitigation and on-site compliance to minimise exposure to hazards. Ranger Presence: Daily Ranger patrols.		Litter Management: Rubbish bins are provided at the entrance to the lookout and in the two-wheel drive campground. Open Space Management: Slashing for infrastructure, safety (fire), visitor access, open space and aesthetic appeal if necessary. Management Facilities: No management facilities are located at this visitor site.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The main car park can become over-crowded during the peak visitor season. - In peak visitor season the rocks located beside the main plunge pool can become over-crowded. Entry into the plunge pool at these times can be difficult. - Issue with visitors jumping from the escarpment and/ or the top of the waterfall. This presents a serious danger to visitors. - The walk from Florence Falls along the creek to Buley Rockhole is being upgraded to ensure a safer and easier walking track and to reduce the impact on the environment. - Capital works being carried out in 2011 include upgrading the walk between Florence Falls and Buley Rockhole, installing gas BBQs at Florence Falls and upgrading the two-wheel drive campground and toilet block. - The four-wheel drive campground is very popular and has the potential to be expanded. - Some visitors physically are unable to walk to the base of the falls via the steep stair case or the 1km walk. 			

	- The signage for the Shady Creek walk does not clearly explain that it is an alternative walk to or from the falls. This leads to visitors being unsure of the destination and therefore do not take the walk.
Future Directions	<ul style="list-style-type: none"> - Directional Signage – Improve the signage on the Shady Creek Walk to clearly explain the purpose of the walk (High). - Car Park – Monitor the level of use of the car park and expand the car park when necessary. (Medium) - Proposed Development – Review the suitability of the entrance to the plunge pool to determine if it is adequate or requires stairs. (Medium) - Proposed Development – Investigate options for an alternative short and easy walk at the Florence Falls site for those visitors unable to walk to the base of the Falls. (Medium) - Campground and Facilities – Expand the existing four-wheel drive campground and provide an additional 17 individual bush camping sites. Upgrade the existing four-wheel drive campground ablution block (Medium)



Plate 3: Florence Falls.

Buley Rockhole

Purpose/ Level of Service:	Buley Rockholes is a very popular site with visitors and in particular Territorians. The site provides the opportunity to enjoy safe swimming in a series of rockholes. Buley Rockholes is a major site providing a moderate standard of access, facilities and information for a relatively large number of visitors. The site will continue to be managed for high levels of visitation.			
Visitor Experience	Typical Visitors: Park visitors seeking the opportunity to swim with minimal walking required to the site.	Intensity of Use: High. Approximately 100,000 visitors per annum. Many spread along the creek and rockholes. Tourists tend to stay for a short time while regular park visitors may stay for several hours.	Zoning: Visitor Zone. Catering for high visitor numbers and mass tourist experiences.	Levels of Service: Moderate level of service.
Access Standards	Vehicle Access: High standard sealed road.	Tracks & Paths: Highly accessible with a moderate standard of tracks. The track that runs parallel to the creek is rocky and quite basic.	Disabled Access: No disabled access is provided.	Car Parking: Designated car and mini bus parking.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads. Detailed site information supported on the website. Comprehensive site orientation. Signs located in the car park advise visitors that if the car park is full then so are the rockholes.		Interpretation and Education: Interpretation is provided at the start of the walk.	
Features and Activities	Activities encouraged within this zone include swimming, picnicking, short walks, sightseeing, photography, nature appreciation and relaxation. A short walk from the swimming site is the Buley campground.			
Visitor Facilities Standards	Seats & Tables and Shelter: None. Visitors picnic directly on the rocks surrounding the creek. Drinking Water: None. Toilets: Two self-composting toilets are provided at the start of the walking track and two toilets are located in the campground.		BBQs and Fireplaces: No BBQs are provided within the day-use area. BBQs are provided in the campground. Food Services: None. Camping: There are 12 camping sites provided. Camping fees apply.	
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards and hidden threats communicated on-site and in pre-visit information. Risk mitigation and on-site compliance to minimise exposure to hazards. Ranger Presence: Daily Ranger patrols.		Litter Management: Rubbish bins are provided at the entry to the day-use area and in the campground. Open Space Management: Slashing for infrastructure, safety (fire), visitor access, open space and aesthetic appeal. Management Facilities: None.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - During the peak visitor season the car park is often full which leads to visitors parking outside designated parking areas. When the car park is full the rockholes are also full. If the car park were to be increased in size, the increase in visitors at the site would negatively impact on the visitor experience. - Visitor over-crowding of Buley Rockholes is a major problem during the peak visitor season. - Interpretative and orientation information located at the start of the walk is quite dated. There is scope to upgrade this area. - There are two composting toilets located at the entry to the walking track leading to the day-use area. These toilets are unsightly and inadequate to cater for the level of use of the site. They also detract from the sense of arrival to the site. - The campground is at capacity during the peak visitor season. - Anti-social behaviour can be an issue at both the day-use area and campground. This is often the result of too much alcohol being consumed and can lead to offensive behaviour and concerns for visitor safety. - Some visitors jump from inappropriate locations presenting a danger to themselves and those swimming in the pools below. - The Buley campground is not irrigated resulting in poor landscaping and no privacy for campers. The toilet block is run down giving visitors a poor experience. 			
Future Directions	<ul style="list-style-type: none"> - Movement of visitors - Work with the tourism industry and tour companies to develop a system of staggering the arrival of visitors to the key visitor sites. Work with the tourism industry to more widely promote the lesser used sites in the Park. (High) - Proposed Development – Remove the existing composting toilets at the entrance to the day-use area and construct an ablution block including change rooms in a suitable location away from the entrance (High). - Proposed Development – Investigate the possibility of installing a bore to service the campground. If a bore is installed remove the existing toilet and replace with an ablution block including showers. Landscape the campground to improve the privacy of visitors and the visual amenity. (High). - Compliance – Implement the amendment to the <i>Territory Parks and Wildlife Conservation By-laws</i> creating Buley Rockhole day-use area as a glass free site. (High) - Proposed Development – Monitor the level of use in the campground. If warranted increase the number of the camping sites to between 20 and 24. (Medium) - Proposed Direction – Investigate the potential for commercial management of the Buley campground. (Medium) - Movement of visitors – Maintain existing signage stating “When car park is full then so are the rockholes”. (Ongoing) 			

Tolmer Falls

Purpose/ Level of Service:	Tolmer Falls is a spectacular waterfall which includes a cave at the base of the falls, sheltering a colony of the near threatened orange leaf-nosed bats. This site provides a high standard of access, facilities and information for a large number of visitors. Visitors are able to view the spectacular falls from a distance without impacting on the fauna living near the falls.			
Visitor Experience	Typical Visitors: Tourists and park visitors seeking a view of the waterfall and a short easy walk.	Intensity of Use: High. Approximately 100,000 visitors per annum. Most visitors stay for a short amount of time.	Zoning: Visitor Zone. Catering for high visitor numbers and mass tourist experience. The actual waterfall and the cave at the base are zoned Special Protection.	Levels of Service: Very high level of service.
Access Standards	Vehicle Access: High standard sealed road.	Tracks & Paths: High standard of access to the viewing platform. Alternative track back to car park is of moderate standard with some rocky sections.	Disabled Access: Disabled access is provided from the car park to the Tolmer Falls lookout.	Car Parking: Designated car and bus parking.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads. This walk is described on the Park 'Short Walks' Fact Sheet.		Interpretation and Education: A range of interpretation panels are provided at the lookout and in the interpretation shelter near the car park. Geared to large numbers of people.	
Features and Activities	Activities encouraged within this zone include sightseeing, short walks, photography and nature appreciation. The presence of many other users is an expected part of the Park experience.			
Visitor Facilities Standards	Seats & Tables and Shelter: Seating is provided at the interpretation shelter and along both walks to viewing platform. No seats are provided at the viewing platform. Drinking Water: None. Toilets: Composting toilet is provided.		BBQs and Fireplaces: None. Food Services: None. Camping: There is no camping at this site.	
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards and hidden threats communicated on-site and in pre-visit information. Risk mitigation and on-site compliance to minimise exposure to hazards. Ranger Presence: Rangers patrol this site daily.		Litter Management: No rubbish bins are provided at this site. Open Space Management: Slashing for infrastructure, safety (fire), visitor access, open space and aesthetic appeal if necessary. Management Facilities: None.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The site is currently under used and has limited activities available for visitors. The site could accommodate much higher visitor numbers without impacting on the natural values. The site has the potential to be developed as a visitor hub and alleviate pressure on Wangi Falls. - The site has the potential to develop a 'wow' feature such as a glass walkway out over the edge of the existing viewing platform or a swing bridge. This 'wow' feature would attract visitors to the site and help alleviate pressure on the primary visitor sites. - The Park currently lacks a picnic area with panoramic / landscape views of the Park. - There is currently no swimming available at Tolmer Falls for the general public. The provision of swimming at this site would help alleviate pressure on the key sites. - There is no seating provided at the Tolmer Falls lookout which limits the time spent by visitors to the site. - The interpretation provided at the lookout and in the interpretation shelter is out of date. The shelter is in a good location to provide more than the standard signs. - A tour operator has a permit to take a limited number of visitors swimming in a rockhole above Tolmer Falls. This is a unique adventure experience only available to a limited number of visitors. 			
Future Directions	<ul style="list-style-type: none"> - Proposed Development – Prepare a Site Development Plan for the Tolmer Falls area and investigate its' potential to be developed as a visitor hub. Investigate the potential to develop a 'wow' feature such as a swing bridge or glass walkway out over the edge of the escarpment. This 'wow' feature could be developed and run by a commercial operator. (High) - Proposed Development – Investigate the potential to offer swimming in the watercourse near the stone country. (High) - Proposed Development – Investigate the potential to provide seating near the Tolmer Falls viewing platform. (High) - Commercial Tour – Promote the continued use of swimming in the rockhole above the Falls for tour groups to increase the diversity of experiences available in the Park. (High) - Proposed Development – Investigate the potential for a half day loop walk from Tolmer Falls to the Lost City. (High) - Proposed Development – Investigate the opportunity to develop a picnic area located near the Litchfield Park Road, which will provide visitors with panoramic / landscape views of the Park. (Medium) - Interpretation – Improve the standard and increase the amount of interpretation provided at the site. (Medium) 			

Magnetic Termite Mounds

Purpose/ Level of Service:	The Magnetic Termite Mounds site provides visitors with the opportunity to learn about and appreciate these unusual insects and their homes. The site is a major site providing high standards of access, facilities and information for a large number of visitors. Visitors are able to view the magnetic termite mounds from a boardwalk constructed on the black soil plains. This is the first visitor site as visitors enter the Park from Batchelor.			
Visitor Experience	Typical Visitors: Tourists and park visitors seek short stop to view termite mounds.	Intensity of Use: High. Approximately 150,000 visitors per annum. Most stay at the site for less than an hour.	Zoning: Visitor Zone. Catering for high visitor numbers and mass tourist experiences.	Levels of Service: Very high level of service.
Access Standards	Vehicle Access: High standard sealed road.	Tracks & Paths: Highly accessible and high standard of tracks. Viewing of the termite mounds is along a boardwalk.	Disabled Access: Barrier-free access to key features and facilities of the main visitor site.	Car Parking: Designated car and bus parking.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads.		Interpretation and Education: A comprehensive range of interpretation geared to large numbers of visitors.	
Features and Activities	Activities encouraged within this zone include sightseeing, short walk, photography and nature appreciation. The presence of many other users is an expected part of this Park experience.			
Visitor Facilities Standards	Seats & Tables and Shelter: Seating provided under interpretation shelter. Drinking Water: None. Toilets: Self-composting toilets are provided.		BBQs and Fireplaces: None. Food Services: None. Camping: There is no camping provided at this site.	
Management Service Standards	Visitor Safety and Risk Mitigation: No significant hazards. Risk mitigation and on-site compliance to minimise exposure to hazards. Ranger Presence: Regular Ranger patrols.		Litter Management: No bins are provided and "take rubbish home" policy is promoted through Fact Sheets. Open Space Management: Slashing for infrastructure, safety (fire), visitor access, open space and aesthetic appeal if necessary. Management Facilities: None.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The cathedral termite mound located adjacent to the car parking area is used by many visitors as a photo opportunity. This mound is a different type from the magnetic termite mounds on the boardwalk. - This is the first site as visitors enter the Park from Batchelor. This is a popular site and all interpretation provided should be to a high standard. There is an opportunity to provide information on all visitor sites within the Park at this site as most visitors stop here rather than the orientation shelter at the entry to the Park. 			
Future Directions	<ul style="list-style-type: none"> - Proposed Development – Relocate the eastern orientation shelter to this site. (Medium) - Interpretation – Review and upgrade the interpretation provided at the site. (Medium) - Proposed Development – Monitor the cathedral termite mound to assess if it requires site protection or interpretation. (Low) 			



Plate 4: The boardwalk at the magnetic termite mounds.

Tabletop Swamp

Purpose/ Level of Service:	The Tabletop Swamp is a low-key visitor site providing the opportunity to picnic in a quiet bushland setting and view some of the Park's bird life.			
Visitor Experience	Typical Visitors: Self reliant, independent visitors seeking the opportunity to bird watch, picnic and take a short walk away from crowds.	Intensity of Use: Low to moderate.	Zoning: Visitor Zone. Catering for lower visitor numbers.	Levels of Service: Basic level of service.
Access Standards	Vehicle Access: High standard unsealed two-wheel drive access.	Tracks & Paths: Moderate standard - short walk.	Disabled Access: No disabled access provided.	Car Parking: Designated car parking and room for coasters.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial road.		Interpretation and Education: Basic interpretation signage exists.	
Features and Activities	Activities encouraged at this site include walking, picnicking, bird watching and nature appreciation.			
Visitor Facilities Standards	Seats & Tables and Shelter: Tables are provided. Drinking Water: None. Toilets: None.		BBQs and Fireplaces: None. Food Services: None. Camping: There is no camping at this site.	
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards and threats are communicated through pre-visit information and on-site. Ranger Presence: Regular patrols.		Litter Management: No rubbish bins are provided. Open Space Management: Slashing of picnic area and access road into site. Management Facilities: None.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - It is proposed to upgrade the facilities at this site to help alleviate pressure on primary visitor sites and enhance the visitor experience. The works will allow visitors to better appreciate the values of the site and include developing a boardwalk with a raised viewing platform and formalising the road and car parking area. These works are subject to funding and approvals. - The site has minimal use over the Wet season. - The current interpretation is inadequate. 			
Future Directions	<ul style="list-style-type: none"> - Proposed Development – Develop the proposed boardwalk, raised viewing platform and formalise the road and car parking area as a high priority. When the development is complete promote the new recreational opportunities available at the site with the assistance of the tourism industry. (High) - Interpretation – Upgrade interpretation as part of the site redevelopment. (High) 			



Plate 5: Tabletop Swamp

Lost City

Purpose/ Level of Service:	The Lost City is a minor site and will be managed to provide visitors with a four-wheel drive bush experience to the lost city formations. The site is low key and includes a short walk through the rock formations.			
Visitor Experience	Typical Visitors: Self reliant, independent and experienced visitors who seek solitude and a sense of remoteness.	Intensity of Use: Low. Approximately 10,000 visitors per annum.	Zoning: Visitor Zone.	Levels of Service: Basic level of service.
Access Standards	Vehicle Access: Four-wheel drive access only. The site is closed during the Wet season.	Tracks & Paths: Moderate standard of walking track.	Disabled Access: No disabled access is provided.	Car Parking: Car parking area provided at start of walking track.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads.		Interpretation and Education: Basic interpretation signage exists.	
Features and Activities	Activities encouraged within this zone include sightseeing, picnicking, short walks, photography, nature and culture appreciation and relaxation.			
Visitor Facilities Standards	Seats & Tables and Shelter: Picnic tables are provided. Drinking Water: None. Toilets: None.	BBQs and Fireplaces: One BBQ is provided. Food Services: None. Camping: There is no camping at this site.		
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards are communicated on-site and through pre-visit information. Ranger Presence: Patrols twice a week.	Litter Management: No rubbish bins are provided and the "take rubbish home" policy is to be promoted. Open Space Management: Slashing around car park area, day-use area and the access track into site. Management Facilities: None.		
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The interpretation signs on site are quite old and out of date. The site provides the opportunity to educate visitors on the geological significance of the area. - There are no toilet facilities at the site and this has a negative impact on the visitor experience and can lead to environmental issues. 			
Future Directions	<ul style="list-style-type: none"> - Proposed Development – Install an ablution facility to improve the visitor experience and protect the environment. (High) - Interpretation – Upgrade the interpretation at the site. (High) 			



Plate 6: The Lost City

Greenant Creek / Tjaetaba Falls

Purpose/ Level of Service:	Greenant Creek / Tjaetaba Falls will be managed as a low-key visitor site providing visitors with the opportunity to walk through a monsoon rainforest habitat beside a picturesque watercourse to the lookout at the top of Tjaetaba Falls. This site provides an alternative visitor site to assist in reducing over-crowding at other key locations.			
Visitor Experience	Typical Visitors: Active and passive visitors seeking a medium walk through rainforest to a waterfall.	Intensity of Use: Low to moderate visitation.	Zoning: Visitor Zone. Catering for a moderate number of visitors.	Levels of Service: Moderate level of service.
Access Standards	Vehicle Access: High standard sealed road.	Tracks & Paths: Moderate standard of tracks.	Disabled Access: No disabled access provided.	Car Parking: Designated car parking area.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads.		Interpretation and Education: Interpretation signs are present on site.	
Features and Activities	Activities encouraged within this zone include sightseeing, picnicking, short walks, photography, nature appreciation and relaxation. Swimming is not permitted below Tjaetaba Falls as the pool and area downstream of the falls is an Aboriginal sacred site. Visitors are able to dip their feet in the pool at the top of the Falls.			
Visitor Facilities Standards	Seats & Tables and Shelter: Picnic tables provided. Drinking Water: None. Toilets: Self composting toilets are provided.	BBQs and Fireplaces: BBQs are provided. Food Services: None. Camping: There is no camping at this site.		
Service Standards	Visitor Safety and Risk Mitigation: Hazards and threats are communicated through pre-visit information and on-site. Ranger Presence: Rangers regularly patrol this site.		Litter Management: No rubbish bins are provided and the "take rubbish home" policy is to be promoted. Open Space Management: Slashing for infrastructure safety (fire), visitor access, open space and aesthetic appeal if necessary. Management Facilities: None.	
Background – Issues & Opportunities	- An area directly adjacent to the top of Tjaetaba Falls is currently being assessed for its potential as a site for a Signature Lodge (see Section 2.5). If the site is found suitable for the development of an eco-lodge, the Greenant Creek visitor site would be modified and the walk to Tjaetaba Falls would close.			
Future Directions	- Proposed Future – Determine the potential for the development of a Signature Lodge. If found suitable modify the site and close the walk to Tjaetaba Falls. (High) - Development: If the site is found not suitable for the development of a Signature Lodge then maintain the site to its current standard. (Ongoing)			



Plate 7: Tjaetaba Falls

Cascades

Purpose/ Level of Service:	Cascades provides a high standard of access, good facilities and information for a moderate number of visitors. This new site was developed in 2010 to provide an alternative recreation opportunity away from the crowds of visitors at the popular sites such as Wangi Falls. At this site visitors have the opportunity to walk or picnic beside the picturesque Cascade Creek or swim in the many rock pools.			
Visitor Experience	Typical Visitors: Self reliant and experienced visitors who seek swimming and picnicking opportunities away from crowds.	Intensity of Use: Moderate. A new location with an undetermined number of visitors.	Zoning: Visitor Zone. Catering for low to medium visitor numbers and personal outback experience.	Levels of Service: Moderate level of service.
Access Standards	Vehicle Access: High standard sealed road.	Tracks & Paths: Moderate standard of tracks. The lower viewing platforms may receive higher numbers of visitors than the top lookout.	Disabled Access: Disabled access from the car park to one of the viewing platforms. No disabled access to the top of the escarpment.	Car Parking: Designated car and bus parking.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads. Detailed site information supported on the Website.		Interpretation and Education: Basic interpretation is provided at the beginning of the walking track.	
Features and Activities	Activities encouraged include sightseeing, picnicking, short and medium walks, swimming, photography, nature appreciation and relaxation. The presence of some other users is an expected part of the Park experience.			
Visitor Facilities Standards	Seats & Tables and Shelter: Seating, tables, chairs, interpretation shelter and viewing platforms provided. Two seats provided at the top of the escarpment. Drinking Water: None. Toilets: A self composting toilet is provided.		BBQs and Fireplaces: None. Food Services: None. Camping: There is no camping at this site.	
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards and hidden threats communicated on-site and in pre-visit information. Risk mitigation and on-site compliance to minimise exposure to hazards. Ranger Presence: Regular Ranger patrols.		Litter Management: Rubbish bins provided near the toilet block. A "take home rubbish" policy will be promoted. Open Space Management: Slashing for infrastructure safety (fire), visitor access, open space and aesthetic appeal if necessary. Management Facilities: None.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - This visitor site was developed to help alleviate pressure on other high use sites. - This site will provide Wet and Dry season access to the rock pools at the top of the escarpment. The footbridge at the base of the creek will need to be removed at the start of the Wet season which will signify the closing of the Dry season section of walk. - Only minimal interpretation is provided near the car park. There is an opportunity to provide more detailed interpretation of the natural values of the site. - The site will need to be promoted to ensure visitors and tour companies know of its existence. - The site may be closed for limited times during the Wet Season when flash flooding occurs. 			
Future Directions	<ul style="list-style-type: none"> - Promotion – Promote Cascades to visitors and tour companies highlighting the fact that the site has been developed for the more adventurous visitor. (High) - Car Park – Monitor the use of the car park to ensure sufficient spaces have been provided and traffic flows correctly. (Ongoing) 			



Plate 8: Swimming locations in Cascades Creek

Walker Creek

Purpose/ Level of Service:	Walker Creek will be managed to provide an alternative location for swimming, picnicking and camping along a picturesque watercourse. Visitors are able to walk in and enjoy camping along the creek at private camping sites. This type of experience is not offered elsewhere in the Park. Camping is only available in the Dry season.			
Visitor Experience	Typical Visitors: Independent, experienced park visitors willing to sacrifice comfort in order to avoid high use areas and retain outback experience.	Intensity of Use: Low. Approximately 25,000 visitors per annum.	Zoning: Visitor Zone catering for low to moderate numbers of visitors.	Levels of Service: Moderate level of service.
Access Standards	Vehicle Access: High, sealed two-wheel drive road.	Tracks & Paths: Moderate standard of tracks.	Disabled Access: No disabled access.	Car Parking: Designated car parking.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads.		Interpretation and Education: Interpretation is provided on site.	
Features and Activities	Activities encouraged within this zone include; swimming, sightseeing, picnicking, short walks, photography, nature appreciation, camping and relaxation.			
Visitor Facilities Standards	Seats & Tables and Shelter: Tables are provided. Drinking Water: None. Toilets: Self composting toilets are provided.	BBQs and Fireplaces: BBQs are provided. Food Services: None. Camping: A number of walk-in camp sites are provided. The site is also a major camp site for Tabletop Walk.		
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards communicated on-site and in pre-visit information. Ranger Presence: Rangers regularly patrol this area.		Litter Management: No bins are provided. "Take rubbish home" policy to be promoted. Open Space Management: Slashing for infrastructure, safety (fire), visitor access, open space and aesthetic appeal if necessary. Management Facilities: The Walker Creek Ranger station is located near to this visitor site. The Ranger station includes an office, residences, bore and workshop.	
Background – Issues & Opportunities	- This is the second site visitors discover as they enter the Park from the north. The proposed sealing of the remaining sections of the Litchfield Park Road is likely to have a significant impact on this site. The sealing of this road is likely to affect the flow of visitors to the Park.			
Future Directions	- Future Direction – If the Litchfield Park Road is sealed within the life of this Plan assess the potential impact this will have on the site. Carry out a site assessment to determine how this impact can be mitigated. (High) - Site Future – Maintain this site as a low key visitor site to ensure this unique experience is still offered within the Park. (Ongoing)			



Plate 9: A bush campsite at Walker Creek

Bamboo Creek Tin Mine

Purpose/ Level of Service:	Bamboo Creek Tin Mine will be managed to provide an insight into the historical use of the area as a tin mine. The site is of historical significance to the Territory and is listed on the NT Heritage Register.			
Visitor Experience	Typical Visitors: Visitors interested in sites of historical significance with ease of access.	Intensity of Use: Low to moderate numbers.	Zoning: Visitor Zone. Catering for low to moderate visitor numbers.	Levels of Service: Basic level of service.
Access Standards	Vehicle Access: Unsealed two-wheel drive access.	Tracks & Paths: Moderate standard of walking track around the site.	Disabled Access: No disabled access is provided.	Car Parking: Designated car parking area.
Interpretation and Community Education Standards	Orientation: Directional signs on the main Park road.		Interpretation and Education: Basic interpretation is provided on-site.	
Features and Activities	Activities encouraged within this site include walking, historical appreciation and picnicking.			
Visitor Facilities Standards	Seats & Tables and Shelter: One table is provided. Drinking Water: None. Toilets: None.		BBQs and Fireplaces: One BBQ is provided. Food Services: None. Camping: There is no camping at this site.	
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards are communicated through pre-visit information and signage on-site. Ranger Presence: Rangers frequently patrol this site.		Litter Management: No rubbish bins are provided and the "take rubbish home" policy should be promoted. Open Space Management: The area surrounding the site and the sides of access road are slashed for visual and safety requirements. Management Facilities: None.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The interpretation at the site needs to be upgraded as many of the panels are faded. - The site is a low key site and is the first visitor site on entry to the Park from the Cox Peninsula Road. The potential sealing of the remaining sections of the Litchfield Park Road in the future may impact this site. More picnic facilities may be required to accommodate a higher number of visitors. - The site is of significance to the traditional Aboriginal owners of the area. There is the potential for interested traditional Aboriginal owners to establish cultural heritage tours of the site with support from the Parks and Wildlife Service. 			
Future Directions	<ul style="list-style-type: none"> - Interpretation – Upgrade the interpretation and include cultural information as a priority. (High) - Cultural Heritage Tours – Assist and support the traditional Aboriginal owners to develop a cultural heritage tour of the site. (Medium) - Proposed Development – Provide more picnic facilities to encourage visitors to stop at the site on their way into the Park. (Low) 			

Tabletop Track

Purpose/ Level of Service:	The Tabletop Track will be managed to provide visitors with the opportunity to undertake a long distance walk or shorter walks with the opportunity to experience the beauty and isolation of the Park and enjoy bush camping. The track is a 39 km circuit and requires bush walkers to be experienced, fit and well prepared. The Tabletop Track can be started from Walker Creek, Florence Falls, Greenant Creek and Wangi Falls.			
Visitor Experience	Typical Visitors: Self reliant, independent, experienced park visitors seeking a long distance walk.	Intensity of Use: Low visitor numbers.	Zoning: Dispersed Use Zone.	Levels of Service: Basic level of service.
Access Standards	Vehicle Access: Two-wheel drive access to any of the starting points.	Tracks & Paths: The track varies from moderate to difficult standard.	Disabled Access: No disabled access is provided.	Car Parking: Car parking at the starting points of the track.
Interpretation and Community Education Standards	Orientation: Information is provided through the directional signs at starting locations and on the website.		Interpretation and Education: A Fact Sheet is available for this walk. Information is also provided on the Litchfield Map. Some interpretation is provided at the start of the walk.	
Features and Activities	Activities encouraged at this site include walking, swimming, camping and nature appreciation. Three campgrounds are provided along the track and camping is also available at Walker Creek and Wangi Falls.			
Visitor Facilities Standards	Seats & Tables and Shelter: Tables are provided at campsites. Drinking Water: None. All water must be carried by visitors. Toilets: Self-composting toilets are provided at the three campgrounds.		BBQs and Fireplaces: BBQs are provided at the camping sites. Food Services: None. Camping: Three camping sites are provided along the walk.	
Management Service Standards	Visitor Safety and Risk Mitigation: The track is closed at the end of September for the Wet season and permits are required to access the track during this time. The track is closed if there is any threat of wildfires. Ranger Presence: Ranger staff occasionally patrol this walking track.		Litter Management: No rubbish bins are provided at the three campsites however rubbish bins are provided at Walker Creek and Wangi Falls camping areas. Open Space Management: The walking track is cleared after the Wet season before opening for the new season. Management Facilities: None.	
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The system of registration for visitors undertaking long distance walks across all NT Parks is currently being reviewed and standardised. - The track can be closed when there is a threat of wildfires. - The track currently has minimal visitation and has the capacity to accommodate greater numbers. Sections of the track could be re-routed to provide more swimming opportunities for visitors. It is likely that providing more opportunities for swimming will increase the level of use of the track. 			
Future Directions	<ul style="list-style-type: none"> - Promote – Promote the Tabletop Track to increase visitor use. Review the level of use on the track in five years to ensure the level of use is still acceptable and not negatively impacting on the visitor experience or the environment. If required implement a maximum visitor threshold. (High / Medium) - Proposed development – Where possible re-route sections of the track to provide visitors with more opportunities for swimming. (High) - Walker Registration – Standardise the registration system for this walk in line with the requirements for all long distance walks across the NT Park Estate. (High) - Adoption of Walking Track Standards – Upgrade signage and promotional material to reflect the Australian Walking Track grading System. (High / Medium) 			

Four-wheel Drive Tracks

The Reynolds River 4WD Track is a 44 km track starting in the north from Litchfield Park Road travelling south, parallel to the western boundary of the Park before meeting the Daly River Road. The track crosses a number of watercourses making it impassable during the Wet season. It is an excellent way for visitors to enjoy an outback experience and see some of the more remote sites in the Park.

The section of the Stapleton Track which runs through the Park is accessed from Milton Road near the town of Adelaide River in the north and Tipperary Station in the south. This track has low visitor numbers as access requires permission from the owners of Tipperary Station to either enter or exit the Park. The section of the Stapleton Track within the Park will be maintained for management purposes as it provides good access to the south-eastern section of the Park.

Management Action

- Maintain the Reynolds River 4WD Track and the section of the Stapleton Track to provide visitors with the opportunity to four-wheel drive and experience an isolated, outback experience. (Ongoing)

Blyth Homestead (Ruins)

Purpose/ Level of Service:	The site will be managed to provide an opportunity to learn about when the Park was an operating cattle station. The site is currently low key however it is proposed to seal the Reynolds River 4WD Track to this site which will potentially increase visitation to a moderate level. The site is of heritage significance to the Territory and is listed on the NT Heritage Register.			
Visitor Experience	Typical Visitors: Self reliant park visitors seeking an historical appreciation.	Intensity of Use: Low number of visitors.	Zoning: Visitor Zone.	Levels of Service: Basic level of service.
Access Standards	Vehicle Access: Access to site is currently four-wheel drive and is only open during the Dry season. It is proposed to seal the road to this site (section 2.5).	Tracks & Paths: Easy walking around the ruins.	Disabled Access: None.	Car Parking: Designated car parking only.
Interpretation and Community Education Standards	Orientation: Directional signage is located at the start and end of the Reynolds River 4WD Track.		Interpretation and Education: On-site interpretation is provided.	
Features and Activities	Activities encouraged within this site include four-wheel driving and historical appreciation.			
Visitor Facilities Standards	Seats & Tables and Shelter: Tables and seats are provided. Drinking Water: None. Toilets: None.	BBQs and Fireplaces: None. Food Services: None. Camping: None.		
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards are communicated through pre-visit information. Ranger Presence: Frequent Ranger patrols.	Litter Management: No rubbish bins are provided and "take rubbish home" policy is promoted. Open Space Management: The site is slashed before opening at the beginning of the Dry season. Management Facilities: None.		
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The site has the potential to accommodate guided historical and cultural tours to enhance the visitor experience. - Sealing 8km of the Reynolds River 4WD Track to this site would provide access to the site for all visitors. 			
Future Directions	<ul style="list-style-type: none"> - Proposed Development – It is proposed to seal an 8km section of the Reynolds River 4WD Track to this site (section 2.5) (High) - Interpretation – Upgrade the interpretation provided at the site subject to resources. (Medium) - Proposed Development – Investigate, promote and support the opportunity for the development of guided historical and cultural tours of the site. If a guided tour is established assess the need for ablution facilities. (Low) 			

Tjaynera Falls (Sandy Creek)

Purpose/ Level of Service:	Tjaynera Falls (Sandy Creek) will be managed to provide the opportunity to camp near and swim at Tjaynera Falls. The site is currently low key however it is proposed to seal the section of the Reynolds River 4WD Track to this site which will potentially increase the visitation to a moderate level.			
Visitor Experience	Typical Visitors: Self reliant visitors seeking the opportunity to swim, camp and picnic away from crowds.	Intensity of Use: Low. Approximately 20,000 visitors per annum.	Zoning: Visitor Zone. Catering for low to moderate visitor numbers.	Levels of Service: Low level of service.
Access Standards	Vehicle Access: Access is by four-wheel drive and is only open during the Dry season. It is proposed to seal the road to this site (see section 2.5).	Tracks & Paths: Moderate standard of track.	Disabled Access: No disabled access provided.	Car Parking: Designated car parking areas at campground and day-use area.
Interpretation and Community Education Standards	Orientation: Directional signs on arterial roads.		Interpretation and Education: None.	
Features and Activities	Activities encouraged within this zone include swimming, four wheel driving, walking, picnicking, camping, nature appreciation and relaxation.			
Visitor Facilities Standards	Seats & Tables and Shelter: Tables are provided within the campground but not in day-use area. Drinking Water: Drinking water provided. Toilets: Toilet facilities are provided.	BBQs and Fireplaces: BBQs are provided in the camping area. Food Services: None. Camping: 10 camping sites provided.		
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards and threats are communicated through pre-visit information and on-site. Ranger Presence: Ranger patrols are daily.	Litter Management: Rubbish bins are provided. Open Space Management: Slashing for infrastructure, safety (fire), visitor access, open space and aesthetic appeal if necessary. Management Facilities: None.		
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The directional signage for the walk from the campground to the Falls is inadequate. - There is currently no interpretation provided at the site. The visitor experience could be enhanced through the provision of information on the natural values of the site. - The existing campground is very basic with no landscaping or identified camping sites. - Sealing 8km of the Reynolds River 4WD Track to this site would provide access to another swimming and camping location for all visitors. 			
Future Directions	<ul style="list-style-type: none"> - Proposed Development - It is proposed to seal an 8km section of the Reynolds River 4WD Track to this site (section 2.5) (High) - Directional Signage – Upgrade the directional signage from the campground to the Falls. (High) - Proposed Development – Landscape the campground and delineate the camping sites. (Medium) - Interpretation – Provide some interpretation of the natural values of the area. (Medium) 			

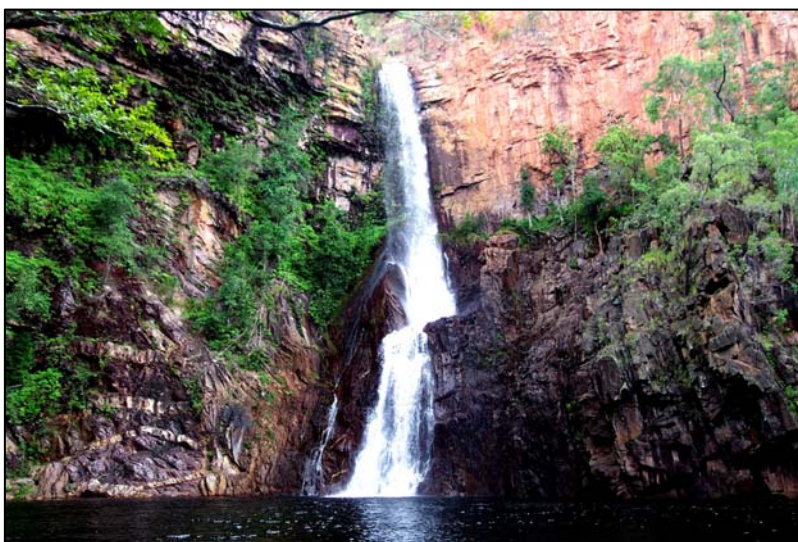


Plate 10: Tjaynera Falls (Sandy Creek)

Surprise Creek Falls

Purpose/ Level of Service:	Surprise Creek Falls will be managed to provide a remote, outback experience away from crowds of people. The site is located along the Reynolds River 4WD Track. The site is a low key site and is only accessible during the Dry season.			
Visitor Experience	Typical Visitors: Self reliant, independent experienced park visitors seeking a remote, bush experience.	Intensity of Use: Low numbers of visitors.	Zoning: Dispersed Use Zone.	Levels of Service: Basic level of service.
Access Standards	Vehicle Access: Access to the site is four-wheel drive and limited to the Dry season.	Tracks & Paths: Moderate standard of track which requires upgrading.	Disabled Access: No disabled access is provided.	Car Parking: Designated car parking area.
Interpretation and Community Education Standards	Orientation: Directional signage provided at the start and end of the Reynolds River 4WD Track.		Interpretation and Education: None.	
Features and Activities	Activities encouraged within this zone include four-wheel driving, walking, swimming, camping, nature appreciation and relaxation.			
Visitor Facilities Standards	Seats & Tables and Shelter: Picnic tables and chairs are provided in the day-use area. Drinking Water: None. Toilets: Composting toilets are provided.	BBQs and Fireplaces: BBQs are provided in the camping area. Food Services: None. Camping: This site provides 10 camping sites.		
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards are communicated on-site and through pre-visit information. Ranger Presence: During the Dry season Ranger staff frequently patrol area.	Litter Management: No rubbish bins are provided and “take rubbish home” policy is promoted. Open Space Management: The day-use area and campground are slashed before opening the site at the beginning of the Dry season. Management Facilities: None.		
Background – Issues & Opportunities	<ul style="list-style-type: none"> - The directional signage for the walk from the campground to the Falls is inadequate. - There is currently no interpretation provided at the site. The visitor experience could be enhanced by providing information on the natural values of the site. - The existing campground is very basic with no landscaping or identified camping sites. 			
Future Directions	<ul style="list-style-type: none"> - Directional Signage – Upgrade the directional signage from the campground to the Falls. (High) - Proposed Development – Landscape the campground and delineate the camping sites. (Medium) - Interpretation – Provide some interpretation of the natural values of the area. (Medium) 			

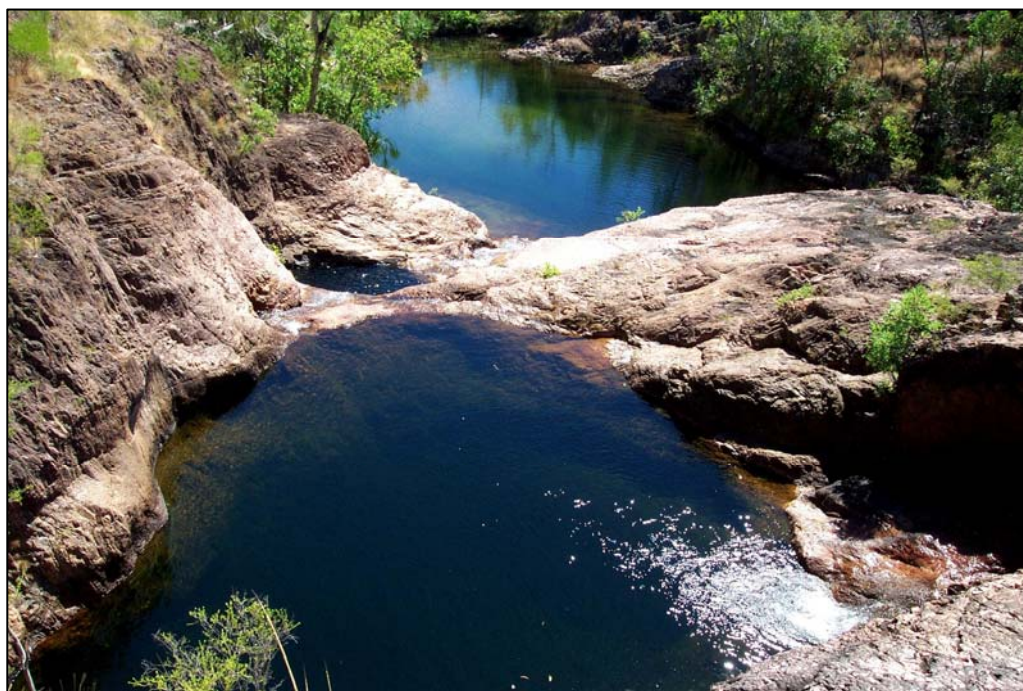


Plate 11: Surprise Creek Falls

Tableland Creek

Purpose/ Level of Service:	Tableland Creek will continue to be managed for the adventurous, self sufficient visitor seeking a remote, outback experience away from crowds of people. Access to the site is managed by permit and no facilities are provided.			
Visitor Experience	Typical Visitors: Self reliant, independent park visitors seeking a remote, bush experience.	Intensity of Use: Low number of visitors. Visitation is by permit only with several permits issued annually.	Zoning: Dispersed Use Zone.	Levels of Service: Basic level of service.
Access Standards	Vehicle Access: Access to the site is four-wheel drive and is only open in the Dry season.	Tracks & Paths: Basic standard of track.	Disabled Access: None.	Car Parking: No designated car parking area.
Interpretation and Community Education Standards	Orientation: Directional signage provided at the start and end of the Reynolds River 4WD Track.		Interpretation and Education: None.	
Features and Activities	Activities encouraged within this zone include four-wheel driving, walking, swimming, camping, nature appreciation and relaxation.			
Visitor Facilities Standards	Seats & Tables and Shelter: None. Drinking Water: None. Toilets: None.		BBQs and Fireplaces: None. Food Services: None. Camping: This site provides a camping area for approximately four vehicles at a time.	
Management Service Standards	Visitor Safety and Risk Mitigation: Hazards are communicated on site and through pre-visit information. Ranger Presence: Rangers occasionally patrol area.		Litter Management: No rubbish bins are provided and “take rubbish home” policy is promoted. Open Space Management: The area is slashed before opening the site. Management Facilities: None.	
Background – Issues & Opportunities	- The site provides a select number of visitors with a unique outback experience away from other park users.			
Future Directions	- Site Future - Maintain this site as a basic bush camping area to ensure this unique experience is offered in the Park in the future. (Ongoing)			



Plate 12: An aerial view of Tableland Creek Falls

Commercial Safari Camp

Purpose/ Level of Service:	The purpose of Commercial Safari Camp is to provide an exclusive experience for clients of the concessionaire. Visitors have the opportunity to spend multiple days exploring the less visited sites in the Park.			
Visitor Experience	Typical Visitors: Tour groups managed through a concession.	Intensity of Use: Low visitor numbers. Group sizes are limited to a maximum of 24 visitors. For each group there is a maximum stay of two nights.	Zoning: Dispersed Use Zone.	Levels of Service: Basic level of service.
Access Standards	Vehicle Access: Access is by four-wheel drive and is only open in the Dry season.	Tracks & Paths: None.	Disabled Access: None.	Car Parking: Parking is provided for the four-wheel drive bus.
Interpretation and Community Education Standards	Orientation: Information is provided through the tour organiser.		Interpretation and Education: None.	
Features and Activities	Activities encouraged at this site include camping, relaxing and nature appreciation.			
Visitor Facilities Standards	Seats & Tables and Shelter: Tables and seats are provided as part of the tour. Drinking Water: Drinking water provided as part of the tour. Toilets: Composting toilets and camp showers are provided.	BBQs and Fireplaces: Cooking facilities are provided as part of the tour. Food Services: Food services are provided as part of the tour. Camping: Tents are provided by the tour organiser.		
Management Service Standards	Visitor Safety and Risk Mitigation: Access to the site is with the concessionaire. Staff Ranger Presence: Ranger staff occasionally patrol this site.	Litter Management: Rubbish is removed by the concessionaire. Open Space Management: None. Management Facilities: None.		
Background – Issues & Opportunities	<ul style="list-style-type: none"> - This is a unique experience not offered elsewhere in the Park. - The length of tenure of the concession will be related to the level of investment by the concessionaire. 			
Future Directions	<ul style="list-style-type: none"> - Proposed Development – Promote the continued use of the commercial safari camp to ensure the diversity of experiences offered in the Park. (High). - Compliance – The concessionaire must comply with the Parks and Wildlife Service Commercial Operations Policy. (Ongoing) 			

Environmental Education Campground

Purpose/ Level of Service:	The purpose of the Environmental Education Campground is to provide a stimulating and safe place for teachers to bring young people to learn about the environment.			
Visitor Experience	Typical Visitors: Groups of students from school or education organisations.	Intensity of Use: Moderate visitor numbers. Group sizes are limited to 40 children plus adult helpers. For each group there is a maximum length of stay of three nights.	Zoning: Dispersed Use Zone.	Levels of Service: Moderate level of service.
Access Standards	Vehicle Access: Access is via a locked gate and a formed gravel road.	Tracks & Paths: Very short track to waterhole.	Disabled Access: None.	Car Parking: Car parking provided for group organisers.
Interpretation and Community Education Standards	Orientation: Information is provided when booking the facility through the Ranger Station at Batchelor. Directional signage provided on Litchfield Park Road.		Interpretation and Education: An Information Booklet is available for this site and can be down-loaded from the NRETAS website.	
Features and Activities	Activities encouraged at this site include walking, swimming, camping and nature appreciation.			
Visitor Facilities Standards	Seats & Tables and Shelter: A large communal shelter is provided. It is a large rectangular open-sided structure with a concrete floor and colour bond roof. Drinking Water: Cold and solar hot running water is also provided in the kitchen and ablation block. All water must be boiled before drinking. Toilets: An ablation block is provided which comprises flushing toilets, showers and changing areas.		BBQs and Fireplaces: Large gas BBQ and fire pit. Firewood is provided. Food Services: A lockable group kitchen is provided with a separate lockable storeroom. Camping: A grassed camping area is provided and can accommodate approximately 20, 2 person-style tents. Camping fees apply.	
Management Service Standards	Visitor Safety and Risk Mitigation: Access to the site is through a locked gate. The key for the gate is obtained on arrival. Staff Ranger Presence: Ranger staff occasionally patrol this site.		Litter Management: Rubbish bins are provided. Open Space Management: The grassed camping area is mowed and irrigated as required. Management Facilities: None.	
Background – Issues & Opportunities	- This facility is booked by education groups (including schools and scout groups) over most of the Dry season. There is a high demand for this facility by educational groups.			
Future Directions	- Site Future – Maintain the site as an education facility for a moderate number of visitors. (Ongoing)			



Plate 13: Environmental Education Campground

2.5 Proposed New Park Developments

Outcomes

- An increase in the number of new and exciting recreation opportunities.
- An improved visitor experience of the Park through offering a wider range of opportunities including an enhanced cultural experience.

Economic Value of Tourism

Holiday visitation to the Top End in 2009 was 471 000 visitors and to the Darwin tourism region which encompasses Darwin and Litchfield National Park was 383 000. The Park's visitation over this period was over 50% of the total visitors to the Top End and over 71% of the total visitors to the Darwin tourism region (Tourism NT 2010). Two core attractions for visitors to the Park are natural and cultural tourism and the proximity of Litchfield National Park to Darwin is a major drawcard. It is probable that there will continue to be a growth in visitor numbers over the life of the Plan. The Plan needs to look ahead and to develop the Park to cater for this increase.

The Park is significant to the Top End tourism industry and is a key driver of tourism activities in the Batchelor area. The tourism industry in the area provides commercial tours, accommodation, meals and general provisions. Currently 22 commercial tour operators offer tours to Litchfield National Park. Of these nine offer day trips from Darwin and 13 offers the Park as part of an extended touring program (three of which camp in the Park or nearby). Commercial accommodation available near the Park and in Batchelor includes a resort, caravan parks, cabins and camping. During the peak season, 48% of visitors stay overnight while during the off peak season only 12% of visitors stay in the Park (Visitor Surveys July 2009).

Market analysis undertaken highlights that future development of the Park should be aimed towards the 'Experiential Traveller'. The Experiential Traveller is generally defined as the traveller seeking fun, adventure and freedom. They like to relax, recharge, get back to nature and immerse themselves in the local culture. The Northern Territory already receives Experiential Travellers and new sites and activities within the Park can be developed to cater for this type of traveller.

Any new recreation sites and activities identified need to enhance the visitor experience, be sustainable and alleviate the pressure on the existing key visitor sites within the Park.

Cycle / Mountain Bike Tracks

For many years cycling and mountain bike enthusiasts and clubs have been using the service tracks and old four-wheel drive tracks within the Park for mountain biking. The landscape of the Park provides the perfect setting for off road cycling and mountain bike tracks with rugged surfaces, spectacular scenery and little or no sand. The Park's close proximity to Darwin has been an enticement for mountain bike clubs to use the Park for weekend events.

To accommodate this recreational activity it is the intention of the Parks and Wildlife Service to now provide dedicated cycle / mountain bike tracks and promote this recreation activity within the Park.

Mountain bike groups were consulted on the feasibility of developing two mountain bike tracks in the Park. The mountain bike groups were very supportive of the proposal.

It is proposed that a short 32 km circuit track be developed from the campground at Florence Falls to the Aida Creek Crossing along the Litchfield Park Road up to the Aida Jump-up and back to the Florence Falls campground.

Starting and finishing at Florence Falls allows visitors to leave their vehicles in the public

car park and return to the campground for a swim or to camp overnight.

The second track will be an overnight loop track approximately 56 km in length starting and finishing at Wangi Falls (see Map 4). The track is designed to be completed over two days with a campsite proposed near the half-way point. Campsite facilities would consist of a roofed shelter and water tank.

The overnight loop track would start and finish at Wangi Falls thus linking in with the proposed secure car parking compound that is proposed for use by visitors using the Tabletop Track (Section 2.4 Wangi Falls).

There may also be the opportunity for the concessionaire at the Wangi Falls Centre to hire out mountain bikes and camping equipment.

The two proposed tracks will require visitors to ride along sections of the Litchfield Park Road. In discussions with the Department of Lands and Planning, the agency was supportive of the proposal and highlighted the need for good signage and information to make visitors aware of the safety aspects when cycling along the Litchfield Park Road.

Both the short and overnight tracks use existing roads and service tracks within the Park. It is proposed to open the tracks in 2011 and to monitor their use. The tracks will be promoted widely as a new experience on offer within the Park. Information on cycling / mountain bike track will be prepared providing visitors with the necessary information to undertake the tracks safely and to gain the most enjoyment.

Both the loop tracks proposed use existing service roads and verges of the Litchfield Park Road and Reynolds River 4WD Track. It is recognised that these tracks may not provide the challenging mountain bike riding experience that a single track through rugged and hilly landscapes can provide and hence other locations for such experiences will be identified through the life of this Plan.

Management Actions

- Develop a short cycle / mountain bike loop track starting and finishing at the Florence Falls car park. Provide an information on the track to enhance visitor safety and enjoyment. (High)
- Develop a long cycle / mountain bike loop track starting and finishing at Wangi Falls. Develop information for visitors on the track to enhance visitor safety and enjoyment. (High)
- Work with mountain bike groups to ensure the alignment and standard of the track meets the needs of mountain bike users and complies with national track standards. (High)
- Work with the tourism industry to promote mountain biking as a new visitor experience in the Park. (High)
- Develop a campsite, water tank and toilet on the overnight loop track. (High)
- Investigate development of a secure car parking facility at Wangi Falls Centre. (High)
- Investigate the potential for a single track located completely off-road. Work with mountain bike groups to determine the most appropriate location for a more challenging mountain bike experience. (Medium)
- Continue to liaise with the Department of Lands and Planning on the development of signage and information to make visitors aware of the safety aspects when cycling along the Litchfield Park Road. (Ongoing)
- Monitor usage and environmental impacts of tracks including weed management and erosion. (Ongoing)

Potential New Visitor Sites

There have been extensive investigations to identify areas that may be suitable for future development. The following section discusses some undeveloped areas that were found to have potential for future development. There may be other areas in the Park that have potential for development by a concessionaire or tour operator which are not identified in this Plan.

The Parks and Wildlife Service recognises that concessions can offer opportunities for visitors which can enhance the visitor experience and which are not offered by the Parks and Wildlife Service (see also Section 5.3). Parks and Wildlife Service have created a new branch, Tourism and Visitor Services which aims to promote new and existing tourism opportunities in the Parks and Reserves across the Northern Territory. Operators who identify new or entrepreneurial opportunities in the Park can approach the Tourism and Visitor Services branch to develop these opportunities in accordance with the Act, the By-laws and the necessary environmental requirements and policies (see also Section 5.1).

During the preparation of this Plan a number of undeveloped areas of the Park were investigated for their potential to be developed as visitor sites to provide new and possibly different experiences and alleviate pressure on key visitor sites. Three sites were identified as having high potential to be developed. The three sites require detailed site assessment and include:

1. Horse Paddock Creek Falls;
2. Eastern Escarpment; and
3. Stewie's Lookout.

1. Horse Paddock Creek Falls

Horse Paddock Creek is located approximately 1 km north east of Blyth Homestead off the Reynolds River 4WD Track (see Map 4). Horse Paddock Creek is a small creek that flows all year and includes a small picturesque waterfall. The site has potential for walking, swimming and camping.



Plate 14: Horse Creek Paddock Falls

2. Eastern Escarpment

The eastern escarpment is located on the southern side of the Litchfield Park Road, south from the turn-off to Florence Falls (see Map 4). This area has potential for future development as a recreation site as it is easily accessible and contains a number of waterfalls with small pools that flow for most of the year. The site has the potential for swimming, walks and camping.



Plate 15: A plunge pool at the base of a waterfall on the eastern escarpment.

3. Stewie's Lookout

Stewie's Lookout is located along the eastern escarpment. The site has landscape views and includes Aboriginal art. The site is easily accessible via to an existing service track. This site has potential for some form of visitor development possibly via the issuing of a concession or special permit .

Sealing a Section of the Reynolds River 4WD Track

As stated in Section 1.4 one of the key strategies of this Plan is to increase the range of visitor experiences available in the Park. A significant development that would open more recreation opportunities to all visitors would be the sealing of an 8 km section of the Reynolds River 4WD Track.

It is proposed to seal the Reynolds River 4WD Track from where it joins the Litchfield Park Road south to the campground at Tjaynera Falls (Sandy Creek) including the spur track to Horse Paddock Creek and Blyth Homestead. Sealing this section of the track would provide an additional two swimming locations, a camping site and more walks for two-wheel drive visitors during the peak visitor season when demand for swimming and camping is at its highest. These additional sites would assist in dispersing two-wheel

drive visitors throughout the Park.

Two-wheel drive access to these sites would allow for all year access however swimming at Horse Paddock Creek and Tjaynera Falls would be restricted to the Dry season due to the potential for saltwater crocodiles and safety hazards associated with the Wet season weather. Walking and camping would be permitted all year.

A new short loop walk from Tjaynera Falls (Sandy Creek) passing by Horse Paddock Creek Falls to the Lost City may also be developed. This loop walk would provide visitors with a walk through scenically attractive landscapes with safe swimming opportunities along the way. A site assessment would be required to determine the potential for this loop walk.

Management Actions

- Seal the 8 km section of the Reynolds River 4WD Track from the start of the track in the north to the Tjaynera Falls (Sandy Creek) campground including the spur to Horse Paddock Creek. (High)
- Undertake a detailed site assessment and develop a site plan for the Horse Paddock Creek Falls area to determine the most appropriate recreation uses. (Medium)
- Undertake a detailed site assessment of the eastern escarpment to determine possible recreation uses. (Medium)
- Undertake a detailed site assessment of Stewie's Lookout to determine possible recreation uses. (Medium)
- Undertake a detailed site assessment to develop a loop walk from Tjaynera Falls (Sandy Creek) passing Horse Paddock Falls to the Lost City. (Medium)



Plate 16: The view from Stewie's Lookout site.

Indigenous Tourism

The Tourism Strategic Plan 2008-2012 identifies Indigenous culture as a major drawcard for a large proportion of international tourists and a significant number of domestic visitors (Tourism NT 2008).

There is demand for cultural experiences and interpretation within the Park. The sharing of cultural information with visitors enhances the visitor experience and gives the visitor an appreciation for the cultural and natural landscapes of the Park. There are a number art sites within the Park that could be developed as a cultural tourism experience if there is interest and agreement from the relevant traditional Aboriginal owners for the site.

There is also the potential for cultural tours to be established at Blyth Homestead or Bamboo Creek Tin Mine if there is interest from the traditional Aboriginal owners. During the life of this Plan, Parks and Wildlife and Tourism NT will work with the traditional Aboriginal owners to determine the level of interest and if agreed assist the traditional Aboriginal owners in establishing a cultural tour.



Plate 17: Blyth Homestead, a site for potential cultural tours.

Management Actions

- Work with the traditional Aboriginal owners to investigate the potential for offering Aboriginal cultural tours within the Park. (Medium)

Adventure Activities

Most activities offered in the Park are water-based. The development of other activities can help alleviate pressure on the primary sites while providing visitors with a different experience.

The Northern Territory currently lacks adventure activities such as zip lines, rope courses and abseiling. These types of activities can offer visitors an exciting and unique experience and the Park could provide the perfect setting for such activities. Tour operators will be invited to submit proposals for the delivery of such experiences on Park. The potential and appropriateness for adventure activities to be developed in the Park will be investigated with the assistance of the Stakeholder Reference Group and a small number of concessions will be identified by 2012.

Management Actions

- The Parks and Wildlife Service will work with the tourism industry groups through the Stakeholder Reference Group to investigate and develop adventure activities while ensuring Park values are protected. (Medium / High)

Eco Accommodation / Signature Lodge

Outcome

- Delivery of high-end immersive nature based accommodation.

The NT Government's Five Year Tourism Strategic Plan 2008-2012 identified that a significant product gap for the Northern Territory is immersive, experiential, nature-based accommodation in key locations. It was also identified that a greater pool of investors need to be attracted to the Territory and that practical measures were needed to fast-track investment decisions. In response to this gap, the NT Government's Major Projects Group (with Tourism NT as the lead agency) developed the Signature Lodges initiative to facilitate investment in the NT by pre-preparing sites for a suite of environmentally responsible, nature-based tourism accommodation developments.

The Signature Lodges initiative will identify key locations suitable for developing world-class, small-scale tourist accommodation within the Northern Territory's National Parks and Reserves, Aboriginal Land and on Crown Land.

The initiative aims to attract investors seeking to develop unique niche tourist accommodation, which meets high environmental standards and delivers an immersive and memorable experience for guests.

It is recognised that considerable time and resources must be invested into the early stages of tourism development projects and that this investment is more significant in protected areas. The Signature Lodge initiative aims to reduce this burden for investors by 'pre-preparing' sites. Site preparation is likely to include activities such as:

- Gaining 'in principle' approvals to develop the site from traditional Aboriginal owners, Park agencies (Territory and /or Commonwealth) and relevant authorities
- Obtaining sacred site clearances
- Undertaking engineering and/or environmental pre-feasibility studies to assess the site's limitations and potential
- Identifying the actions that may be involved in establishing essential services on the site.

Signature Lodge developments will be operated by private proponents on a commercial basis (noting that they will assume the brand of that proponent and hence will not be marketed as a "Signature Lodge"). The sites will be made available through an open, competitive Expression of Interest process. Lease terms will reflect the capital investment made on the site and the surrounding area and may incorporate non-financial terms, such as Indigenous employment outcomes subject to any relevant laws in force in the Northern Territory.

It is anticipated that there will only be one Signature Lodge in any park. Guests of the Signature Lodge will have exclusive access to the site.

Signature Lodge developments will attract national and international attention and become a drawcard for the broader destination. They will provide the region with an economic injection, additional jobs and will stimulate the development of complementary tourism products and experiences.

Signature Lodge in Litchfield National Park

Tourism NT believes that Litchfield National Park is a premier location for a Signature Lodge development. There has been significant interest in the Park by major investors over the years. Research indicates that the park has significant potential to deliver a more immersive experience for a small number of visitors.

Early investigations into suitable locations for a Signature Lodge site have commenced. The Tjaetaba Falls site is worthy of future investigation as it:

- Offers a prominent waterfall view and longer panoramic views
- Is centrally located to existing tourism facilities in the park
- Will not cause the displacement of many visitors as current visitation to the area is low
- Will be possible to construct a year-round access track
- Provides natural protection from saltwater crocodiles.

If further investigations indicate that the site would be suitable, pre-preparation activities will continue towards releasing the site by calling for Expressions of Interest to construct and manage a development in the Tjaetaba Falls area. It is anticipated that Expressions of Interests could be invited by mid 2012.

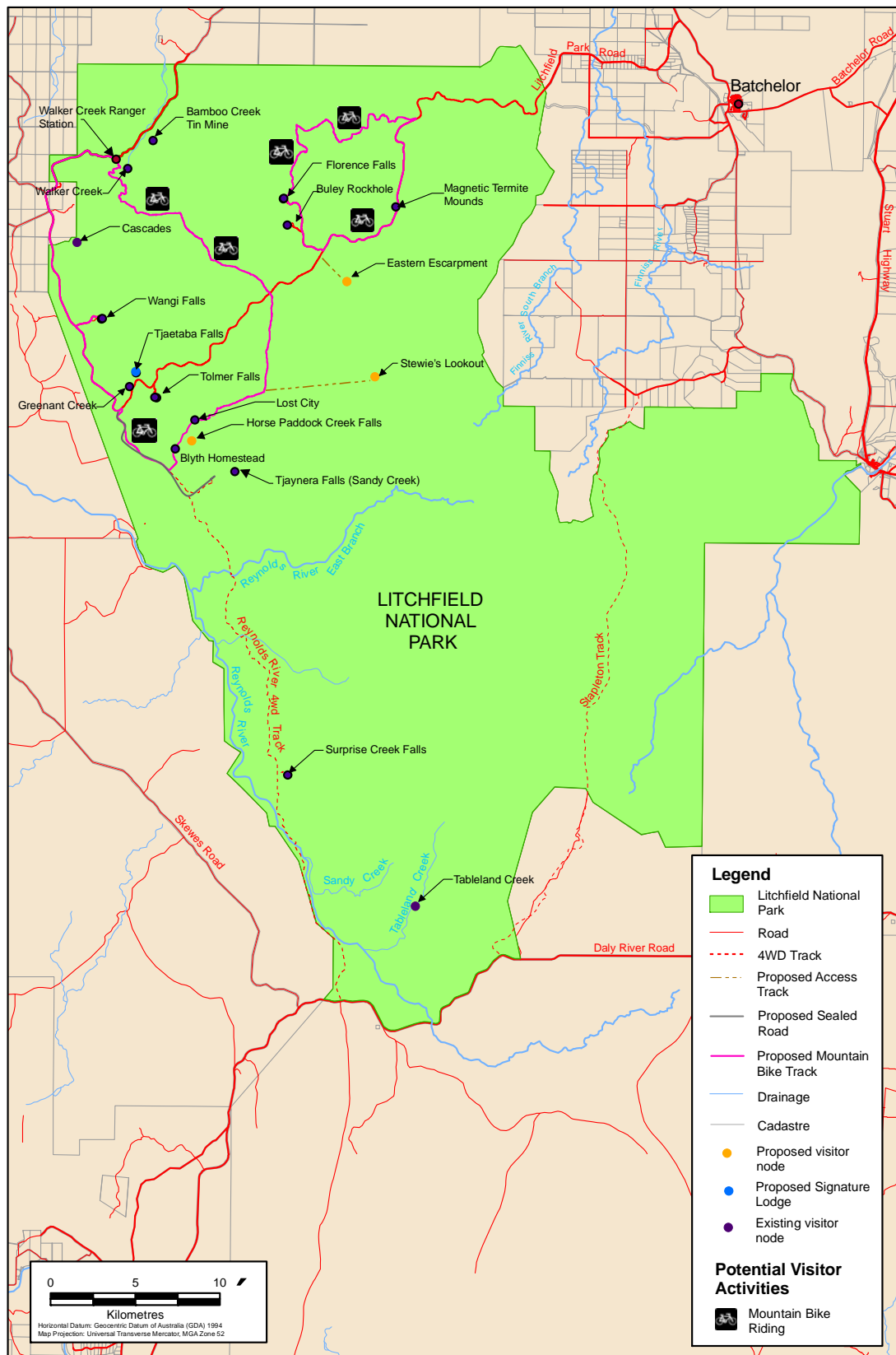
If the Tjaetaba Falls site is found to be unsuitable at any stage, investigations will shift to other sites within the Park. Alternate potential sites include the Eastern Escarpment, the Tolmer Falls area, Florence Creek and the Bamboo Creek area.

It is recognised that identifying a Signature Lodge site may present new or changed management priorities for the Park. For example, if a small lodge was to be developed near Tjaetaba Falls, the access spur onto the Tabletop Track may need to be realigned and a loop walk from Greenant Creek may need to be established. Such decisions will be made by developing a site plan for the broader area neighbouring the Signature Lodge site.

Management Action

- Investigate the Tjaetaba Falls area to determine its suitability for a Signature Lodge site. (High)
- If Tjaetaba Falls is found unsuitable, identify and investigate other locations within the park for potential Signature Lodge sites. (High)
- In conjunction with the successful Signature Lodge proponent, undertake site planning for nearby areas. (High)

Map 4: Proposed and Potential Recreation Activities and Site



2.6 Visitor Safety

Outcome

- Public risk effectively managed resulting in very low incidence of injury to visitors.

Visitor safety is paramount in the management of the Park however visitor accidents do occur and when they do it is important that the situation is handled quickly and effectively. The Parks and Wildlife Service has an overarching Visitor Incident system that provides a basis on which to respond to emergencies. The Parks and Wildlife Service also undertakes annual risk management assessments and specific risk mitigation activities are captured within operational action plans. All incidents are reported centrally and the Department as a whole has a range of OH&S and hazard reduction guidelines to which the Park adheres. The effective implementation of this system requires sufficient resources and trained, competent staff.

Emergency helicopter landing sites are located at Wangi, Tolmer and Florence Falls and Walker Creek. Batchelor airstrip is also used if required.

Swimming within Litchfield National Park is only permitted within the designated swimming areas. Saltwater crocodiles do occur outside of these designated swimming areas and visitors are warned of their presence through pre-visit information and on-Park signage. The Parks and Wildlife Service maintain a Crocodile Management Plan across the Park. This Plan is reviewed regularly or as required.

Due to the importance of swimming to visitors, the water quality of the designated swimming areas will be tested as required by the Parks and Wildlife Service policy "*Management of Microbial Water Quality in Recreational Water Bodies*".



Plate 18: Rangers remove a saltwater crocodile from Wangi Falls.

Directional signage is an important element to ensure visitors have a safe and relaxing visit. The Parks and Wildlife Service will continue to review and improve the directional signage within the Park. Good visitor information that shapes visitor expectations and behaviour will assist in reducing incidents of injury to visitors.

The Parks and Wildlife Service are in the process of adopting the Australian Walking Track Grading System for all the walks across the NT Parks Estate. This system will allow visitors to better understand the grading of the walking tracks which will improve the safety of visitors. This grading system will be applied to the walking tracks across Litchfield National Park.

Management Actions

- All staff must be familiar with the procedures and be trained and prepared to implement them at any time. (High)
- Park staff will work closely with NT Police, Fire and Emergency Services and Bushfires NT and during safety incidents when required. (High)
- Maintain a Crocodile Management Plan across the Park and review the Plan annually. (High)
- Undertake water quality monitoring of designated swimming areas as required by the Parks and Wildlife Service “*Management of Microbial Water Quality in Recreational Water Bodies*” policy. (Ongoing)
- Review and upgrade directional signage to ensure visitors are able to locate Park facilities. (Ongoing)
- Adopt the Australian Walking Track Grading System across all walking tracks in the Park. (High / Medium)

2.7 Visitor Information, Interpretation and Monitoring

Outcomes

- The provision of clear interpretation and directional information to enhance visitor enjoyment and understanding of park values.
- A clear understanding of the level of visitation, demographics, activities, preferences and satisfaction levels to assist park management and planning.

Interpretation in the Park can enhance visitor enjoyment and provide an avenue for visitors to learn and appreciate the natural and cultural values of the Park. It is essential to provide up to date and interesting information. The Park currently provides two forms of interpretation; interpretive signage throughout the Park and Ranger campfire talks as part of the ‘Parks Alive’ Program. Information is also provided by the tourism industry and tour groups.

There are currently two orientation shelters provided at the eastern and western entries to the Park. The eastern orientation shelter is poorly located and is underutilised. The relocation of the eastern orientation shelter to the Magnetic Termite Mounds visitor site would encourage more visitors to read the information on the Park.

Management Action

- Ensure interpretive material provided is accurate and informative. (High)
- Relocate the eastern orientation shelter to the Magnetic Termite Mounds visitor site. (Medium).

Visitor Monitoring

Visitor monitoring is essential in improving knowledge and understanding of visitor behaviour, helps improve park management and a requisite for conserving values of the Park.

The Department of Construction and Infrastructure collect information on vehicle numbers through traffic counters on the Litchfield Park Road. The Parks and Wildlife Service also maintain a number of traffic counters in the Park to collect visitor figures for select visitor sites.

The Parks and Wildlife Service will continue to maintain accurate visits data from traffic counters in the Park. The Parks and Wildlife Service will carry out visitor surveys to ascertain visitor satisfaction, profile and use of the Park approximately every three years.

Management Action

- The Parks and Wildlife Service will continue to collect visits data from traffic counters and carry out visitor surveys approximately every three years in accordance with the Parks and Wildlife Visitor Monitoring Program. (High)

2.8 Visitor Access

As discussed in the Introduction, there are four entries into the Park. The main Park access is via Batchelor Road, a two-wheel drive road, from Batchelor which joins Litchfield Park Road.

The second entry to the Park is via the Cox Peninsula Road which joins the Litchfield Park Road in the north western corner of the Park. This road is sealed however sections of the Litchfield Park Road remain unsealed. The Roads Network Division have advised that it is a priority to seal the entire length of the Litchfield Park Road however it is not likely to occur for at least five years. Currently this entry is closed during the Wet season. The eventual sealing of this road is likely to have a significant impact on the flow of visitors through the Park.

The third entry to the Park is via the Reynolds River 4WD Track. This is an unsealed four-wheel drive access track and is closed during the Wet season. The fourth entry is via Marindja Road which is an unsealed road from Channel Point and closes during the Wet season.

Access along the Litchfield Park Road from Batchelor is restricted for limited periods due to flash flooding in the Wet season. Access to the Park from the Cox Peninsula Road can become impassable during the Wet season as it has several creek crossings and a river crossing. The Parks and Wildlife Service advise the public of the closure of the Reynolds River 4WD Track and specific site closures via media releases and the NRETAS 'Park Access' webpage. Closure of the other entries to the Park is carried out by the Department of Construction and Infrastructure.

Specific visitor sites such as Buley Rockhole, Florence Falls and Cascades can be periodically closed during the Wet season as a result of flash floods. The Lost City site is also closed during the Wet season once the road becomes water logged. Other sites accessed via the Reynolds River Track including Blyth Homestead, Tjaynera Falls (Sandy Creek) and Surprise Creek Falls are currently closed over most of the Wet season until the Reynolds River 4WD Track re-opens. The proposed sealing of the section of the Reynolds River 4WD Track to Blyth Homestead and Tjaynera Falls will provide for all year access of these sites.

2.9 Anti-Social Behaviour

Outcome

- A reduction in the occurrence of anti-social behaviour in the Park.

Over the years sites such as Wangi Falls, Buley Rockhole and Florence Falls have increased in popularity amongst visitors and locals. During peak season these sites often become over-crowded and anti-social behaviour from some visitors is occurring more frequently. This behaviour is largely attributed to the consumption of excessive amounts of alcohol. This poor behaviour can include abusive language and in some instances can lead to violence leaving many visitors feeling unsafe and negatively

impacting on their experience. To improve visitor safety and enjoyment anti-social behaviour needs to be reduced.

The Stakeholder Reference Group agreed that managing anti-social behaviour was necessary and as a first step agreed to recommend banning glass in prescribed areas. The Parks and Wildlife Service are amending the *Territory Parks and Wildlife Conservation By-laws* to enable Rangers to enforce no glass containers at prescribed areas within a Park. The Stakeholder Reference Group and the Parks and Wildlife Service have agreed that all designated swimming areas within the Park will become prescribed areas when the amendment to the By-law has been enacted.

Identifying all designated swimming areas in the Park as 'glass free' will send a clear message to the general public. It may also be possible to work with the local stores, accommodation outlets and the Information Centre in Batchelor to advise people at the time of purchasing or before they enter the Park that glass is not permitted in any of the designated swimming areas. Glass containers will still be permitted in the picnic areas and campgrounds in the Park.

The introduction of a glass ban in all designated swimming areas in the Park will require the development and implementation of an education campaign. The Parks and Wildlife Service will work with Tourism NT to raise awareness of the new 'glass-free' designated swimming areas with visitors and tour operators.

Management Actions

- After the *Territory Parks and Wildlife Conservation By-laws* are enacted ban glass from all designated swimming areas in the Park. (High)
- Undertake an education campaign with assistance from the tourism industry to raise awareness that all designated swimming areas within Litchfield National Park have become 'glass free'. Install signage where appropriate. (High)

2.10 Waste Management

The management of rubbish and waste in the Park is a major concern. Rubbish bins are provided at a number of visitor sites and the rubbish collected from these bins is currently disposed of in a land fill dump within the Park. The volume of rubbish generated has increased dramatically over the past few years.

The issue of waste disposal in Parks and Reserves in the Northern Territory will be addressed through the development of a *Waste Management Policy* which is identified for preparation by the Parks and Wildlife Service.

Management Actions

- Implement the *Waste Management Policy* once it has been prepared. (High)

3. Management of Natural Values

Vision for the Park's Biodiversity

It is envisaged that:

- The Park will continue to make an important contribution to the reservation of sandstone plateaus, undisturbed remnant rainforests, upland swamps and black soil plains;
- The Park will conserve the natural values, such as sandstone plateaus, woodland communities, important water resources and threatened flora and fauna species and our knowledge of them will be maintained and enhanced for future generations; and
- Threatening processes will be managed to reduce their impact on the Park's biodiversity.

Outcomes

- The protection of the Parks natural landscapes and environment.
- The conservation of the Park's natural floral and faunal diversity.
- The protection of the natural water systems of the Park from damage and maintenance of the water quality to a high standard.

The Park protects a broad representation of Top End flora and fauna in a region that is developing rapidly. The high species diversity in the Park is due to the variety of habitats including sandstone plateaus, undisturbed remnant rainforests, upland swamps and black soil plains. The Park's central sandstone plateau supports rich woodland flora communities dominated by Darwin Woollybutt (*Eucalyptus miniata*), Darwin Stringybark (*Eucalyptus tetradonta*), grevillea (*Grevillea pteridifolia*), banksia (*Banksia dentata*) and a wide variety of other woodland species.

The Park includes numerous patches of monsoon rainforest located in deep, narrow gorges that were created over thousands of years by the force of waterfalls cutting into the escarpment walls.

Litchfield National Park lies across three bioregions including Darwin Coastal, Pine Creek and Daly Basin. The Darwin Coastal bioregion is characterised by flat, low-lying country, drained by several large rivers. The vegetation communities include eucalypt forest and woodlands with tussock and hummock grass understorey. The Pine Creek bioregion is characterised by mainly hilly to rugged ridges and undulating plains with eucalypt woodlands and patches of monsoon forest. The Daly Basin bioregion is characterised by gently undulating plains with scattered low plateau remnants and some rocky hills and gorges along its western edge. The dominant vegetation is Darwin Woollybutt and stringybark open forests (DEWHA, 2008).

Litchfield National Park is ranked as a Class 1 Park for biodiversity value under the Parks and Wildlife Service's Management Effectiveness Framework (MEF). The MEF provides a basis for allocating resources to priorities across the system of NT Parks and Reserves (see also section 5.1). All parks across the NT estate are ranked from Class 1 to Class 4 with Class 1 being the highest ranking.

3.1 Water Resources

The Park contains water-dependent ecosystems which are of regional significance as important wildlife habitats including monsoon forests, riparian and floodplain habitats. Water movement is an important factor in shaping and maintaining these ecosystems.

There are numerous springs located on the top of the Tabletop landform which provide a continuous source of water for locations such as Buley Rockholes, Florence Falls, Tolmer Falls, Wangi Falls and Tjaetaba Falls. It is important to protect these springs from any developments that may impact the flow or lead to pollution of the waterways.

Management Actions

- Ensure any proposed developments on the Tabletop do not impact on the flow of springs or lead to pollution of waterways. (Ongoing)

3.2 Flora

There are 787 native plant species recorded in the Park including one species of cycad *Cycas armstrongii*, listed as vulnerable on the NT Threatened Species List. The cycad is at risk from inappropriate fire and introduced grasses.

The Park contains representative samples of eight NT vegetation types and contains the sole representative sample of NT Vegetation Type No. 48, *Livistona humilis* (Fan Palm) tall open-shrubland with Sorghum grassland understorey (NRETAS, 2009).

The Fan Palm vegetation type is not especially threatened in the short term but in the longer term may become threatened by the spread of Gamba grass.

The significant habitats within the Park include the sandstone flora and the rainforest patches associated with gorges e.g. Sandy Creek. Litchfield National Park also contains fire-sensitive plants and communities including Callitris pines and Cycad stands and rainforest patches.

Litchfield National Park contains three species of cycad (*Cycas armstrongii*, *C. calcicola*, and *C. maconochiei* subsp. *maconochiei*). All Cycads are listed on the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) due to their commercial use. Cycads are an indicator of fire regimes. Poor fire regimes that include frequent hot fires will negatively impact on this species. A Cycad Management Program has been prepared for all species of Cycad in the Northern Territory (Liddle, 2009).

As previously mentioned *Cycas armstrongii* occurs in the Park and is classified as vulnerable. This species is negatively impacted by inappropriate fire regimes resulting from increased fuel loads from exotic grasses such as Gamba and Mission grasses.

The occurrence of *Cycas calcicola* in the Park is considered significant due to the high population number. A *Cycas calcicola* monitoring program was established in the Park in 1997. It is important to continue monitoring this species as it is a good indicator of poor fire regimes. *Cycas calcicola* generally live in areas that are protected or sheltered from fire and the species prefers cool fires and is negatively impacted by frequent hot fires.



Plate 19: A stand of Cycads near Tolmer Falls.

Another indicator of poor fire regimes, particularly frequent, high intensity fires are species of *Callitris* pines. The northern cypress-pine, *Callitris intratropica* are a distinct species easily seen by air and could be monitored as part of Bushfires NT fly overs and during the fire monitoring plot surveys. The information gathered on the health of these populations help determine the success of Park fire management programs on an annual basis.

Management Actions

- The Park's floral diversity will be protected through fire, weed and feral animal management programs integrated into annual operational plans (see section 3.4). (High)
- Establish a *Callitris intratropica* monitoring program using information collected through the Bushfires NT as part of their park fly overs and from information gathered from the fire monitoring plot surveys. (Medium)
- Every two years monitor the eight *Cycas calcicola* plots. Every five to ten years but not exceeding ten years re-assess the plots in conjunction with the Biodiversity Division of NRETAS. (Ongoing)

Performance Measure

- Stable or increasing trends for selected high priority and/ or threatened species.

3.3 Fauna

There are 340 native vertebrate species recorded on the Park comprising 191 birds, 25 amphibians, 77 reptiles and 47 mammals. There are 11 threatened fauna species, 1 listed as Critically Endangered, 2 listed as Endangered and 8 listed as Vulnerable.

Table 3 outlines the species listed as vulnerable, critically endangered or endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act* or the NT *Territory Parks and Wildlife Conservation Act*.

Table 3: Species of conservation significance found in Litchfield National Park.

Scientific Name	Common Name	NT Conservation Status	Australian Conservation Status
<i>Varanus mertensi</i>	Mertens' water monitor	VU	-
<i>Varanus panoptes</i>	floodplain monitor	VU	-
<i>Dromaius novaehollandiae</i>	emu	VU	-
<i>Erythrotriorchis radiatus</i>	red goshawk	VU	VU
<i>Ardeotis australis</i>	Australian bustard	VU	-
<i>Geophaps smithii</i>	Partridge pigeon	VU	VU
<i>Dasyurus hallucatus</i>	northern quoll	CR	EN
<i>Phascogale pirata</i>	northern brush-tailed phascogale	VU	VU
<i>Hipposideros inornata</i>	Arnhem leaf-nosed bat	VU	-
<i>Conilurus penicillatus</i>	brush-tailed rabbit-rat	VU	VU

CR – Critically Endangered; EN – Endangered; VU – Vulnerable

Management Actions

- The Park's faunal diversity will be protected through fire, weed and feral animal management programs integrated into annual operational plans (see section 3.4). (High)

Performance Measure

- Stable or increasing trends for selected high priority and/ or threatened species.

Research and Monitoring

Continual improvement in the management of the Park depends much upon developing knowledge of the Park's natural resources and understanding what changes, if any, are taking place over time. Scientific research has been undertaken in the Park however there is still more that can be learned about the natural resources and how these resources are affected by human activities.

Research and monitoring is carried out by NRETAS, other government agencies and individuals. Associated activities including interfering with wildlife and taking, interfering or keeping protected wildlife requires a permit issued under the *Territory Parks and Wildlife Conservation Act* or the By-laws.

Fauna surveys of 41 permanent fire monitoring plots in the Park are carried out every five years as part of the Three Park Fire Monitoring Program (see also section 3.4). These surveys provide invaluable information on the health of the Park and its' fauna. The surveys also provide information on the success of the Park's fire management programs.

Several fauna programs are recommended for implementation within the Park over the next 10 years. The programs are listed in priority order from highest to lowest priority.

Management Actions

- Continue to carry out fauna surveys of the fire monitoring plots every five years as part of the Three Park Fire Monitoring Program. (High)

Sanctuary

It is recognised that feral animals such as cats and cane toads have had a major impact on the native fauna of the Top End. To assist in the protection of native species there is a proposal to construct an exclusion fence one kilometre square within the Tableland habitats. The fence aims to provide a safe location for the re-introduction of threatened fauna such as the quoll, brush-tailed rabbit rat and northern brush-tailed phascogale. The location of the sanctuary will be determined by the Rangers with assistance from the Biodiversity Conservation Division of NRETAS.

Management Actions

- Construct and maintain a one kilometre square exclusion fence in the tableland habitats. Re-introduce threatened fauna including quolls, brush-tailed rabbit-rats and northern brush-tailed phascogales. (High)
- Investigate opportunities to source external funding for the development of the exclusion fencing and for maintenance of the project. (High)

Partridge Pigeon

Litchfield National Park is a stronghold for the Partridge pigeon. This species spends most of its life on the ground with the nest generally located in areas of dense ground cover and feeds in areas that are relatively open. As a result the Partridge pigeon is a good indicator of benevolent fire regimes as mosaic, cool burns suit this species.

A monitoring program for the Partridge pigeon could be designed using a number of the existing fire monitoring plot sites. The program would involve Rangers committing to burn particular areas at designated times of the year. Later in the year an annual survey would be carried out to count the number of Partridge pigeons within the selected area. An initial survey would need to identify where the birds occur and determine the most appropriate fire plots to use. It is proposed that the Partridge pigeon program would be run by the Park Rangers and would be coordinated by the Biodiversity Conservation Division of NRETAS.

A good method of recording sightings of particular fauna species is through the use of 'CyberTrackers'. This system sets up a database which records the location of occurrences of a particular species through a GPS and can be added to other recorded sightings across the Northern Territory. The 'CyberTracker' system is currently used by Indigenous Ranger groups across Kakadu and Arnhem Land. The purchase of the 'CyberTracker' program could be used to record sightings of Partridge pigeons across the Park.

Management Actions

- Establish a Partridge pigeon monitoring program to be coordinated by the Biodiversity Conservation Division and implemented by the Rangers. (Medium)
- Establish a 'CyberTracking' Program for recording sightings of Partridge pigeons. (Medium)



Plate 20: Partridge pigeon

Emu

Emus occur in the Park however the number of Emus is unknown. This species is highly mobile and difficult to directly manage therefore management needs to occur through appropriately managing their habitat through good management of fire and weeds, specifically, Gamba grass.

Emus lay their eggs on the ground and both the adults and young spend their entire lives on the ground. This species is therefore negatively impacted by frequent and high intensity fires. Fire management needs to include mosaic burns in the late Wet and /or early Dry season and needs to reduce the frequency and intensity of fires. Emus also have difficulty pushing through Gamba grass and therefore Gamba grass needs to be managed where possible.

A monitoring program could be established with the assistance of the Rangers. Rangers would record sightings of Emus through the 'CyberTracker' system suggested previously. This would allow Park staff to keep a record of all sightings which could then be linked with any sightings across Kakadu and Arnhem Land.

Management Actions

- Establish a 'CyberTracking' Program for recording sightings of Emus. (Medium)

Red Goshawk

There are several known breeding sites of the Red Goshawk in the Park and this species is listed as Vulnerable under NT legislation. In order to determine if this species persists, all known sites and any new sites will be documented. Annual targeted surveys during the breeding season for this species will give an indication of whether this species persists. Assistance for these surveys could be sought through local bird watching groups.

Management Actions

- Undertake targeted annual surveys of the Red Goshawk during breeding season. (Ongoing)

Quoll

Quolls have been previously recorded in Litchfield National Park. Quoll populations have been declining in the Northern Territory for several decades and this has been exacerbated by the arrival of the cane toad. In order to determine if they persist in the Park all incidental recordings should be entered into a database. The 'CyberTracker' system previously suggested could also be used to record any sightings of this species in the Park by Rangers.

Management Actions

- Record all incidental sightings of quolls to determine if this species persists in the Park. (Ongoing)
- Establish a 'CyberTracking' Program for recording sightings of Quolls. (Medium)

Orange leaf-nosed Bat and Arnhem leaf-nosed Bat

Surveys carried out in 1991, 1994 and 1995 identified the orange horse-shoe bats (now known as orange leaf-nosed bats) at Tolmer Falls as being one of the largest breeding colonies for the species and a critical Dry season refuge (Griffiths et. al, 1997). The orange leaf-nosed bat is listed as Near Threatened under the *Territory Parks and Wildlife Conservation Act*. The Tolmer Falls area has been specifically zoned 'Special Protection Zone' to protect this colony of orange leaf-nosed bats at the base of the falls.

Monitoring of the colony of orange leaf-nosed bats at Tolmer Falls should occur every two to three years by the Biodiversity Conservation Division with assistance from Park staff. While surveying the orange leaf-nosed bats the Arnhem leaf-nosed bats could also be surveyed to monitor their population size. The Arnhem leaf-nosed bat is listed as Vulnerable under the *Territory Parks and Wildlife Conservation Act* and has not been recorded in the Park since 1983.

Management Actions

- Every two to three years monitor the orange horse-shoe and Arnhem leaf-nosed bats. (Ongoing)

3.4 Managing Threatening Processes

Threatening processes particularly fire, weeds and feral animals impact on all elements of the Park from biodiversity through to visitors, their safety and experiences. Limited resources necessitate targeted approaches to management of threatening processes. The greatest threat to the natural values and biodiversity of the Park are frequent, high intensity, late Dry season wildfires.

Litchfield National Park is the second most visited Park in the NT Parks estate behind Casuarina Coastal Reserve. As a result threatening processes need to be managed not only to protect the Park's natural values but also to protect visitor safety and ultimately visitor enjoyment. It is important to find the balance between management of biodiversity and visitor safety. Currently management for visitor safety and protection of visitor infrastructure takes precedence over managing for biodiversity.

Fire

Outcomes

- A reduction of the impact of wildfire on the native plants, animal and the natural environment of the Park.
- The protection of people, personal property and Park assets from harm due to fire.

Landscape-scale and over frequent fire is the greatest threat to the Parks' biodiversity values and is also a major threat to visitor safety and infrastructure. Fire management is carried out on the Park for the following reasons, in order of priority:

1. Protection for public safety;
2. Protection of property / park infrastructure; and
3. Protection of biodiversity.

In 2009 approximately 72% of the Park was burnt. 27% of this area was burnt as part of the Park's controlled burning program however over 45% was as a result of wildfires and back burning to control these wildfires. The majority of wildfires in the Park are lit by arsonists and a small percentage are from lightning strike.

Fire history of recent years indicates that too much of the Park is being burnt and too frequently. Frequent, intense fires lead to a reduction in biodiversity as many species are unable to cope with frequent hot fires. If the Park continues to burn in the current trend it is likely that much of the biodiversity in the Park will be lost.

Rangers currently burn at the end of the Wet season and early Dry season to provide a mosaic, cool burn to protect key assets, significant habitats, infrastructure and protect Park boundaries. Not all the required areas in the Park can be burnt in the early part of the year when fires are cool. This leaves large tracts of Park land unprotected from wildfire.

Litchfield National Park is part of a three Park fire monitoring program along with Kakadu and Nitmiluk National Parks. The monitoring program within Litchfield National Park comprises 41 permanent monitoring plots located across a variety of landform and vegetation types / habitat conditions within the Park (Russell-Smith et. al, 2002). The monitoring program comprises two elements, annual satellite-based mapping of fire events and five yearly on-ground assessment of changes in biota. These surveys provide essential information on how fire is affecting the Park and whether the biodiversity of the Park is improving, staying the same or declining. The next intensive, on-ground monitoring of the fire plots will occur in early 2011.

The Parks and Wildlife Service will work to reduce the average area burnt annually by 10 to 15%. The Fire Management Program will aim to burn between 20 and 25% of the Park each year with these smaller patches being burnt each year adding up to the whole Park being burnt every five years. The aim of fire management is to ultimately provide protection of the park assets and visitor safety while maintaining the biodiversity values of the Park.

The key habitat which requires protection from hot, frequent wildfires is the sandstone habitats in the Park. Park Rangers will prepare an annual fire management plan and a fire management strategy. These plans and strategies will be prepared with the assistance of the Bushfires NT.



Plate 22: Rangers carrying out a fuel reduction burn.

Management Actions

- Develop and implement a Fire Management Plan. Burn smaller sections/ patches of the Park (approximately 20-25%) during the end of the Wet season and early Dry season, with the patches burnt each year adding up to the whole Park being burnt every 5 years. (High)
- Continue to implement the Fire Monitoring Plot program. At the 5 year review, review the existing plot locations to determine if they are appropriately sited. (High)
- The Park Rangers will investigate ways to involve the traditional Aboriginal owners in control burning and fire management on the Park. (Medium)
- Undertake annual fire scar mapping. (Ongoing)

Performance Measure

- Reduce by 10 – 15% the area of the Park burnt by wildfire annually.
- No loss or significant decline in fire sensitive ecosystems or populations of indicator species in the Park.

Weeds

Outcome

- A reduction of the impact of priority weeds on the native plants, animal and the natural environment of the Park.

Weeds represent a major threat to the biodiversity values of the Park and if left unmanaged have the potential to significantly alter the structure of the ecosystems. Consequently, weed management is an important part of conservation land management. Eradication of some species over large areas is generally not feasible. Management is therefore focussed on eradication and control in select areas and of priority species.

The Parks and Wildlife Service has a responsibility under the *Weeds Management Act* to control the spread of declared weeds and, in some cases eradicate them from the Park estate. There are currently 61 weeds species listed for the Park. The three weed species of most significant threat to the biodiversity values of the Park are:

1. Gamba grass (*Andropogon gayanus*)
2. Mission grass (*Pennisetum polystachion.*)
3. Mimosa (*Mimosa pigra*)

Gamba grass poses the most significant threat to the biodiversity values of the Park. This species dries off in the late Dry season creating very high fuel loads which result in late and very intense fires. These fires can burn large tracts of land, impacting on rainforest patches and particular fauna species such as the brush-tailed rabbit rat and emu. Gamba grass is highly invasive with the ability to alter and damage savanna landscapes. Gamba grass is classed as a Class B/C weed under the *Weeds Management Act* and within the Park requires containment of existing infestations, while eradicating any smaller and/or new infestations. Gamba grass is also listed as a Key Threatening Process under the Commonwealth's *Environment Protection and Biodiversity Conservation Act* and a Threat Abatement Plan is currently being prepared.

Mission grass also poses a threat to the Park's natural values and is a declared Class B (spread to be controlled) and Class C (not to be introduced to the Northern Territory) weed under the *Weeds Management Act*. The seeds of this weed are easily spread and the grass readily competes with native grasses and will quickly occupy disturbed areas. Research has shown that Mission grass invasion results in fuel loads 5 times larger than

uninvaded sites (Douglas, 2004). These greater fuel loads contribute fuel for destructive fires in the late Dry season.

Mimosa pigra is listed as a Weed of National Significance. Within the Northern Territory and in the area encompassing Litchfield National Park *Mimosa* is declared a Class A/C (to be eradicated / not to be introduced) weed under the *Weeds Management Act*. Within the Park there are number of small infestations in the southern section of the Park near the Reynolds River. These infestations are monitored and treated bi-annually. *Mimosa* is a threat to the Park's natural values as populations can replace native plant communities and form dense monospecific stands which can damage ecosystems.

Park management will prepare an annual Weed Management Plan. It is not feasible to eradicate Gamba and Mission grass from the whole Park however the Weed Management Plan will:

- Target the protection of key biodiversity locations and areas of high visitor use;
- Target strategically identified areas where Gamba is low in density;
- Target strategically identified areas that have the potential to cause the further spread of Gamba and Mission grass such as the four-wheel drive tracks; and
- Identify an area of containment and a barrier.

Any new and all known locations of Gamba grass will be recorded and the location sent to the Weeds Branch of NRETAS. The Weed Management Plan will be prepared with assistance from the Weeds Branch of NRETAS.

In relation to *Mimosa*, management will continue to annually target this species in an attempt to reduce and if possible eradicate it from the Park.

Management Actions

- Prepare a Weed Management Plan with the assistance of the Weeds Branch of NRETAS (High). The Plan will:
- *Target the protection of key biodiversity locations and areas of high visitor use;*
- *Target strategically identified areas where Gamba is low in density;*
- *Target strategically identified areas that have the potential to cause the further spread of Gamba and Mission grass such as the four-wheel drive tracks;*
- *Identify an area of containment and a barrier;*
- *Target bi-annual treatment of Mimosa within the southern section of the Park to reduce and if possible eradicate it from the Park; and*
- *Take into consideration, where necessary, any requirements of the Commonwealth's Threat Abatement Plan for Gamba grass, once it has been prepared.*
- Any new and all known locations of Gamba grass will be recorded and locations sent to the Weeds Branch of NRETAS.
- Investigate alternative methods of managing Gamba Grass and implement if appropriate.

Performance Measure

- Reductions in the extent of existing priority weed species.
- No new sustained infestations of weeds in the Park.

Feral Animals

Outcome

- A reduction in the impact of feral animals on the native plants, animals and the natural environment of the Park.

Feral animals can have a major impact on the natural values of a Park. They can cause erosion of fragile soils, spread weeds and exotic diseases and compete with native animals for food and habitat. There have been 11 exotic animal species recorded within the Park including cane toads, cats, house mouse, goats, Asian house gecko, black rat, horse, pig, sambar deer, cattle and swamp buffalo.

The complete eradication of all feral animals in the Park is not feasible as there are no long-term control methods for species such as the cat and cane toad. The key species with the greatest impact on the Park's fauna include:

1. Cats
2. Cane Toads
3. Cattle
4. Pigs
5. Goats

Feral animals in the Park are managed through a contract agreement. A contractor is employed twice a year to muster cattle from the Park and cull horses, pigs, buffalos and goats. The culled animals are collected and used for pet meat. Neighbours to the Park and the public are notified prior to the muster and cull occurring. Opportunistic culling also occurs down the Reynolds River 4WD Track when it is closed to the public.

An option that is being considered to control pigs in key locations is the fencing of significant rainforest patches to exclude pigs. Pigs cause damage and negatively impact on some of the rainforest patches within the Park.

Management Actions

- Eradicate the small localised herd of goats. (High)
- Investigate the potential to fence and maintain small rainforest patches with significant conservation value to exclude pigs. (Low)
- Continue to employ a contractor to carry out mustering of cattle and culling of pigs, horses, buffalos and goats. (Ongoing)

Performance Measure

- A reduction in the impact of feral animals on the Parks natural values.

4. Management of Cultural Values

The Cultural Vision for the Park

By 2021 it is envisaged that:

- The rich Aboriginal heritage of the Park will be kept alive through the active and ongoing involvement of the traditional Aboriginal owners; and
- The European historical sites will be protected, maintained and interpreted to enhance visitor appreciation of these sites and their significance.

4.1 Aboriginal Cultural Values

Outcome

- Protection and management of the significant cultural sites in the Park.

There are four Aboriginal groups that have a close association with Litchfield National Park and include the Kungarakan, Werat, Warai and Maranunggu people.

There are many sacred sites, art sites, archaeological sites and sites of significance throughout the Park. The management of Aboriginal sites will be guided by the Aboriginal Areas Protection Authority (AAPA) and the *Northern Territory Aboriginal Sacred Sites Act*. Further, the *Northern Territory Aboriginal Sacred Sites Act* provides protection for sacred sites by requiring a person who proposes to use or conduct work on land to apply for an Authority Certificate. An Authority Certificate will only be issued if the use of or work on the land can proceed without there being a substantive risk of damage or interference with a sacred site on or in the vicinity of the land or if an agreement is reached between the applicant and the custodians of the sacred site. Subject to the terms of the *Northern Territory Aboriginal Sacred Sites Act*, this protection enables custodians of the sacred site to say who can enter the site and what can happen in or on the site.

There is a significant burial ground located in the north-western section of the Park. This site is of importance to a number of the Aboriginal groups and this site is carried managed by the traditional Aboriginal owners and the AAPA.

Nothing in the *Territory Parks and Wildlife Conservation Act*, limits the right of Aboriginals who have traditionally used an area of land or water from continuing to use that area in accordance with Aboriginal tradition for hunting, food gathering and for ceremonial and religious purposes. Traditional hunting is still carried out in select areas of the Park with the Aboriginal people mainly hunting fish and turtles. Current impacts of traditional hunting and gathering on the Park's natural values are low.

The Parks and Wildlife Service acknowledge that cultural knowledge belongs to the traditional Aboriginal owners and will not use, or permit to be used, such knowledge without prior consent of traditional Aboriginal owners. Wherever possible, the Parks and Wildlife Service will assist the traditional Aboriginal owners assert their intellectual property rights consistent with Parks and Wildlife Service policy.

The *Heritage Conservation Act* provides protection to archaeological places and objects in the Territory. Under the *Heritage Conservation Act* consent of the Minister is required before work is carried out on or in relation to an archaeological place and object. Archaeological site clearance must be sought for any works, including conservation, to prescribed archaeological sites in the Park.

Management Actions

- A Cultural Heritage Management Program will be developed including a cultural heritage database for the Park, documenting all known cultural heritage sites and their management. (Medium)
- Traditional hunting and gathering of animals, plants and natural materials from the Park for traditional purposes will extend only to the traditional Aboriginal owners. If hunting or gathering activities are perceived to negatively impact on the Park's natural values or visitor experience, Park Management will review harvesting practices with traditional Aboriginal owners. (Ongoing)
- The management and protection of sacred sites will be assured through the Aboriginal Areas Protection Authority and the expressed wishes of the traditional Aboriginal owners. Authority Certificates will be sought for any works proposed on the Park that are triggered by the *Northern Territory Aboriginal Sacred Sites Act*. (Ongoing)
- Any proposals for work affecting archaeological sites or objects will be consistent with the requirements of the *Heritage Conservation Act*. Expert advice will be sought from the relevant NT government authority. Sacred sites clearance process will also apply to works that may impact archaeological sites. (Ongoing)
- Park staff will manage the burial site in accordance with the wishes of the traditional Aboriginal owners and the requirements of the Aboriginal Areas Protection Authority. (Ongoing)
- The Parks and Wildlife Service will work with the four Aboriginal groups to gather information for the interpretation of sites within the Park, where appropriate. (Ongoing)
- The NRETAS Indigenous Cultural and Intellectual Property Policy aims to protect Indigenous cultural knowledge and the intellectual property rights of Indigenous persons and communities. To the fullest extent possible, any cultural information obtained from the traditional Aboriginal owners of the Park will be recorded, stored and used consistently with their directions. (Ongoing)
- Indigenous ecological knowledge and skills will be integrated into park management programs where possible and recorded appropriately. (Ongoing)

4.2 European Historical Values

Outcome

- No avoidable damage to the significant heritage sites in the Park.

The historical values of Litchfield National Park provide an insight into the development of the Top End pastoral and mining industries, which had a profound effect on the culture and lifestyles of local Indigenous people. Two sites within Litchfield National Park are registered on the NT Heritage Register including Blyth Homestead and Bamboo Creek Tin Mine.

Blyth Homestead is of heritage significance due to its architectural and social significance. The Homestead was built in 1929 by the Sargeant family as an outstation on Stapleton Station. Blyth Homestead is one of the few remaining examples of this type of building which was formerly common on Northern Territory Pastoral leases.

Bamboo Creek Tin Mine is of historic significance as it provides an insight into the small-scale mining activities that occurred in the area. Tin was discovered in the area in 1906 and was mined sporadically until 1955. The site contains remnants of the equipment

used for ore extraction, processing and transportation of tin.

Both heritage sites may require restoration works over the life of this Plan. Clearances will be sought under the *Heritage Conservation Act* for works on places and objects protected under that legislation.

Management Actions

- Management of the historical sites and any upgrades or works to the sites will be in accordance with the *Heritage Conservation Act*. (Ongoing)

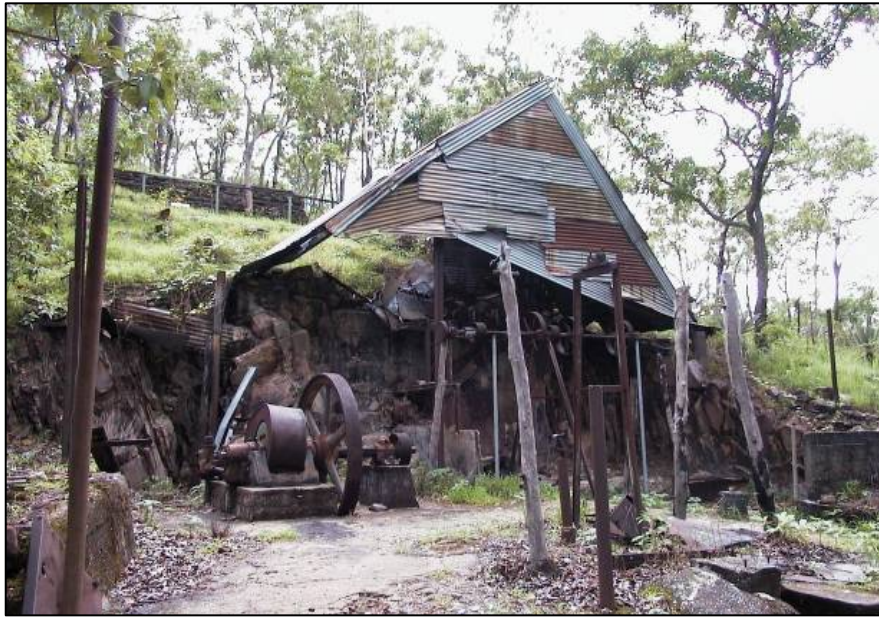


Plate 23: Bamboo Creek Tin Mine

5. Park Administration

5.1 General Administration

Outcome

- Responsible management and appropriate and effective administration of Litchfield National Park.

Overall management of the Park is guided by a legislative and policy framework. For proper management of the Park, and the safety of persons and property, it is essential that By-laws and regulations are in place and properly enforced.

The Parks and Wildlife Service are responsible for the daily management of the Park and finance and resource the Park's recurrent management programs including administrative, staffing, infrastructure and services. The Park is managed by staff based in the Batchelor Parks and Wildlife Office and the Walker Creek Ranger Station.

All funding for the management of the Park is sourced through the Northern Territory Government. Capital works and funded works programs are subject to Territory-wide government priorities. Park managers need to ensure effective allocation of funding across Park management and infrastructure requirements. Park and agency-wide priorities, performance indicators, monitoring, evaluation and reporting need to be integrated into a management cycle.

Achieving the Management Actions outlined in this Plan will enable the Parks and Wildlife Service to demonstrate its commitment to the Territory 2030 Strategic Plan 2009. The management of the Park's biodiversity and the reduction in weeds and other invasive species such as feral animals directly links with the Territory 2030, Objective 1: Custodians of our natural heritage (DCM, 2009).

Management Effectiveness Framework

The Management Effectiveness Framework informs priority setting and resource allocation across the system of the NT Parks and Reserves. Part of the framework establishes the relative importance of each park in the context of the park system, by assessment of each park's contribution to biodiversity conservation, and recreation and tourism. It does not attempt to compare significant cultural sites across the park system. The framework also groups parks of similar importance and prescribes general management standards to each group.

Litchfield National Park is both a Class 1 (most important) Biodiversity park and a Class 1 Visitor park. Class 1 Parks for biodiversity value requires management of the Park to maintain and improve landscape condition and as a very high priority to manage threats at both landscape scale and specific conservation values. Class 1 Parks for recreational value requires the provision of high quality and scale of facilities of superior design at key visitor sites for key experiences.

Class 1 parks will be subject to annual performance review that looks at each aspect of the business cycle. Every fifth year the condition of the park's biodiversity will be directly assessed by biological surveys incorporating the park's long-term fire-plot monitoring program.

Work and Business Opportunities

The Northern Territory Government's Territory 2030 Strategic Plan promotes Indigenous employment in land management. There is the opportunity for local Indigenous groups

to tender for management contracts within the Park.

Park management can provide for work and business opportunities for the local community. Contract services and business opportunities in the Park include cleaning of the Park's facilities, general repairs and maintenance of infrastructure, walking track maintenance, fencing, construction and weed and feral animal control.

Indigenous people will also be encouraged to seek employment through the Parks and Wildlife traineeship or apprenticeship program. Traditional Aboriginal owners may also be employed as cultural consultants and guides on a casual basis for specific projects.

Mining

Mining and extractive activities can have significant impacts on the natural and cultural values of the Park. Mining companies can apply to the Northern Territory Government for permission to explore for minerals within Litchfield National Park. In order to protect the Park's values a Reservation from Occupation (No. 1229) has been granted over sections of NT Portion 2783. These areas include Wangi, Florence and Tolmer Falls and Blyth Homestead.

A granted exploration licence extends across most of the Park and there is an application for an exploration licence over a smaller area in the southern section of the Park.

Mining is permitted within the Park in accordance with the *Territory Parks and Wildlife Conservation Act* and the *Mining Act*.

Development Proposals

Proposals to develop commercial accommodation or other commercial infrastructure within or adjacent to the Park are likely to arise during the life of this Plan. Such developments may present significant opportunities for business partnerships with traditional Aboriginal owners and result in benefits for visitors, local economies and expanded Park services.

The Parks and Wildlife Service are currently preparing a *Commercial Development Policy*. This policy will provide a clear over-arching process to facilitate the development of privately developed and operated tourism infrastructure in NT Parks. Any major proposals or new works will be required to comply with this policy and be assessed commensurate with the scale of potential impact consistent with the *Environment Assessment Act*, *Heritage Conservation Act*, *Planning Act* and *Environment Protection and Biodiversity Conservation Act*.

Management Actions

- Enforce provisions of the *Territory Parks and Wildlife Conservation Act*, including its By-laws and regulations and other legislation where appropriate. (Ongoing)
- Manage the Park in accordance with approved policies and standard operating procedures. (Ongoing)
- Continue to offer contracts and concession opportunities as required, for the management and maintenance of Park assets. Traditional Aboriginal owners will be encouraged to take up commercial tourism opportunities including campfire talks, campground maintenance, cultural tours or other viable enterprises. (Ongoing)
- The potential impacts of any proposed activity or development will be considered and assessed commensurate with the scale of potential impact, consistent with the *Environment Assessment Act*, *Heritage Conservation Act*, *Planning Act* and *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* and other legislation as appropriate. (Ongoing)

5.2 Community and Stakeholder Engagement

Outcome

- A highly engaged community that is supportive of the Park and its management.

Stakeholder Reference Group

The key stakeholders of the Park have a keen interest in how the Park is managed and the future direction for the Park. The key stakeholders for Litchfield National Park include the Aboriginal stakeholders, the tourism industry and the community.

A Stakeholder Reference Group was established in May 2010 to enable key stakeholders to provide advice to the Parks and Wildlife Service on the management and future direction of the Park and in particular the preparation of this Plan of Management and capital works projects identified for the Park.

The Stakeholder Reference Group comprises one representative from each of the four Aboriginal groups, a representative from Tourism NT, Tourism Top End, the Batchelor Tourism Development Group and tour operators and the Northern Land Council. The Group also includes three officers from the Parks and Wildlife Service. The Stakeholder Reference Group meets as required and have provided essential input into developing this Plan of Management.

Every two years the purpose of the Stakeholder Reference Group will be reviewed to ensure the Group is achieving its' objectives and whether to continue the role of the Group.

Aboriginal Involvement

There are four traditional Aboriginal owner groups that cover Litchfield National Park including Kungarakana, Werat, Warai and Maranunggu. Park rangers regularly liaise with the traditional Aboriginal owners and will continue to do so in the future.

While no formal joint management agreement is in place for Litchfield National Park, the Parks and Wildlife Service will continue to liaise and work with the traditional Aboriginal owners to look after country. Park Management will involve the Aboriginal people in the Park and in Park programs where possible.

The Parks and Wildlife Service recognise that these Aboriginal groups are important stakeholders in the management of the Park. The Parks and Wildlife Service will continue to promote membership of these Aboriginal groups on the Stakeholder Reference Group.

Tourism Industry Engagement

As Litchfield National Park is one of the most highly visited parks in the Northern Territory it is essential that tourism needs are considered in the management and future development of the Park. Tourism input into the Park was achieved through the inclusion of Tourism NT as a partner in preparing this Plan of Management. This partnership will continue to operate during the implementation of this Plan of Management.

Communication with the tourism industry will be achieved through regular meetings of the Stakeholder Reference Group.

Community Involvement

The town of Batchelor is at the entry to Litchfield National Park. The Park is an important source of revenue for the town through the provision of accommodation, food, fuel and general supplies. Park rangers work closely with the Batchelor community and attend working group meetings including the Batchelor Tourism Development Group. Park

management will continue to maintain good relationships with the community in Batchelor.

The size and shape of the Park reinforces the need for good working relationships with neighbours to ensure the conservation effort is not isolated from the broader landscape. Park management will continue to maintain good working relationships with the Park neighbours.

Litchfield National Park receives over 260,000 visitors per year and around 20% of these visitors are Territorians. Many of these Territorians are Darwin locals and they feel a strong ownership to Litchfield National Park. Developments or proposed changes in the Park can generate significant public interest and it is important to ensure good communication with the community.

The Park and Wildlife Service are committed to ensuring the whole community have a say in the development of the Park. This has been done through public meetings held in both Darwin and Batchelor.

Management Actions

- Regularly liaise with neighbours to facilitate cooperative management for the control of fire, stray stock and feral animals, weeds, soil conservation, fences, aspects of Aboriginal interest, visitor access and tourism development. (Ongoing)
- Continue to hold meetings of the Stakeholder Reference Group. Every two years review the purpose of the Stakeholder Reference Group to ensure it is achieving its' objectives and determine if the Group should be continued. (Ongoing)

5.3 Commercial Operations

Outcomes

- An increased number of commercial activities which enhance the visitor experience and/ or supplement visitor management in the Park.
- Commercial activities are of a high standard and compatible with the Park's character and values and in accordance with permits and legislation.

Concessions provide services that are appropriately offered by private enterprise. Concessions can be an important tool for managing visitors and better use of staff resources. Well managed concessions can make Parks more accessible and more enjoyable to a greater number of people and benefit the tourist industry.

Permits are issued to businesses that provide appropriate services, assist management or will enhance the visitor experience within the Park. There are currently three approved concession operators for Litchfield National Park. It is essential that commercial activities undertaken in the Park are of a high standard and are compatible with the Park's character and values. All concessionary operations are required to operate in accordance with the Act, the By-laws and where relevant, the Parks and Wildlife Service Commercial Operations Policy.

Management Actions

- All commercial operations within the Park are required to operate under a concession lease or license agreement in accordance with the Act, the By-laws and where relevant the Parks and Wildlife Service Commercial Operations Policy. (Ongoing)
- Ensure that the type and number of operations does not compromise the character and/ or visitor experience in the Park. (Ongoing)

6. Programs

This section brings together the management actions and these are grouped together as programs that are assigned priorities to assist park management.

Priorities assigned are as follows:

ONGOING:	Already established but essential to be continued.
HIGH:	Imperative to achieve the Plan's stated objectives.
MEDIUM:	Very important to achieve the Plan's stated objectives but subject to the availability of resources.
LOW:	May be undertaken only if other guidelines are met and the necessary resources are available.
#	Denotes an opportunity for which external funding could be sought.

Management Actions	Page Number	Priority
1.4 Zoning		
The Park will be managed in accordance with the zoning scheme	4	Ongoing
Regardless of the designated zone all management and development will have regard to maintaining the Park's natural character, its conservation values and visitor experiences.	4	Ongoing
Any new development will be subject to the approval of the standard environmental and heritage protection processes.	4	Ongoing
2.4 Development of Existing Visitor Activities and Facilities		
Wangi Falls		
Investigate the potential for the development of a secure car parking compound for visitors using the Tabletop Track.	14	High
Through the development of the Wangi Falls Centre encourage the site as the starting point for the Tabletop Track.	14	
Work with the tourism industry and tour companies to develop a system of staggering the arrival of visitors to the key visitor sites. Work with the tourism industry to more widely promote the lesser used sites in the Park.	14	High
Continue to implement the Crocodile Management Plan and the Emergency Response Procedure Manual.	14	Ongoing
Florence Falls		
Improve the signage on the Shady Creek Walk to clearly explain the purpose of the walk.	16	High
Monitor the level of use of the car park and expand the car park when necessary.	16	Medium
Review the suitability of the entrance to the plunge pool to determine if it is adequate or requires stairs.	16	Medium
Investigate options for an alternative short and easy walk at the Florence Falls site for those visitors unable to walk to the base of the Falls.	16	Medium
Expand the existing four-wheel drive campground and provide an additional 17 individual bush camping sites. Upgrade the existing four-wheel drive campground	16	Medium

ablution block.		
Buley Rockhole		
Work with the tourism industry and tour companies to develop a system of staggering the arrival of visitors to the key visitor sites. Work with the tourism industry to more widely promote the lesser used sites in the Park.	17	High
Remove the existing composting toilets at the entrance to the day-use area and construct an ablution block including change rooms in a suitable location away from the entrance.	17	High
Investigate the possibility of installing a bore to service the campground. If a bore is installed remove the existing toilet and replace with an ablution block including showers. Landscape the campground to improve the privacy of visitors and the visual amenity.	17	High
Implement the amendment to the <i>Territory Parks and Wildlife Conservation By-laws</i> creating Buley Rockhole day-use area as a glass free site.	17	High
Monitor the level of use in the campground. If warranted increase the number of the camping sites to between 20 and 24.	17	Medium
Investigate the potential for commercial management of the Buley campground.	17	Medium
Maintain existing signage stating "When car park is full then so are the rockholes".	17	Ongoing
Tolmer Falls		
Prepare a Site Development Plan for the Tolmer Falls area and investigate its' potential to be developed as a visitor hub. Investigate the potential to develop a 'wow' feature such as a swing bridge or glass walkway out over the edge of the escarpment. This 'wow' feature could be developed and run by a commercial operator.	18	High
Investigate the potential to offer swimming in the watercourse near the stone country.	18	High
Investigate the potential to provide seating near the Tolmer Falls viewing platform.	18	High
Promote the continued use of swimming in the rockhole above the Falls for tour groups to increase the diversity of experiences available in the Park.	18	High
Investigate the potential for a half day loop walk from Tolmer Falls to the Lost City.	18	High
Investigate the opportunity to develop a picnic area located near to the Litchfield Park Road which will provide visitors with panoramic / landscape views of the Park.	18	Medium
Improve the standard and increase the amount of interpretation provided at the site.	18	Medium
Magnetic Termite Mounds		
Relocate the eastern orientation shelter to this site.	19	Medium
Review and upgrade the interpretation provided at this site.	19	Medium
Monitor the cathedral termite mound to assess if it requires site protection or interpretation.	19	Low
Tabletop Swamp		
Develop the proposed boardwalk, raised viewing platform and formalise the road and car parking area occurs as a high priority. When the development is complete promote the new recreational opportunities available at the site with the tourism industry.	20	High
Upgrade interpretation as part of the site redevelopment.	20	High
Lost City		
Install an ablution facility to improve the visitor experience and protect the	21	High

environment.		
Upgrade the interpretation at the site.	21	High
Greenant Creek / Tjaetaba Falls		
Determine the potential for the development of a Signature Lodge. If found suitable modify the site and close the walk to Tjaetaba Falls.	22	High
If the site is found not suitable for the development of a Signature Lodge then maintain the site to its current standard.	22	Ongoing
Cascades		
Promote Cascades to visitor and tour companies highlighting the fact that the site has been developed for the more adventurous visitor.	23	High
Monitor the use of the car park to ensure sufficient spaces have been provided and traffic flows correctly.	23	Ongoing
Walker Creek		
If the Litchfield Park Road is sealed within the life of this Plan assess the potential impact this will have on the site. Carry out a site assessment to determine how this impact can be mitigated.	24	High
Maintain this site as a low key visitor site to ensure this unique experience is still offered within the Park.	24	Ongoing
Bamboo Creek Tin Mine		
Upgrade the interpretation as a priority.	25	High
Assist and support the traditional Aboriginal owners in the development of a cultural heritage tour of the site.	25	Medium
Provide more picnic facilities to encourage visitors to stop at this site on their way into the Park.	25	Low
Tabletop Track		
Promote the Tabletop Track to increase visitor use. Review the level of use on the track in five years to ensure the level of use is still acceptable and not negatively impacting on the visitor experience or the environment. If required implement a maximum visitor threshold.	26	High/ Medium
Where possible re-route sections of the track to provide visitors with more opportunities for swimming.	26	High
Standardise the registration system for this walk in line with the requirements for all long distance walks across the NT Park Estate.	26	High
Upgrade signage and promotional material to reflect the Australian Walking Track Grading System.	26	High / Medium
Four-wheel Drive Tracks		
Maintain the Reynolds River 4WD Track and the section of the Stapleton Track to provide visitors with the opportunity to four-wheel drive and experience an isolated, outback experience.	27	Ongoing
Blyth Homestead		
It is proposed to seal an 8km section of the Reynolds River 4WD Track to this site (see section 2.5)	27	High
Upgrade the interpretation provided at the site subject to resources.	27	Medium
Investigate, promote and support the opportunity for the development of guided historical and cultural tours of the site. If a guided tour is established assess the	27	Low

need for ablution facilities.		
Tjaynera Falls (Sandy Creek)		
It is proposed to seal an 8km section of the Reynolds River 4WD Track to this site (see section 2.5).	28	High
Upgrade the directional signage from the campground to the Falls.	28	High
Landscape the campground and delineate the camping sites.	28	Medium
Provide some interpretation of the natural values of the area.	28	Medium
Surprise Creek Falls		
Upgrade the directional signage from the campground to the Falls.	29	High
Landscape the campground and delineate the camping sites.	29	Medium
Provide some interpretation of the natural values of the area.	29	Medium
Tableland Creek		
Maintain this site as a basic bush camping area to ensure this unique experience is offered in the Park in the future.	30	Ongoing
Commercial Safari Campground		
Promote the continued use of the commercial safari camp to ensure the diversity of experiences offered in the Park.	31	High
The concessionaire must comply with the Parks and Wildlife Service Commercial Operations Policy.	31	Ongoing
Environmental Education Campground		
Maintain this site as an education facility for a moderate number of visitors.	32	Ongoing
2.5 Proposed New Park Developments		
Cycle / Mountain Bike Tracks		
Develop a short cycle / mountain bike loop track starting and finishing from the Florence Falls car park. Develop information for visitors on the track to enhance safety and enjoyment.	34	High
Develop a long cycle / mountain bike loop track starting and finishing from Wangi Falls. Develop information for visitors on the track to enhance safety and enjoyment.	34	High
Work with the tourism industry to promote mountain biking as a new visitor experience in the Park.	34	High
Work with mountain bike groups to ensure the alignment and standard of the track meets the needs of mountain bike users.	34	High
Develop a campsite, water tank and toilet on the overnight loop track.	34	High
Investigate development of a secure car parking facility at Wangi Falls Centre.	34	High
Investigate the potential for a single track located completely off-road. Work with mountain bike groups to determine the most appropriate location for a more challenging mountain bike experience.	34	Medium
Continue to liaise with the Department of Lands and Planning on the development of signage and information to make visitors aware of the safety aspects when cycling along the Litchfield Park Road.	34	Ongoing
Monitor usage and environmental impacts of tracks including weed management and erosion.	34	Ongoing

Potential New Visitor Sites		
Seal the 8km section of the Reynolds River 4WD Track from the start of the track in the north to the Tjaynera Falls (Sandy Creek) campground including the spur to Horse Paddock Creek.	37	High
Undertake a detailed site assessment and develop a site plan for the Horse Paddock Creek Falls area to determine the most appropriate recreation uses.	37	High
Undertake a detailed site assessment of the eastern escarpment to determine possible recreation uses.	37	Medium
Undertake a detailed site assessment of Stewie's Lookout to determine possible recreation uses.	37	Medium
Undertake a detailed site assessment to develop a loop walk from Tjaynera Falls (Sandy Creek) passing Horse Paddock Falls to the Lost City.	37	Medium
Indigenous Tourism		
Work with the traditional Aboriginal owners to investigate the potential for offering Aboriginal cultural tours within the Park.	38	Medium
Adventure Activities		
The Parks and Wildlife Service will work with the tourism industry groups through the Stakeholder Reference Group to investigate and develop adventure activities while protecting Park values.	38	Medium / High
Eco Accommodation / Signature Lodge		
Investigate the Tjaetaba Falls area to determine its suitability for a Signature Lodge site.	40	High
If Tjaetaba Falls is found unsuitable, identify and investigate other locations within the park for potential Signature Lodge sites.	40	High
In conjunction with the successful Signature Lodge proponent, undertake site planning for nearby areas.	40	High
2.6 Visitor Safety		
All staff must be familiar with the procedures and be trained and prepared to implement them at any time.	43	High
Park staff will work closely with NT Police, Fire and Emergency Services and the Bushfires NT during safety incidents when required.	43	High
Maintain the Crocodile Management Plan across the Park and review the Plan annually.	43	High
Undertake water quality monitoring of designated swimming areas as required by the Parks and Wildlife Service " <i>Management of Microbial Water Quality in Recreational Water Bodies</i> " Policy.	43	Ongoing
Review and upgrade directional signage to ensure visitor's are able to locate Park facilities.	43	Ongoing
Adopt the Australian Walking Track grading System across all walking tracks in the Park.	43	High / Medium
2.7 Visitor Information, Interpretation and Monitoring		
Ensure interpretive material provided is accurate and informative.	43	High
Relocate the eastern orientation shelter to the Magnetic Termite Mounds visitor site.	43	Medium
The Parks and Wildlife Service will continue to collect visits data from traffic counters and carry out visitor surveys approximately every three years in accordance with the Parks and Wildlife Visitor Monitoring Program.	44	High

2.9 Anti-Social Behaviour		
After the <i>Territory Parks and Wildlife Conservation By-laws</i> are enacted ban glass from all designated swimming areas in the Park.	45	High
Undertake an education campaign with assistance from the tourism industry to raise awareness that all designated swimming areas within Litchfield National Park have become 'glass free'. Install signage where appropriate.	45	High
2.10 Waste Management		
Implement the <i>Waste Management Policy</i> once it has been prepared.	45	High
3. Management of Natural Values		
3.1 Water Resources		
Ensure any proposed developments on the Tabletop do not impact on the flow of springs or lead to pollution of waterways.	47	Ongoing
3.2 Flora		
The Park's floral diversity will be protected through fire, weed and feral animal management programs integrated into annual operational plans (see section 3.4).	48	High
Establish a <i>Callitris intratropica</i> monitoring program using information collected through the Bushfires NT as part of their park fly overs and from information gathered from the fire monitoring plot surveys.	48	Low
Every two years monitor the eight <i>Cycas calcicola</i> plots. Every five to ten years but not exceeding ten years re-assess the plots in conjunction with the Biodiversity Division of NRETAS.	48	Ongoing
3.3 Fauna		
The Park's faunal diversity will be protected through fire, weed and feral animal management programs integrated into annual operation plans (see section 3.4).	50	High
Research and Monitoring		
Continue to carry out fauna surveys of the fire monitoring plots every five years as part of the Three Park Fire Monitoring Program.	50	High
Construct and maintain a one kilometre square exclusion fence in the Tableland habitat. Reintroduce threatened fauna including quolls, brush-tailed rabbit-rats and northern brush-tailed phascogales.	50	High
Investigate opportunities to source external funding for the development of the exclusion fencing and for maintenance of the project.	50	# High
Establish a Partridge pigeon monitoring program to be coordinated by the Biodiversity Conservation Division and implemented by the Rangers.	50	Medium
Establish a 'CyberTracking' Program for recording sightings of Partridge pigeons, Emus and quolls.	50	Medium
Undertake targeted annual surveys of the Red Goshawk during breeding season.	51	Ongoing
Record all incidental sightings of quolls to determine if this species persists in the Park.	52	Ongoing
Every two to three years monitor the orange horse-shoe and Arnhem leaf-nosed bats.	52	Ongoing
3.4 Managing Threatening Processes		
Fire		
Develop and implement a Fire Management Plan. Burn smaller sections/ patches of the Park (approximately 20-25%) during the end of the Wet season and early Dry	53	High

season, with the patches burnt each year adding up to the whole Park being burnt every 5 years.		
Continue to implement the Fire Monitoring Plot program. At the 5 year review, review the existing plot locations to determine if they are appropriately sited.	53	High
The Park Rangers will investigate ways to involve the traditional Aboriginal owners in control burning and fire management on the Park.	53	Medium
Undertake annual fire scar mapping.	53	Ongoing
Weeds		
Prepare a Weed Management Plan with the assistance of the Weeds Branch of NRETAS. The Plan will: <ul style="list-style-type: none"> • Target the protection of key biodiversity locations and areas of high visitor use; • Target strategically identified areas where Gamba is low in density; • Target strategically identified areas that have the potential to cause the further spread of Gamba and Mission grass such as the four-wheel drive tracks; • Identify an area of containment and a barrier; • Target bi-annual treatment of Mimosa within the southern section of the Park to reduce and if possible eradicate it from the Park; and • Take into consideration, where necessary, any requirements of the Commonwealth's Threat Abatement Plan for Gamba grass, once it has been prepared. 	55	High
Any new and all known locations of Gamba grass will be recorded and locations sent to the Weeds Branch of NRETAS.	55	Ongoing
Investigate alternative methods of managing Gamba Grass and implement if appropriate.	55	High
Feral Animals		
Eradicate the small localised herd of goats. (High)	56	High
Investigate the potential to fence and maintain small rainforest patches with significant conservation value to exclude pigs.	56	Low
Continue to employ a contractor to carry out mustering of cattle and culling of pigs, horses, buffalos and goats.	56	Ongoing
4. Management of Cultural Values		
4.1 Aboriginal Cultural Values		
A Cultural Heritage Management Program will be developed including a cultural heritage database for the Park, documenting all known cultural heritage sites and their management.	58	Medium
Traditional hunting and gathering of animals, plants and natural materials from the Park for traditional purposes will extend only to the traditional Aboriginal owners. If hunting or gathering activities are perceived to negatively impact on the Park's natural values or visitor experience, Park Management will review harvesting practices with traditional Aboriginal owners.	58	Ongoing
The management and protection of sacred sites will be assured through the Aboriginal Areas Protection Authority and the expressed wishes of the traditional Aboriginal owners. Authority Certificates will be sought for any works proposed on the Park that are triggered by the <i>Northern Territory Aboriginal Sacred Sites Act</i> .	58	Ongoing
Any proposals for work affecting archaeological sites or objects will be consistent with the requirements of the <i>Heritage Conservation Act</i> . Expert advice will be sought from the relevant NT government authority. Sacred sites clearance process will also	58	Ongoing

apply to works that may impact archaeological sites.		
Park staff will manage the burial site in accordance with the wishes of the traditional Aboriginal owners and the requirements of the Aboriginal Areas Protection Authority.	58	Ongoing
The Parks and Wildlife Service will work with the four Aboriginal groups to gather information for the interpretation of sites within the Park, where appropriate.	58	Ongoing
The NRETAS Indigenous Cultural and Intellectual Property Policy aims to protect Indigenous cultural knowledge and the intellectual property rights of Indigenous persons and communities. To the fullest extent possible, any cultural information obtained from the traditional Aboriginal owners of the Park will be recorded, stored and used consistently with their directions.	58	Ongoing
Indigenous ecological knowledge and skills will be integrated into park management programs where possible and recorded appropriately.	58	Ongoing
4.2 European Historical Values		
Management of the historical sites and any upgrades or works to the sites will be in accordance with the <i>Heritage Conservation Act</i> .	59	Ongoing
5. Park Administration		
5.1 General Administration		
Enforce provisions of the <i>Territory Parks and Wildlife Conservation Act</i> , including its By-laws and regulations and other legislation where appropriate.	61	Ongoing
Manage the Park in accordance with approved policies and standard operating procedures.	61	Ongoing
Continue to offer contracts and concession opportunities as required, for the management and maintenance of Park assets. Traditional Aboriginal owners will be encouraged to take up commercial tourism opportunities including campfire talks, campground maintenance, cultural tours or other viable enterprises.	61	Ongoing
The potential impacts of any proposed activity or development will be considered and assessed commensurate with the scale of potential impact, consistent with the <i>Environment Assessment Act</i> , <i>Heritage Conservation Act</i> , <i>Planning Act</i> and <i>Environment Protection and Biodiversity Conservation Act</i> and other legislation as appropriate.	61	Ongoing
5.2 Community and Stakeholder Engagement		
Regularly liaise with neighbours to facilitate cooperative management for the control of fire, stock and feral animals, weeds, soil conservation, fences, aspects of Aboriginal interest, visitor access and tourism development.	63	Ongoing
Continue to hold meetings of the Stakeholder Reference Group. Every two years review the purpose of the Stakeholder Reference Group to ensure it is achieving its' objectives and determine if the Group should be continued.	63	Ongoing
5.3 Commercial Operations		
All commercial operations within the Park are required to operate under a concession lease or license agreement in accordance with the Act, the By-laws and where relevant the Parks and Wildlife Service Commercial Operations Policy.	63	Ongoing
Ensure that the type and number of operations does not compromise the character and/ or visitor experience in the Park.	63	Ongoing

7. References

- Department of the Chief Minister (DCM) (2009). *Northern Territory Climate Change Policy 2009*. Published by the Northern Territory Government.
- Department of the Chief Minister (DCM) (2009). *Territory 2030 Strategic Plan 2009*. Published by the Northern Territory Government.
- Department of Environment, Water, Heritage and the Arts (DEWHA), (2008). *Rangelands 2008 – Taking the Pulse*. Australian Collaborative Rangeland information System: Reporting Change in the Rangelands.
- Douglas, M. M, Setterfield S.A, Rossiter N., Barratt J., Hutley L.B. (2004). *Effects of mission grass (Pennisetum polystachion (L) Schult) invasion on fuel loads and nitrogen availability in a northern Australia tropical savanna*. Weed management: balancing people, planet, profit. 14th Australian Weeds Conference. Wagga Wagga, New South Wales.
- Griffiths AD, Woinarski J.C.Z, Armstrong ID, Cowie ID, Dunlop CR & Horner PG, (1997). *Biological Study of Litchfield National Park. Technical Report No. 62*. Parks and Wildlife Commission of the Northern Territory.
- Liddle, D.T (2009) *Management Program for Cycads in the Northern Territory of Australia 2009-2014*. Department of Natural Resources, Environment, the Arts and Sport, Darwin.
- NRETAS (2009). *Park Profile for Litchfield National Park*. Unpublished data, Northern Territory Government.
- NRETAS (2009). *Visitor Survey Results for Litchfield National Park July 2009*. Unpublished data. Northern Territory Government.
- Parks and Wildlife Service (2010). Visitor figures for Litchfield National Park. Unpublished information from the Parks Visits Database.
- Russell-Smith J., Edwards E.C., Woinarski J.C.Z., McCartney J., Kerin S., Winderlich S., Murphy B.P., Watt F. (2002) *Fire and biodiversity monitoring for conservation managers: a 10 year assessment of the 'Three Parks' (Kakadu, Litchfield and Nitmiluk) program*. Culture Ecology and Economy.
- Tourism Northern Territory (2010). *Litchfield National Park Strategic Planning Presentation*. Unpublished.
- Tourism Northern Territory. (2008). *Five Year Tourism Strategic Plan. A plan to guide the direction and success of the NT tourism industry 2008 to 2012*. Northern Territory Government.
- Tourism Northern Territory (2010). *Tourism Research Australia's National and International Visitor Surveys*.

Appendix 1

Table 1: Walking track information for Litchfield National Park

Track Section	Length Km	Aust. Track Grading*	NT Track Grading	Standards of Service	Experience
Shady Creek Walk	1.0	2	Easy	Suitable for most people who walk occasionally. Well formed track constructed to a moderate standard.	This is a nice walk along Shady Creek and is an alternative to the main track to the Florence Falls plunge pool.
Florence Falls Platform	0.3	1	Easy	Provides disabled access.	Provides views to the plunge pool at the base of Florence Falls.
Florence Creek Walk	3.0	3	Easy	Suitable for most people who walk occasionally. Well formed track.	Provides a walk along the edge of the creek between Florence Falls and Buley Rockhole.
Tolmer Falls Walk – direct walk to viewing platform	1.6	1	Easy	Easy walk on sealed surface to viewing platform. Provides disabled access	An easy walk to the viewing platform which provides excellent views of the spectacular Tolmer Falls.
Alternative walk to viewing platform	1.6	3	Easy	Suitable for moderately fit people who walk regularly. Formed track of moderate standard and is rocky in parts.	An alternative walk to the viewing platform through stone country and cycad grove.
Wangi Falls Walk	1.6	3	Hard	Suitable for people who walk regularly. The track is narrow in places with some climbing and descending. Lookout platform with a series of steps. Walk includes interpretive signage.	Return walk to overlook Wangi Falls and plunge pool. Provides landscape views of the edge of the escarpment.
Tabletop Swamp Walk	0.1	2	Easy	Basic formed track to edge of swamp.	The walk takes visitors to the edge of the Tabletop Swamp where visitors can view the numerous bird life of the area.
Magnetic Termite Mound Walk	0.15	1	Easy	Suitable for most people who walk occasionally. Well formed track and board walk constructed to a high standard. Provides disabled access.	A leisurely walk along the edge of the black soil flood plains to view the very impressive magnetic termite mounds.
Tjaetaba Falls (Greenant Creek) Walk	2.7	3	Moderate	Suitable for moderately fit people who walk regularly. Track is to a moderate standard with some steep sections.	The walk follows creek upstream, climbs steeply to Tjaetaba Falls Lookout circuit through monsoon rainforest.

Cascade Creek Walk (dry season)	1.3 approx	3	Moderate	Suitable for moderately fit people who walk regularly.	Follows Cascade Creek along the northern bank. Provides the opportunity for swimming in rock pools along the walk.
Cascade Creek Walk (wet season)	1.8 approx	3	Moderate	Suitable for moderately fit people who walk regularly.	Traverses the escarpment on the southern side of Cascade Creek. The walk takes visitors to the top of Cascade Creek where visitors can swim in the rockholes.
Walker Creek Walk	3.5	3	Moderate	Suitable for moderately fit people who walk regularly.	The walk follows the picturesque Walker Creek upstream and returns along the same route.
Bamboo Creek Tin Mine loop walk	0.55	2	Easy	Suitable for most people who walk occasionally. Track is formed and of a moderate standard. Interpretive signage is provided at the mine.	This walk leads to and then around the Bamboo Creek Tin mine.
Tjaynera (Sandy Creek) Falls Walk	3.4	3	Moderate	Suitable for moderately fit people who walk regularly.	Track winds along the creek before reaching the plunge pool.
Surprise Creek Falls	0.4	3	Moderate	Suitable for moderately fit people who walk regularly.	The walk is from the camping area to Surprise Creek Falls.
Tabletop Track	39.0 circuit	4	Moderate to hard	Good level of fitness required. Bush walking experience required. Basic camp sites provided en-route.	Excellent long distance bushwalk. The walk traverses across the Tabletop through woodlands, along creek lines to waterfalls and pools.
Environmental Education Campground		2	Easy	Suitable for most people who walk occasionally. Formed track.	A short walk from the campground area to the waterhole.

* Draft gradings using the Australian Walking Track Grading System – to be confirmed when the Park walking tracks are formally assessed.